

# Microfinance, gender and entrepreneurial behaviour of families in Ghana

George Acheampong

*Department of Marketing and Entrepreneurship,  
University of Ghana Business School, Accra, Ghana*

## Abstract

**Purpose** – The purpose of this paper is to understand the relationship between microfinance participation and entrepreneurial behaviour of Ghanaian families as well as the moderating role of the family head's gender. It is argued from a resource-based theory perspective that microfinance is a financial resource that removes credit constraints to entrepreneurial behaviour of families. However, gender of the family head creates heterogeneity in this relationship in line with the gender theory.

**Design/methodology/approach** – In order to test these claims, cross-sectional data from 2,727 families on microfinance participation and household characteristics in Ghana are utilised.

**Findings** – The study finds that microfinance participation has a positive and significant relationship with a family's decision to own an enterprise. Also, the study finds that female-headed families are better utilizers of microfinancial resources for entrepreneurial purposes compared to their male counterparts. This difference is a pure gender effect.

**Originality/value** – This finding is in contrast to the dominant stream of gender-based entrepreneurship research that suggests that women are subordinate to men and need to be helped to become "honorary men". From a policy standpoint, solutions aimed at reversing discrimination against women in economic markets must consider women within their own right. The study makes a contribution to the literature by showing empirically the source of heterogeneity in entrepreneurial returns to microfinance participation by families.

**Keywords** Gender, Entrepreneurship, Ghana, Family business, Microfinance

**Paper type** Research paper

## Introduction

Entrepreneurship has been mooted as a tool that can be useful in overcoming poverty among the poor. Bruton *et al.* (2013) have argued that rather than viewing those in poverty as a market for goods, the solution lies in understanding how to help those living in poverty create their own businesses. Ultimately, entrepreneurship among those in poverty will create a long-lasting solution to their poverty. This is because market-based approaches have been argued to be more useful in reducing poverty (Acheampong and Esposito, 2014; Prahalad and Hart, 2002) while serving as a more inclusive path to economic growth and development (McMullen, 2011). Newman and Kinghan (2015) have suggested in an empirical study that entrepreneurship has welfare enhancing effects on poor families especially by boosting their incomes through their inclusion in economic activities. However, credit remains a binding constraint to entrepreneurial behaviour (Beck and Demircuc-Kunt, 2006; Eifert *et al.*, 2008) of these families. Evans and Jovanovic (1989) have noted that capital is essential for starting a business, and liquidity constraints tend to exclude those with insufficient funds at their disposal. Microfinance has been suggested as a solution to these credit constraints that impede the entrepreneurial behaviour of the poor (Khavul, 2010). Microfinance represents the issuance of small loans usually unsecured to poor communities in the developing world (Bruton *et al.*, 2011).

Several questions have however been raised about the usefulness of microfinance in generating the entrepreneurial outcomes that are mooted by scholars. Therefore, the main question in the literature is: does microfinance actually foster enterprise development and what contingencies affect this relationship? For example, Field *et al.* (2013) argue that



microfinance debt contracts that require early repayment discourage illiquid risky investment and thereby limit the potential impact of microfinance on microenterprise outcomes and family welfare. On the contrary, Banerjee *et al.* (2015) have noted a consistent and positive effect of microfinance on microenterprise outcomes in the developing world. Bradley *et al.* (2012) have also argued that capital is not enough for entrepreneurs to be successful in the marketplace as suggested by the allocative view to entrepreneurship. This is because, as capital becomes more available, entrepreneurs will experience a diminishing return to the financial resources. These differences in the entrepreneurial returns to microfinance may be due to boundary conditions. One boundary condition that has been reported is the type of entrepreneur utilising the microfinance resource (Banerjee Breza *et al.*, 2015). It is reported that entrepreneurs who receive microfinance after starting their business receive better outcomes than those who start with microfinance resources. One boundary condition that has received less attention on how it moderates the baseline relationship is gender of the entrepreneur (Sarfaraz *et al.*, 2014; Haus *et al.*, 2013; Gupta *et al.*, 2008; Scherer *et al.*, 1990). This is despite the fact that gender is one of the most extensive psycho-social schemas and constructions in society (Bem, 1981; Lindsey, 2005) that influence the economic behaviour and appropriations of socio-economic agents such as families (Anker, 1997; Gatzweiler and Baumüller, 2014; Skitka and Maslach, 1990). Gender ascriptions influence access to and utilisation of these microfinancial resources, yet the usefulness of these resources with gender heterogeneity remains complex (Marlow and Patton, 2005). Consequently, it can be deduced from the literature that access to microfinance drives entrepreneurial action such as ownership of family enterprises, but such an assumption is rarely based on a strong theory while empirical evidence backing such a claims remain largely inconsistent. These inconsistencies in the relationship between microfinance and family enterprise formation may be due to boundary conditioning from the gender of the family head. Therefore, this study seeks to address the following research questions:

*RQ1.* Does gender of family head provide a contingency effect on relationship between microfinance participation and family entrepreneurial behaviour?

*RQ2.* What is the source of the difference between the different sexes if any exists?

Building on the resource-based theory (RBT) (Alvarez and Busenitz, 2001; Barney, 1991, 2001) and the gender theory (GT) (Bem, 1981; Lindsey, 2005), this study argues that families that participate in microfinance programmes are more likely to be entrepreneurial by removing constraints to this behaviour. However, gender of the family head creates some contingency effects on the relationship between family microfinance participation and entrepreneurial behaviour. This contingency is driven by the fact that women in Africa are largely discriminated against leading to the marginality thesis widely discussed in the entrepreneurship literature. Also, from a microfinance perspective, these women are discriminated against in economic markets, and hence only capable women are able to select into both microfinance participation and entrepreneurial behaviour. This difference is estimated to be a pure gender effect driven by environmental factors that lead to self-selection of capable female family heads into entrepreneurship. A cross-sectional data set on microfinance participation and family characteristics among 2,727 families in Ghana is utilised to achieve this end. The study makes a contribution to the literature by investigating into gender issue between male and female and its moderating effect on the relationship between microfinance participation and entrepreneurial behaviour of families in Ghana. Additionally, this study introduces a theoretical argument to explain the mechanism linking microfinance accessibility to family enterprise ownership, using a good theory to introduce gender as a conditioning factor. Also, a unique data set from Ghana is used to test the relationships, and thus helping enrich knowledge on how and when microfinancing drives entrepreneurial behaviour in families. More specifically, Alvarez and

Busenitz (2001) note that most RBT research has been conducted for larger firms although small businesses, especially family ones, also need to acquire critical resources required to start a new business. The study also helps to understand the value of resources to entrepreneurial behaviour by attempting to provide some insights on the role of gender as a boundary condition that leads to inconsistent results in the literature. Additionally, this study helps to decompose the source of this gender difference as the theory suggests it could come from endowments, environmental or interaction of both. Related to the above is a methodological contribution of the source of gender differences in microfinance markets and the consequences of these differences. The non-linear Blinder-Oaxaca decomposition method is utilised to understand the source of these differences (Sinning *et al.*, 2008). Finally, a GT approach embracing family business research contributes to a needed theoretical deconstruction of existing perspectives on the emergence, operations, sustainability and succession of family businesses in the twenty-first century (Al-Dajani *et al.*, 2014).

The following sections of this paper presents on microfinance and entrepreneurship in Ghana; the theoretical framework and hypothesis development for this study; the moderating role of gender, the research methodology, results/findings, discussion of findings, conclusions, limitations and directions for future studies, respectively.

### **Microfinance and entrepreneurship in Ghana**

Contextually, entrepreneurship in Ghana is an interesting mix between male and female operated businesses and their roles in economic development (Adom, 2015; Adom and Williams, 2012; Boohene *et al.*, 2008; Kuada, 2009; Langevang *et al.*, 2015; Overå, 2007; Spring and Rutashobya, 2009). The differences between female and male entrepreneurial behaviour is a function of the business environment, personal characteristics, socio-cultural factors and personal characteristics (Spring and Rutashobya, 2009). These characteristics have generally shaped male entrepreneurial activities into the formal sector as main source of family income while women engage in informal entrepreneurial behaviour as a complement to family income (Adom and Williams, 2012; Dzisi, 2008). Several factors have been adduced for the success of female entrepreneurship in Ghana. These include human capital factors (Adom and Asare-Yeboah, 2016), personal values, strategies and skills (Boohene *et al.*, 2008). However, the vitality of entrepreneurial activities is bounded by several other factors (Langevang *et al.*, 2015) that impede development such as access to start-up and growth capital (Asiedu *et al.*, 2013), especially among female entrepreneurs. This signals discrimination among women in formal credit markets in Ghana.

The original conceptualization of microfinance by Mohamad Yunus was set out to address some of the credit asymmetry and discrimination faced by women. In Ghana, this has not been different as most microfinance participation is targeted at women especially those not receiving much support from formal credit markets (Asiedu *et al.*, 2013; Hansen and Rand, 2014a). Generally, Afrane (2002) reports that although microfinance programs have every potential to improve the conditions of beneficiaries, they also tend to create disturbing negative impacts if necessary counteracting measures are not taken. In a study of microfinance access and utilisation in Ghana, Akpalu *et al.* (2012) report that increasing women's access to microfinance could potentially contribute to increasing efficiency in output and consequently reduce poverty and empower women. However, women, especially in patriarchal societies, face several constraints that could limit access and effective application of loans. For example, women who must ask for permission from their husbands or male household heads or any male member of their household before accessing were less efficient than their counterparts who do not ask for permission before accessing loans. Similarly, women whose businesses are being controlled by their husbands or household heads are less efficient than their counterparts whose businesses are not controlled. The efficiency of women in utilising microfinance resources better than men is

indicated in another study where female participants of microfinance programmes were less likely to be delinquent (Evans and Winston, 2008). These are the sources of the differences between men and women in microfinance outcomes with some suggesting a capability effect while others argue a socio-cultural or pure gender effect (Arku and Arku, 2009).

### Theoretical framework

The theoretical foundation of this study is based on the integration of two influential theories, thus, the RBT and the GT. Over the past few years, several and different extant literatures (Chathoth and Olsen, 2007; Galbreath and Galvin, 2008; Pribadi and Kanai, 2011; Barney, 1991; Peteraf and Barney, 2003; Rivard *et al.*, 2006; Tavitiyaman *et al.*, 2012; Bem, 1981; Lindsey, 2005) have proven that the RBT and GT have become dominant contemporary approaches.

Extensively, the RBT have been used to deepen understanding regarding how firms use a bundle of valuable, rare and non-substitutable resources to gain a competitive advantage in an industry or market (Barney, 1991, 2001). Far back from the time of Barney (1991), who, over two decades ago, edited a special piece on the resource-based view, the theory as of today has become the basis of many models, ideas, theories and hypotheses. More importantly, the RBT provides a parsimonious clarification amongst frameworks used in the extant literature to explain the relationship that exist between resources, capabilities and sustainable competitive advantage (Barney, 1991).

Despite the tremendous benefits of the RBT, an individual's willingness to participate in entrepreneurial activities goes beyond resources and capabilities. The GT further provides explanation of how gender is viewed as the outcome of a cognitive process by which sex-linked characteristics are transmitted and maintained by members of a society as well as its impact on entrepreneurial focus. This process consequently leads to the development of gender stereotypes with some artefacts in society referred to as feminine and others masculine. The theory is therefore a psychological theory of gender in which men (boys) and women (girls) internalise society's associations and schema of gender (Anker, 1997; Lindsey, 2005; Bem, 1981).

Applying the RBV and the GT to this study, the researchers found works of Alvarez and Busenitz (2001), Barney (1991, 2001), Bem (1981), Chung (2009) and Lindsey (2005) relevant to investigate the moderating influence of gender in the relationship between microfinance participation and entrepreneurial Behaviour of families in Ghana. It is argued that families that participate in microfinance programmes are more likely to be entrepreneurial by removing constraints to this behaviour. However, gender of the family head creates some contingency effects on the relationship between family microfinance participation and entrepreneurial behaviour. This contingency is driven by the fact that women in Africa are largely discriminated against leading to the marginality thesis widely discussed in the entrepreneurship literature. Also, from a microfinance perspective, these women are discriminated against in economic markets, and hence only capable women are able to select into both microfinance participation and entrepreneurial behaviour. This difference is estimated to be a pure gender effect driven by environmental factors that lead to self-selection of capable female family heads into entrepreneurship.

### Hypothesis development

#### *Microfinance and entrepreneurial behaviour*

The resource-based view of the firm suggests that firms must possess a bundle of valuable, rare and non-substitutable resources to gain a competitive advantage in an industry or market (Barney, 1991, 2001). Firm resources refer to all the strengths of a business that enable it to conceive and implement strategies and these can include assets and processes (Montesor, 2004). These resources can be classified into physical, organisational, human

(Shaw *et al.*, 2013), social (Lin, 1999) and financial resources (Beck *et al.*, 2008). These resources confer advantages to businesses if they are valuable, rare, inimitable and not strategically substitutable (Barney, 1991). A resource is valuable if it helps a business to strategically neutralise environmental threats. The same resource confers advantages on the firm if it is held by few businesses in which case the possessor of this resource has an advantage over those who do not possess these resources, especially considering that this resource is valuable as has already been established. Again, resources confer competitive advantage to businesses if these resources cannot be easily copied or substituted. If these conditions are not met, then the earlier two conditions cannot exist as imitation and substitution reduce the value of the resource by making it available to many other businesses in which sense it is no longer rare. The relationship between RBT and entrepreneurial behaviour has been theorised by scholars including Alvarez and Busenitz (2001). They suggest that the entrepreneurial process emanates when some social agents have insights into the value of resources that other agents do not. The capability to understand the usefulness of resources in this light can be seen as an agent's asset and hence a resource in itself. One such valuable resource is finance. Some families can view financial resources as an entrepreneurial resource that can be used to start a family business while others can use it for other purposes such to as pay for education, feeding and medical bills. Microfinance is one major source of entrepreneurial finance across the globe (Beck *et al.*, 2008) and has been linked to enterprise-level outcomes (Newman *et al.*, 2014; Shahrar *et al.*, 2016). It represents the issuance of small unsecured loans for the purpose of business generation within poor communities (Bruton *et al.*, 2011). These loans represent financial resources that social agents can utilise for entrepreneurial purposes if the right insights can be gleaned in line with the RBT. It must be pointed out clearly that variability in microfinance accessibility causes changes in entrepreneurial behaviour. In this study, the decision of families as social agents to utilise these financial resources for entrepreneurial activities in Ghana is hypothesised. This is because, from the development literature, microfinance has been positioned as being utilised to improve household welfare (Chiova *et al.*, 2015). Consequently, it is hypothesised that:

*H1.* Families that participate in microfinance schemes will set up family businesses.

#### *Male- and female-headed families and entrepreneurial behaviour*

While microfinance resources are critical for the formation of family enterprises, some scholars believe it is not enough to achieve success in the marketplace (Bradley *et al.*, 2012). Therefore, because entrepreneurs must engage in a process of creativity, learning and discovery to overcome the diminishing returns to financial resources as they become increasingly available. This can be achieved through a process of demand co-creation and negotiation requiring the utilisation of social credentials (Sarasvathy *et al.*, 2014). Gender is one of such important social credentials affecting the allocation of social resources. Gender refers to the social attribution systems that are used to distinguish between male and female sexes (Chung, 2009). It is therefore a basic organising condition in human society. According to the gender schema theory (Bem, 1981), gender is the outcome of a cognitive process by which sex-linked characteristics are transmitted and maintained by members of a society. This process consequently leads to the development of gender stereotypes with some artefacts in society referred to as feminine and others masculine. The theory is therefore a psychological theory of gender in which men (boys) and women (girls) internalise society's associations and schema of gender (Bem, 1981). Beyond the psychological dimension of gender, there is also the sociological perspective that accounts for the engendering of social actors in their interactions. One of the basic ways of understanding the sociology of gender is the functionalist theory (Lindsey, 2005). This theory holds that social balance is

maintained when men and women contribute their parts in the functioning of society. These contributions should be based on assigned social status and roles to avoid social normlessness. In contemporary society, men are expected to play the instrumental role that maintains the physicality of families while women play the expressive role of cementing relationships and providing emotional support (Lindsey, 2005). The question then is whether gender attributions from both the psychological and sociological dimensions influence economic behaviour and outcomes for men and women differently. Skitka and Maslach (1990) suggest that gender roles inform what behaviour can be considered appropriate for each class of gender. Gender roles and status has also been theorized to lead to occupational segregation (Anker, 1997) as men and women choose jobs that do not compete or are complementary with social expectations. Gender theorists suggest that the labour market segregation mechanisms favour men and discriminate against women (Lindsey, 2005; Simmonds, 2012). They opine that men participate in paid labour market activities (breadwinning) while women are left with unpaid household chores (homemaking). This has led to a situation where women have been marginalised and disadvantaged in many aspects of society (Gatzweiler and Baumüller, 2014). However, the marginality theory suggests that marginalised persons have an experience in which the “cake of custom’ is broken and the individual is freed for new enterprises and for new associations” (Park, 1928). Consequently, the marginality thesis of entrepreneurship holds that individuals that are marginalised will look for opportunities in the fringes of the mainstream by establishing their own businesses (Adom, 2014; Vargas-Hernandez, 2013) and the establishment of family businesses in the context of this study. In this study, it is argued that female family heads are better utilizers of microfinance resources for starting businesses compared to male family heads. This is because, within the small business literature, evidence abounds on the discrimination in formal credit markets against female-led businesses (Akoten *et al.*, 2006; Asiedu *et al.*, 2013). This is largely symptomatic of the general discrimination of women in business (Gatzweiler and Baumüller, 2014) and other aspects of society as discussed extensively by the gender role theory (Shinnar *et al.*, 2012). Marlow and Patton (2005) argue that these differences are driven by the nature of socio-economic activity that requires women to subordinate to men in most societies with Ghana being no different or even more pronounced. This has led to a situation where there is self-selection of women into businesses and credit markets (Aterido *et al.*, 2013; Hansen and Rand, 2014b). This means that women who are able to break the “glass ceiling” imposed by psycho-social expectations are better able to utilise the few financial resources available to them than the average male entrepreneur. Consequently, it is hypothesised that:

*H2.* Female-headed families are more likely to have family businesses than male-headed families.

The above stated hypothesis establishes a direct relationship between female-headed families likability to have a family business as compared to a male-headed family. This has been attributed to psycho-social reasons within the gender schema and functionalist theories. In this hypothesis, an attempt is made to establish the heterogeneity in the relationship between microfinance and the establishment of family businesses as a result of gender differences of family heads.

#### *The moderating role of gender*

Banerjee *et al.* (2015) have found that there is a lot of heterogeneity in the returns to microfinance. The heterogeneity is largely explained by the different types of entrepreneurs accessing the microfinancial resources. There is little focus on the characteristics of the entrepreneurs such as gender. Gender has however been shown to psycho-socially explain economic behaviour and outcomes received by the different sexes (Anker, 1997; Lindsey, 2005).

This creates heterogeneity in the utilisation of resources for entrepreneurial purposes among the different sexes. This is in line with the original conceptualization of the RBT that suggests that entrepreneurs are heterogeneous in the ability to have insights about the usefulness of resources for strategic ends (Alvarez and Busenitz, 2001).

In this study, an attempt is made to establish the heterogeneity in the relationship between microfinance and the establishment of family businesses as a result of gender differences of family heads. Therefore, it is hypothesised that:

- H3.* The relationship between microfinance participation and entrepreneurial behaviour is moderated by the gender of the family head, such that the relationship is stronger among enterprises headed by female family heads relative to enterprises headed by male family heads.

#### *The source of gender effect*

So far, the study has sought to argue that gender is a source of heterogeneity in the relationship between microfinance and entrepreneurial behaviour of families. However, the source of this heterogeneity remains unclear. Beyond the heterogeneity in the relationship between microfinance participation and the establishment of family enterprises as a result of gender differences, it is important to understand the source of this difference. The RBT argues that heterogeneity is the main source of sustained competitive advantage for businesses. This may be due to social complexities (Barney, 1991, 2001) such as organisational culture (Zilber, 2011), reputation of the firm among suppliers and customers (Mavri and Ioannou, 2008) and relationships among managers (Owusu-Frimpong and Martins, 2010; Wu *et al.*, 2012). These reflect the internal and external firm-level dichotomies (Mellahi and Wilkinson, 2004). Organisational culture and relationships among managers of a firm are strategic level issues within the remit of the top managers of firms and hence represent the endowments of the specific organisation. The reputation of the firm among suppliers is an issue external to the firm and hence represents unearned advantages that accrue to social agents. Finally, these two issues can interact to create heterogeneity in the resource outcomes available to social agents. In this study, it is argued that the heterogeneity caused by gender in microfinancial resource and entrepreneurial behaviour is largely due to favouritism of women due to self-selection into entrepreneurship (Hansen and Rand, 2014b). This is because, on average, women who enter entrepreneurship are better than their male counterparts due to the discrimination women face in economic markets (Aterido *et al.*, 2013) as argued in *H2* earlier. We extend this idea to the family context and argue that female-headed families are likely to face discrimination emanating from society as has been argued by the general GT (Lindsey, 2005). Consequently, on average, female-headed families will be more capable of using their microfinancial resources for entrepreneurial activities. It is therefore hypothesised that:

- H4.* The differential between male- and female-headed families is due to a pure gender effect not female endowment.

## **Methodology**

### *Data source*

This current study uses data from the poverty assessment and comparative study of rural microfinance institutions and government programmes in Ghana (Annim *et al.*, 2014). Fundamentally, the motivation behind this paper was to evaluate the delivery strategies of microfinance institutions in Ghana, with the aim of recognising best practices to control operations of the industry by benchmarking against global practices with the view of sustaining and boosting the returns of the identified delivery strategies of

microfinance programmes. The study assessed the socio-economic profiles of households taking an interest in microfinance and a control group. Additionally, data on household demographics, thus, sex age, education, health status, religion, occupation and ethnicity were collected. A surveillance survey preceded the study to guide the selection of clients and non-clients. The data collection team zoned the country into three sectors, thus, coastal, middle and northern of which 17 microfinancing institutions comprising of rural banks, financial non-governmental organisations, credit unions, a “savings and loans” company and a susu group in all the zones were selected. Focussing on a target population of clients who, in the past six months, had received loans or had been shortlisted but yet to receive loans, individuals in 1,628 households were selected for this study. In each of the institutions, at least 30, and a most extreme of 160 clients were selected. A two-stage sampling procedure was adopted for the selection of the households included in this study. First, purposive sampling technique was utilised to select the number of clients by programme per institution, while a simple random sample was used for households’ selection. The minimum needed from each programme of a selected MFI was 30 clients. The selection followed this procedure: –30 clients were selected from programmes with between 30 and 40 new clients; –40 clients from programmes with between 41 and 100 new clients; –60 clients from programmes with between 101 and 200 new – clients; –80 clients from programmes with between 201 and 300 new clients; –100 clients from programmes with between 301 and 400 new clients; –120 clients from programmes with between 401 and 500 new clients; and –160 clients from programmes with 501 or more new clients. In addition, 1,104 households countrywide were selected based on a sample from the 2000 Census of Population and Housing as a control group. With the help of Ghana Statistical Service, 70 enumeration areas (EA) were haphazardly selected from the three zones. Each selected EA comprised of 17 or 18 households, giving a potential sample size of between 1,190 and 1,260. The number of EAs selected from each zone and region were as follows: Northern Zone: 12; Northern: 7; Upper West: 2 and Upper East: 3; Middle Zone: 29; Ashanti: 12; Brong Ahafo: 7 and Eastern: 10; Coastal Zone: 29; Greater Accra: 10; Volta: 6; Central: 6 and Western: 7. The data were collected from 2,727 households across Ghana in total. The data were collected in cross-sectional time methodology using the survey approach with the face-to-face interview as the method of collection. A 91 per cent response rate was accomplished.

#### *Operationalization of variables*

*Dependent variable: family entrepreneurial behaviour.* This refers to whether a family has an enterprise or not. Specifically, in this study, a family enterprise is conceptualised as non-farm family enterprises operated by a household. Nukunya (2003) noted that most families live in households in Ghana and hence labelling household enterprises as family enterprises has a basis in Ghanaian sociological behaviour. A family-based enterprise in this study is conceptualised as an enterprise that is owned and operated collectively by the family either nuclear or extended. This is the main distinguishing factor between this form of enterprise and the generic enterprise used in the small business literature. In the data utilised for the study, families were asked to indicate if the family head engaged in non-farm entrepreneurial activities. Therefore, in this study, commercial agriculture is not considered as part of family entrepreneurial behaviour. This is largely because the data impose constraints on the conceptual specification of family entrepreneurial behaviour or capture these other facets. However, this does not derail the argumentation in this study as this approach is consistent with other studies utilising secondary data to understand entrepreneurial behaviour (Arthur, 2007; Kinghan and Newman, 2015). Families with enterprises are considered entrepreneurial and coded as 1 and those without are considered non-entrepreneurial and are coded as 0.

*Independent variable: microfinance participation.* This is operationalised as whether a family (both individually and as a collective) participates in any microfinance scheme. Families with microfinance participation are coded as 1 and the families that do not participate are coded as 0. Table I helps to understand the nature of the independent variable through a breakdown of the programme type: 34.92 per cent of the families participate in rural microfinance programmes; 15.94 per cent participate in government sponsored microfinance programmes; while 8.79 per cent are donor agency funded.

*Moderator and decomposition variable: gender.* Gender was measured using the sex of the family head categories of male and female. A female-headed household is one in which a woman is the head of the household. It does not also mean that there is no male adult present but rather a husband may not be present in the household. This is because in Ghanaian sociology husbands are the head of homes. Therefore, if there is a husband, he is likely to be the head of the household but an adult son will most likely not be the household head. In the data set utilised, the specific question is does the household head lead the family in any non-farm entrepreneurial activities. Consequently, a female- or male-headed family entrepreneur is one that leads a family in a collective entrepreneurial behaviour. Female family heads were coded as 1 while male-headed families were coded as 0. A binary measurement of gender, although popular, does not account for individuals with ambiguous genitalia (Simmonds, 2012). However, this binary measurement remains accepted in the management and economic literature, and is employed for the purposes of this study. The variable is utilised for two purposes of moderating the relationship between microfinance and family enterprise establishment. The moderating role will help establish heterogeneity in the relationship while the decomposition role will help establish the source of the heterogeneity as either due to endowments, environmental or both.

*Instrumental variables.* It is possible that the relationship between microfinance participation and having a family enterprise is endogenous. A family that has an enterprise maybe likely to join a microfinance programme to gain capital (financial resources) for its operations while microfinance firms may target families with enterprises as has been the initial conceptualization for microfinance and development outcomes (Banerjee *et al.*, 2015; Shahriar *et al.*, 2016). In order to deal with this problem, two variables are introduced to conduct an instrumental variables regression. These are savings account and owning a piece of land. The key condition in choosing an instrumental variable is that it should be directly correlated to the endogenous variable but not the outcome variable (Wooldridge, 2012). A family having at least a savings account whether formally or informally does not directly lead to entrepreneurial behaviour except it helps in the acquisition of financial resources for start-up and consequently can be a good instrument. Also, self-selection occurs in credit markets (Fajnzylber *et al.*, 2009) as those families that believe they cannot access credit do not participate due to profit orientation that microfinance has become in recent times (Shahriar *et al.*, 2016). Hence, the decision not to participate in microfinance may be due to the lack of collateral to guarantee microcredit.

*Control variables.* Control variables are important to understanding the effects of main independent variables on a dependent variable. When used appropriately, they should help

**Table I.**  
Microfinance  
participation

Type of programme	Gender		Total	Per cent
	Male	Female		
Control group	831	269	1,100	40.34
Rural microfinance's own programme	729	224	953	34.92
Government programme	346	88	434	15.94
Donor agency programme	154	86	240	8.79
Total	2,060	667	2,727	100

uncover the true effects of the independent variable and if not can mask the true effect (Bernert and Aguinis, 2016). This study controls for location, ethnicity, marital status, age, religion, education, health and family size. The location variable was coded using a rural-urban approach. Families located in urban areas were coded as 1 and those in rural areas were coded as 0. In Ghana, the majority ethnic group are the Akans who enjoy strong cultural, economic and political power (Dzisi, 2008; Lindberg and Morrison, 2008). To control for this effect, ethnicity is included in the model with Akan majority tribe coded as 1 and other minorities coded as 0. Marriage has been shown to be the unexplained difference between male- and female-headed businesses (Jennings and Mcdougald, 2007). Women withdraw from formal employment markets to either engage in homekeeping or informal entrepreneurship to support family income. This effect is controlled for with married family heads coded as 1 and non-married ones coded as 0. Religion also influences types of credit utilised for entrepreneurial activities. For example, Muslims are less likely to engage in any form of microfinance that is interest based and therefore their entrepreneurial behaviour may be limited by this constraint (Acheampong, 2017). Religion was controlled for with Christian religion coded as 1 and other religions such as Islam and traditional African religion coded as 0. The number of persons in a household is more likely to affect entrepreneurship as it limits the number of resources available for entrepreneurial activities by the family, especially female entrepreneurship (Kinghan and Newman, 2015). Family size is controlled for using the total number of persons in the household. Since there is no clear variable capturing this effect, it is constructed by summing the number of children and adults in a household. Age dependence has been theorized to affect organisational outcomes in organisational ecology (Thornhill and Amit, 2003). This effect is controlled for with the age of the family head as a proxy. Education influences the human capital of its possessor, and human capital is linked to economic outcomes (Lund-Vinding, 2006). This was operationalized as the level of literacy (ability to read and write) of the family head. The health status of the family head was included as health is an important part of human capital. This was operationalized as “has the family head been sick in the last 4 weeks?” Those that have been sick were coded as 1 and the others as 0.

### *Empirical specifications*

To examine the relationship between microfinance participation, gender and family entrepreneurial behaviour, a probit model is specified:

$$P(\text{FEB} = 1) = \phi(\alpha + \beta_1\text{MFP} + \beta_2\text{FEM} + \beta_3\text{MFP} \times \text{FEM} + \beta_4\text{COV} + \varepsilon_i) \quad (1)$$

where FEB = 1 means a family engages in entrepreneurial behaviour;  $\alpha$  is the constant;  $\beta$  is the estimated coefficient; MFP represents a family’s participation in microfinance or not; FEM is the female dummy; MFP  $\times$  FEM is the interaction between microfinance participation and gender of family head; COV represents other controls in the model; and  $\varepsilon$  refers to the error term. To estimate the source of gender differential, a Blinder-Oaxaca non-linear decomposition is specified.

Threefold decomposition (Sinning *et al.*, 2008):

$$Y_F - Y_M = (X_F - X_M)\beta_M + X_M(\beta_F - \beta_M) + (X_F - X_M)(\beta_F - \beta_M) \quad (2)$$

where  $M$  and  $F$  represent male and female family heads, respectively;  $Y_F - Y_M$  is the difference in entrepreneurial behaviour between female and male family heads;  $X$  is the mean value of the explanatory variable; and  $\beta$  is the estimated coefficient for each group. The first and second parts of the right-hand sides of the equations represent the characteristic and coefficient effects, respectively, and, in the case of the threefold decomposition, a third which is the interaction effect.

**Results**

*Descriptive results*

The descriptive results show that approximately 32 per cent of families sampled have an enterprise but this is higher for female-headed families with 54 per cent of these families having an enterprise as compared to 25 per cent of male-headed families. In terms of microfinance participation among families, the general sample shows about a 60 per cent participation rate, and this is consistent across the gender groups. Female-headed families consisted of 25 per cent of the sample showing a male dominance, which is consistent with much of Ghanaian culture (Nukunya, 2003). Most of the female-headed families are in urban areas while male-headed families are more likely to own land than female-headed families. On average, most family heads were likely to be 47 years old, and 74 per cent of these families were Christian families in religion. Also, 60 per cent of the family heads were literate (could read and write) and the family sizes were, on average, composed of three persons (Table II).

*Regression results*

Table III presents the results for the various model specifications of the independent variable with controls and moderating effects on the dependent variable. In model 1, a very parsimonious model involving the independent variable alone is specified, and in model 2, controls are added to the independent model. In model 3, an assumption is made that the microfinance variable is endogenous and hence an instrumental probit model is specified. The Wald test of exogeneity shows a  $\chi^2$  of 0.65 which is insignificant at the 0.05 significance level. Consequently, the results do not support the existence of endogeneity using our instruments. This means a return to normal probit analysis in explaining the relationships between the constructs of interest. In model 4, a return is made to a simple probit model with a moderation of gender on the relationship between microfinance and entrepreneurial behaviour. Models 5 and 6 are re-estimations of Model 2 for the male and female gender, respectively. The results indicate that microfinance participation by families has a positive and significant influence in all the model specifications. Also, female-headed families are more likely to start businesses compared to male-headed families as reported in models 2-4. Gender (female dummy) is seen positively and significantly moderates the relationship between microfinance and entrepreneurial behaviour in families (Figure 1).

The decomposition results in Table IV are generated from the Blinder-Oaxaca specification. Model 1 shows the results for a specification with male-headed families as the

Variable	General sample		Male sample		Female sample	
	Mean	SD	Mean	SD	Mean	SD
Family enterprise	0.323	0.468	0.252	0.435	0.541	0.499
Microfinance participation	0.596	0.491	0.597	0.491	0.596	0.491
Urban	0.475	0.500	0.449	0.497	0.571	0.495
Akan	0.511	0.500	0.483	0.500	0.601	0.490
Ownership of land	0.554	0.497	0.588	0.492	0.447	0.498
Number of savings account	0.654	0.743	0.665	0.771	0.622	0.652
Married	0.763	0.425	0.923	0.266	0.271	0.445
Age of family head	47.178	13.353	46.995	13.017	47.750	14.346
Christian	0.738	0.440	0.702	0.457	0.850	0.357
Literacy of family head	0.594	0.491	0.638	0.481	0.456	0.498
Health of family head	0.218	0.413	0.193	0.395	0.291	0.454
Family size	5.242	2.480	5.369	2.487	4.850	2.421
Female	0.245	0.430				

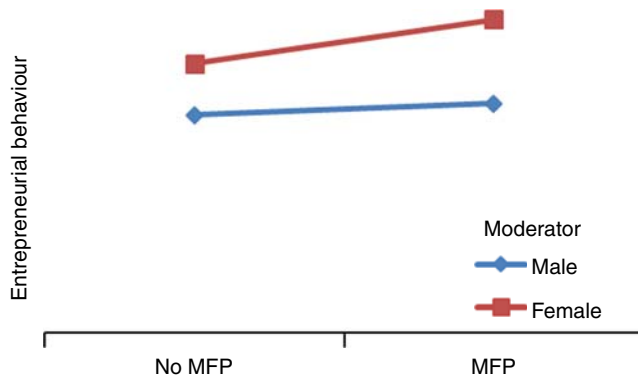
**Table II.**  
Summary statistics

DV: family enterprise	(1)	(2)	(3)	(4)	(5)	(6)
Microfinance (Yes = 1)	0.154*** (0.017)	0.107*** (0.017)	0.505*** (0.177)	0.108*** (-0.017)	0.061** (0.020)	0.257*** (0.032)
Urban (Yes = 1)		0.205*** (0.016)	0.687*** (0.069)	0.203*** (0.016)	0.208*** (0.019)	0.180*** (0.035)
Majority ethnic (Yes = 1)		0.019 (0.018)	0.073 (0.062)	0.015 (0.018)	0.017 (0.020)	-0.005 (0.038)
Married head (Yes = 1)		-0.031 (0.025)	-0.134 (0.091)	-0.028 (0.025)	-0.015 (0.034)	-0.030 (0.040)
Age of head		-0.006*** (0.001)	-0.022*** (0.003)	-0.006*** (0.001)	-0.006*** (0.001)	-0.007*** (0.001)
Christian head (Yes = 1)		-0.046* (0.021)	-0.163* (0.074)	-0.042* (0.021)	-0.055* (0.023)	-0.009 (0.054)
Literate head (Yes = 1)		0.064** (0.020)	0.224*** (0.067)	0.061** (0.019)	0.081*** (0.024)	0.013 (0.038)
Health of head (Yes = 1)		-0.002 (0.020)	0.013 (0.072)	-0.002 (0.020)	-0.001 (0.023)	-0.005 (0.039)
Family size		-0.005 (0.003)	-0.021* (0.012)	-0.005 (0.003)	-0.001 (0.023)	-0.005 (0.039)
Female head (Yes = 1)		0.234*** (0.023)	0.792*** (0.088)	0.264*** (-0.028)	-0.005 (0.004)	-0.004 (0.009)
Microfinance × Female				0.063*** (0.019)		
Wald	70.40***	535.64***	534.20***	544.20***	282.58***	130.39***
Pseudo- $R^2$	0.021	0.187		0.192	0.139	0.170
Test of exogeneity			0.65			
$n$	2,718	2,715	2,714	2,714	2,057	658

Notes: Robust standard errors are reported in parentheses. \* $p < 0.10$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

Table III. Average marginal effects from probit regressions

**Figure 1.**  
The moderating  
role of gender



**Table IV.**  
Blinder-Oaxaca  
estimates

	(1) Family enterprise	(2) Family enterprise
<i>Decomposition</i>		
Endowments	-0.032 (0.030)	0.038 (0.025)
Coefficients (pure gender effect)	-0.255*** (0.031)	0.261*** (0.035)
Interaction	-0.007 (0.038)	-0.007 (0.038)
<i>n</i>	2,715	2,715

**Notes:** Robust standard errors are reported in parentheses. \* $p < 0.10$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

reference group while model 2 has female-headed families as the reference group. This is to ensure that there is no order effect in the results. The results show that the endowments and interaction effects are insignificant in both models. The coefficient effect is however significant in both models.

### Discussion and implication of findings

Entrepreneurship has been found to be very useful to the welfare of families in the developing world (Newman and Kinghan, 2015). However, one of the major constraints that families have in establishing family businesses is the availability of resources, especially financial resources (Beck *et al.*, 2008; Evans and Jovanovic, 1989). This study seeks to understand the linkage between microfinance resources and entrepreneurial behaviour of families and the moderating role of gender of family head. This discussion is limited to the hypothesised relationships and their implications for the enterprise theory and policy as well as suggests contributions to the entrepreneurship literature and directions for future research. The discussion is based on the hypothesis developed.

In *H1*, the study sought to establish the baseline relationship between microfinance and entrepreneurial behaviour of families. Our argument in this hypothesis is that having the microfinance resources removes entry constraints that are imposed by a lack of resources to pursue an entrepreneurial vision. After the analysis, it is found that there is a strong positive relationship between family microfinance participation and entrepreneurial behaviour and is robust to the different model specifications. This finding supports theorizations about the relationship between the RBT and entrepreneurial behaviour (Alvarez and Busenitz, 2001; Barney, 2001). These suggest that the entrepreneurial processes emanate when some social agents have insights into the value of resources that other agents do not. The capability to understand the usefulness of resources in this light then can be seen as an agent's asset and hence a resource in itself. Consequently, the findings suggest that microfinance participation

---

allows a family to possess a valuable, rare, inimitable and non-substitutable resource that can reduce constraints to entrepreneurial behaviour (Evans and Jovanovic, 1989) with the right insights into the resource.

*H2* and *H3* seek to establish the moderating effects of family-head gender on the relationship established in *H1*. First, an attempt is made to establish the relationship between the gender of family head and entrepreneurial behaviour. The study argues that women have been discriminated against in line with the GT (Anker, 1997; Lindsey, 2005), and this situation has led to women being a marginalised group in society (Gatzweiler and Baumüller, 2014; Park, 1928). In line with the marginality thesis of entrepreneurship, it is suggested that female-headed families will be marginalised and hence look for opportunities in the fringes of the mainstream by establishing their own businesses (Adom, 2014; Vargas-Hernandez, 2013). The study finds support for this theory, which is robust to different empirical specifications. Second, an attempt is made to establish the moderating role of gender on the relationship between microfinance participation and entrepreneurial behaviour of the family. This is because Banerjee *et al.* (2015) have found that there is a lot of heterogeneity in the returns to microfinance. Yet, heterogeneity in microfinance outcomes due to gender differences between men and women remain nascent in the entrepreneurship literature. This study argues that female-led families are more likely to have better returns to microfinance than their male counterparts due to the discrimination in economic markets, and hence only competent female family heads select into microfinance participation and hence have better outcomes. The study finds support for this claim. This finding supports the claim in the literature that women are efficient utilizers of microfinance resources compared to their male counterparts (Akpalu *et al.*, 2012). Consequently, the idea that women must be helped to become honorary men in business is no longer valid (Marlow and Patton, 2005).

In *H4*, the study seeks to establish the source of heterogeneity in microfinance participation outcomes for male- and female-headed families. The RBT suggests that resource advantages can afford economic agents certain advantages due to social complexities (Barney, 1991). These social complexities can reflect internal and external firm-level dichotomies that continue to be debated in the organisation and management literature. However, the advantages, an economic agent (in the case of this study, a family) can have, may come from either the families own internal capabilities, externally conferred and may be an interaction of earlier two (Mellahi and Wilkinson, 2004). In this study, the gender differential is due to environmental effects that favour women due to the selection of more competent women into entrepreneurship as a result of discrimination in economic markets generally (Aterido *et al.*, 2013; Hansen and Rand, 2014b). There was support for this claim, and the effect is not reversed even when the reference group for the decomposition analysis was swapped.

#### *Implications for policy and theory*

In this section, some policy prescriptions are offered based on the findings of this study. First, the microfinance participation has been found to be positively correlated to family business establishment. Government should increase its support to the microfinance sector as a way of making it available to families that want to engage in entrepreneurial activities that might be hampered by credit constraints. Second, female-headed families should, all things being equal, be given preferential treatment, as these families are better utilizers of microfinance to achieve entrepreneurial outcomes compared to their male counterparts. Although this finding is driven by a purely gender effect, it can help address deep-seated social complexities that discriminate against women as a positive externality to favouring female-led families in this direction.

In terms of theory, the resource-based view of the firm suggests that firms must possess a bundle of valuable, rare and non-substitutable resources to gain a competitive advantage

in an industry or market (Barney, 1991, 2001). This theory suggests that only existing firms with resources of this calibre can sustain their competitive advantage. However, recent studies are beginning to show that this argument is not enough for firms as it assumes an allocative view to entrepreneurship, although there is a discovery and creativity dimension to entrepreneurship (Bradley *et al.*, 2012). This study extends this idea by suggesting that these resources can help a family overcome environmental constraints to the achievement of its strategic goal of starting a family business (Evans and Jovanovic, 1989), which can be reasoned as a competitive advantage. Second, Alvarez and Busenitz (2001) note that most RBV research has been for larger firms, although small businesses, especially family ones, also need to acquire critical resources to achieve sustained competitive advantage. This can be tied into the current contentions in literature about the value of microfinance as a resource to entrepreneurship (see Banerjee *et al.*, 2015; Field *et al.*, 2013). The findings of this study addresses this question by suggesting that empirically there is a basis to claim that microfinance is useful to entrepreneurship, especially families in the Ghanaian context. Finally, the study's findings help to address the arguments about the gender differences and their sources in credit access outcomes in the developing world (Asiedu *et al.*, 2013; Hansen and Rand, 2014b). The findings of this study show that the gender differences are driven largely by external factors which reveal a pure gender effect. However, this difference benefits women more than men. This suggests the issue of "revealed-capabilities" is worth considering within the gender debate. This finding offers some credence to the issues raised by gender scholars within the entrepreneurship literature who argue that women should not be considered as subordinate men that need to be helped to become honorary men but, as this study shows, have their own capabilities that need to be honed (Ahl and Marlow, 2012; Marlow, 2002; Marlow and Patton, 2005).

#### *Directions for future research*

This study makes significant contributions to literature on the relationship between microfinance and entrepreneurial behaviour of families and the heterogeneity caused by the gender of family head. However, there may be other boundary conditions within the context of the family or microfinance programme that can influence the nature of the relationship. Consider, for example, other demographics of the family such as location, human capital and age of family head, which were controlled for and found to be significant in this study but was not moderated for. Further studies are needed to disentangle the bounding effect of these on the baseline relationship. At the level of the microfinance programme, Shahriar *et al.* (2016) have shown that the profit orientations of the institutions can have an effect on entrepreneurial behaviour. Anecdotally, this orientation of microfinance can have a moderating effect on the relationship between a family's participation and its entrepreneurial behaviour. Second, the cross-sectional nature of the data imposes restrictions on the study's ability to observe families that enter into entrepreneurship purely because there is greater access to capital or those that are already in entrepreneurship and need extra capital to boost their family business (Banerjee *et al.*, 2015).

#### **Conclusion**

This study sought to understand the relationship between microfinance participation and entrepreneurial behaviour of Ghanaian families as well as the moderating role of the family head's gender. The study finds that microfinance participation has a positive and significant relationship between a family's decision to own an enterprise. Also, gender positively moderates the above relationship and the gap is due to a pure gender gap resulting from discrimination of women in society. The study makes a major contribution to the literature by showing empirically the source of heterogeneity in entrepreneurial returns to microfinance participation by families.

## References

- Acheampong, G. (2017), "Micro-entrepreneurial motivations in Ghana: do Muslims differ?", in Ramadani, V., Dana, L.-P., Gërguri-Rashiti, S. and Ratten, V. (Eds), *Entrepreneurship and Management in an Islamic Context*, Springer International Publishing, Cham, pp. 33-47.
- Acheampong, G. and Esposito, M. (2014), "The nature of entrepreneurship in bottom of the pyramid markets", *International Journal of Entrepreneurship and Small Business*, Vol. 21 No. 4, pp. 437-456.
- Adom, K. (2014), "Beyond the marginalization thesis: an examination of the motivations of informal entrepreneurs in sub-saharan Africa", *International Journal of Entrepreneurship and Innovation*, Vol. 15 No. 2, pp. 113-125.
- Adom, K. (2015), "Recognizing the contribution of female entrepreneurs in economic development in Sub-Saharan Africa: some evidence from Ghana", *Journal of Developmental Entrepreneurship*, Vol. 20 No. 1, p. 1550003, available at: <https://doi.org/10.1142/S108494671550003X>
- Adom, K. and Asare-Yeboah, I.T. (2016), "An evaluation of human capital theory and female entrepreneurship in sub-Saharan Africa", *International Journal of Gender and Entrepreneurship*, Vol. 8 No. 4, pp. 402-423.
- Adom, K. and Williams, C.C. (2012), "Evaluating the motives of informal entrepreneurs in Koforidua, Ghana", *Journal of Developmental Entrepreneurship*, Vol. 17 No. 1, p. 1250005.
- Afrane, S. (2002), "Microfinance interventions in Ghana and South Africa: a synthesis of major impacts and lessons", *Journal of Microfinance*, Vol. 4 No. 1, pp. 37-58.
- Ahl, H. and Marlow, S. (2012), "Exploring the dynamics of gender, feminism and entrepreneurship: advancing debate to escape a dead end?", *Organization*, Vol. 19 No. 5, pp. 543-562.
- Akoten, J.E., Sawada, Y. and Otsuka, K. (2006), "The determinants of credit access and its impacts on micro and small enterprises: the case of garment producers in Kenya", *Economic Development and Cultural Change*, Vol. 54 No. 4, pp. 927-944.
- Akpalu, W., Alnaa, S.E. and Aglobitse, P.B. (2012), "Access to microfinance and intra household business decision making: implication for efficiency of female owned enterprises in Ghana", *Journal of Socio-Economics*, Elsevier Inc., Vol. 41 No. 5, pp. 513-518.
- Al-Dajani, H., Bika, Z., Collins, L. and Swail, J. (2014), "Gender and family business: new theoretical directions", *International Journal of Gender and Entrepreneurship*, Vol. 6 No. 3, pp. 218-230.
- Alvarez, S.A. and Busenitz, L.W. (2001), "The entrepreneurship of resource-based theory", *Journal of Management*, Vol. 27 No. 6, pp. 755-775.
- Anker, R. (1997), "Theories of occupational segregation by sex: an overview", *International Labour Review*, Vol. 136 No. 3, pp. 315-339.
- Annim, S., Awusabo-Asare, K., Abane, A., Amonoo, E. and Acheampong, I. (2014), "Poverty assessment and a comparative study of rural microfinance institutions and government programmes in Ghana", Inter-university Consortium for Political and Social Research (ICPSR-35296), Ann Arbor-Michigan, MI, available at: [www.icpsr.umich.edu/icpsrweb/ICPSR/studies/35296](http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/35296)
- Arku, C. and Arku, F.S. (2009), "More money, new household cultural dynamics: women in micro-finance in Ghana", *Development in Practice*, Vol. 19 No. 2, pp. 200-213.
- Arthur, P. (2007), "Institutions and small-scale enterprises in Ghana development institutions and small-scale enterprises in Ghana", *Journal of Contemporary African Studies*, Vol. 25 No. 3, pp. 417-437.
- Asiedu, E., Kalonda-Kanyama, I., Ndikumana, L. and Nti-Addae, A. (2013), "Access to credit by firms in sub-Saharan Africa: how relevant is gender?", *American Economic Review*, Vol. 103 No. 3, pp. 293-297.
- Aterido, R., Beck, T. and Iacovone, L. (2013), "Access to finance in Sub-Saharan Africa: is there a gender gap?", *World Development*, Vol. 47 No. 1, pp. 102-120.
- Banerjee, A., Breza, E., Duflo, E. and Kinnan, C. (2015), *Do Credit Constraints Limit Entrepreneurship? Heterogeneity in the Returns to Microfinance*, Department of Economics Northwestern University, Evanston, IL.

- Banerjee, A., Karlan, D. and Zinman, J. (2015), "Six randomized evaluations of microcredit: introduction and further steps", *American Economic Journal: Applied Economics*, Vol. 7 No. 1, pp. 1-21.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Barney, J.B. (2001), "Is the resource-based 'view' a useful perspective for strategic management research? Yes", *The Academy of Management Review*, Vol. 26 No. 1, pp. 41-56.
- Beck, T. and Demirgüç-Kunt, A. (2006), "Small and medium-size enterprises: access to finance as a growth constraint", *Journal of Banking & Finance*, Vol. 30 No. 11, pp. 2931-2943.
- Beck, T., Demirgüç-Kunt, A. and Maksimovic, V. (2008), "Financing patterns around the world: are small firms different?", *Journal of Financial Economics*, Vol. 89 No. 3, pp. 467-487.
- Bem, S.L. (1981), "Gender schema theory: a cognitive account of sex typing", *Psychological Review*, Vol. 88 No. 4, pp. 354-364.
- Bernerth, J.B. and Aguinis, H. (2016), "A critical review and best-practice recommendations for control variable usage", *Personnel Psychology*, Vol. 69 No. 1, pp. 1-55.
- Boohene, R., Sheridan, A. and Kotey, B. (2008), "Gender, personal values, strategies and small business performance", *Equal Opportunities International*, Vol. 27 No. 3, pp. 237-257.
- Bradley, S.W., McMullen, J.S., Artz, K. and Simiyu, E.M. (2012), "Capital is not enough: innovation in developing economies", *Journal of Management Studies*, Vol. 49 No. 4, pp. 684-717.
- Bruton, G.D., Ketchen, D.J. and Ireland, R.D. (2013), "Entrepreneurship as a solution to poverty", *Journal of Business Venturing*, Elsevier Inc., Vol. 28 No. 6, pp. 683-689.
- Bruton, G.D., Khavul, S. and Chavez, H. (2011), "Microlending in emerging economies: building a new line of inquiry from the ground up", *Journal of International Business Studies*, Palgrave Macmillan, Vol. 42 No. 5, pp. 718-739.
- Chathoth, P.K. and Olsen, M.D. (2007), "The effect of environment risk, corporate strategy, and capital structure on firm performance: an empirical investigation of restaurant firms", *International Journal of Hospitality Management*, Vol. 26 No. 3, pp. 502-516.
- Chliova, M., Brinckmann, J. and Rosenbusch, N. (2015), "Is microcredit a blessing for the poor? A meta-analysis examining development outcomes and contextual considerations", *Journal of Business Venturing*, Elsevier Inc., Vol. 30 No. 3, pp. 467-487.
- Chung, R. (2009), "The gender schema: how contrasts and multiple characteristics affect metaphorical gender in adults", *Griffith Working Papers in Pragmatics and Intercultural Communication*, Vol. 2 No. 1, pp. 51-61.
- Dzisi, S. (2008), "Entrepreneurial activities of indigenous African women: a case of Ghana", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 2 No. 3, pp. 254-264.
- Eifert, B., Gelb, A. and Ramachandran, V. (2008), "The cost of doing business in Africa: evidence from enterprise survey data", *World Development*, Vol. 36 No. 9, pp. 1531-1546.
- Evans, D.S. and Jovanovic, B. (1989), "An estimated model of entrepreneurial choice under liquidity constraints", *Journal of Political Economy*, Vol. 97 No. 4, p. 808.
- Evans, J.D. and Winston, E. (2008), "Loan delinquency among small business owners in Ghana: the importance of gender to the lending process", *International Journal of Entrepreneurship and Small Business*, Vol. 5 Nos 3/4, pp. 318-336.
- Fajnzylber, P., Maloney, W.F. and Gabriel, V. (2009), "Releasing constraints to growth or pushing on a string? Policies and performance of Mexican micro-firms", *Journal of Development Studies*, Vol. 45 No. 7, pp. 1027-1047.
- Field, B.E., Pande, R., Papp, J. and Rigol, N. (2013), "Does the classic microfinance model discourage entrepreneurship among the poor? Experimental evidence from India", *The American Economic Review*, Vol. 103 No. 6, pp. 2196-2226.
- Galbreath, J. and Galvin, P. (2008), "Firm factors, industry structure and performance variation: new empirical evidence to a classic debate", *Journal of Business Research*, Vol. 61 No. 2, pp. 109-117.

- Gatzweiler, F.W. and Baumtüller, H. (2014), "Marginality – a framework for analyzing causal complexities of poverty", in von Braun, J and Gatzweiler, F.W. (Eds), *Marginality: Addressing the Nexus of Poverty, Exclusion and Ecology*, Springer, Dordrecht, pp. 27-40.
- Gupta, V.K., Turban, D.B. and Bhawe, N.M. (2008), "The effect of gender stereotype activation on entrepreneurial intentions", *Journal of Applied Psychology*, Vol. 93 No. 5, pp. 1053-1061.
- Hansen, H. and Rand, J. (2014a), "Estimates of gender differences in firm's access to credit in Sub-Saharan Africa", *Economics Letters*, Vol. 123 No. 3, pp. 374-377.
- Hansen, H. and Rand, J. (2014b), "The myth of female credit discrimination in African manufacturing", *Journal of Development Studies*, Vol. 50 No. 1, pp. 81-96.
- Haus, I., Steinmetz, H., Isidor, R. and Kabst, R. (2013), "Gender effects on entrepreneurial intention: a meta-analytical structural equation model", *International Journal of Gender and Entrepreneurship*, Vol. 5 No. 2, pp. 130-156.
- Jennings, J.E. and McDougald, M.S. (2007), "Work-family interface experiences and coping strategies: implications for entrepreneurship research and practice", *Academy of Management Review*, Vol. 32 No. 3, pp. 747-760.
- Khavul, S. (2010), "Executive overview", *Academy of Management Perspectives*, Vol. 24 No. 3, pp. 58-72.
- Kinghan, C. and Newman, C. (2015), "Social capital, political connections, and household enterprises, No. 2015/001", available at: [www.wider.unu.edu/publications/working-papers/2015/en\\_GB/wp2015-001/\\_files/93141573571717252/default/wp2015-001.pdf](http://www.wider.unu.edu/publications/working-papers/2015/en_GB/wp2015-001/_files/93141573571717252/default/wp2015-001.pdf) (accessed 11 June 2015).
- Kuada, J. (2009), "Gender, social networks, and entrepreneurship in Ghana", *Journal of African Business*, Vol. 10 No. 1, pp. 85-103.
- Langevang, T., Gough, K.V., Yankson, P.W.K., Owusu, G. and Osei, R. (2015), "Bounded entrepreneurial vitality: the mixed embeddedness of female entrepreneurship", *Economic Geography*, JOUR, Wiley Online Library, Vol. 91 No. 4, pp. 449-473.
- Lin, N. (1999), "Building a network theory of social capital", *Connections*, Vol. 22 No. 1, pp. 28-51.
- Lindberg, S.I. and Morrison, M.K.C. (2008), "Are African voters really ethnic or clientelistic? Survey evidence from Ghana", *Political Science Quarterly*, Vol. 123 No. 1, pp. 95-122.
- Lindsey, L.L. (2015), *Gender Roles: A Sociological Perspective*, Routledge, Oxford.
- Lund-Vinding, A. (2006), "Absorptive capacity and innovative performance: a human capital approach", *Economics of Innovation and New Technology*, Vol. 15 Nos 4/5, pp. 507-517.
- McMullen, J.S. (2011), "Delineating the domain of development entrepreneurship: a market-based approach to facilitating inclusive economic growth", *Entrepreneurship: Theory and Practice*, Vol. 35 No. 1, pp. 185-193.
- Marlow, S. (2002), "Women and self-employment", *International Journal of Entrepreneurship and Innovation*, Vol. 3 No. 2, pp. 83-91.
- Marlow, S. and Patton, D. (2005), "All credit to men? Entrepreneurship, finance, and gender", *Entrepreneurship Theory and Practice*, Vol. 29 No. 6, pp. 717-735.
- Mavri, M. and Ioannou, G. (2008), "Customer switching behaviour in Greek banking services using survival analysis", *Managerial Finance*, Vol. 34 No. 3, pp. 186-197.
- Mellahi, K. and Wilkinson, A. (2004), "Organizational failure: a critique of recent research and a proposed integrative framework", *International Journal of Management Reviews*, Vols 5-6 No. 1, pp. 21-41.
- Montresor, S. (2004), "Resources, capabilities, competences and the theory of the firm", *Journal of Economic Studies*, Vol. 31 No. 5, pp. 409-434.
- Newman, A., Schwarz, S. and Borgia, D. (2014), "How does microfinance enhance entrepreneurial outcomes in emerging economies? The mediating mechanisms of psychological and social capital", *International Small Business Journal*, Vol. 32 No. 2, pp. 158-179.
- Newman, C. and Kinghan, C. (2015), "Economic transformation and the diversification of livelihoods in rural VietNam", UNU-WIDER Working Paper Series No. 64, Helsinki.

- Nukunya, G.K. (2003), *Tradition and Change in Ghana: An Introduction to Sociology*, Ghana Universities Press.
- Overå, R. (2007), "When men do women's work: structural adjustment, unemployment and changing gender relations in the informal economy of Accra, Ghana", *The Journal of Modern African Studies*, Vol. 45 No. 4, pp. 539-563.
- Owusu-Frimpong, N. and Martins, A. (2010), "Adoption and implementation of internal marketing systems by Ghanaian small- and medium-sized enterprises", *Journal of African Business*, Vol. 11 No. 1, pp. 26-48.
- Park, R.E. (1928), "Human migration and the marginal man", *American Journal of Sociology*, Vol. 33 No. 6, pp. 881-893.
- Peteraf, M.A. and Barney, J.B. (2003), "Unraveling the resource-based tangle", *Managerial and Decision Economics*, Vol. 24 No. 4, pp. 309-323.
- Prahalad, C.K. and Hart, S.L. (2002), "The fortune at the bottom of the pyramid", *Strategy+Business*, Vol. 26 No. 1, pp. 1-14.
- Pribadi, H. and Kanai, K. (2011), "Examining and exploring Indonesia small and medium enterprise performance: an empirical study", *Asian Journal of Business Management*, Vol. 3 No. 2, pp. 98-107.
- Rivard, S., Raymond, L. and Verreault, D. (2006), "Resource-based view and competitive strategy: an integrated model of the contribution of information technology to firm performance", *The Journal of Strategic Information Systems*, Vol. 15 No. 1, pp. 29-50.
- Sarasvathy, S., Kumar, K., York, J.G. and Bhagavatula, S. (2014), "An effectual approach to international entrepreneurship: overlaps, challenges, and provocative possibilities", *Entrepreneurship Theory and Practice*, Vol. 38 No. 1, pp. 71-93.
- Sarfraz, L., Faghih, N. and Majd, A.A. (2014), "The relationship between women entrepreneurship and gender equality", *Journal of Global Entrepreneurship Research*, Vol. 4 No. 1, p. 6.
- Scherer, R.F., Brodzinski, J.D. and Wiebe, F.A. (1990), "Entrepreneur career selection and gender: a socialization approach", *Journal of small business management*, Vol. 28 No. 2, pp. 37-47.
- Shahriar, A.Z.M., Schwarz, S. and Newman, A. (2016), "Profit orientation of microfinance institutions and provision of financial capital to business start-ups", *International Small Business Journal*, Vol. 34 No. 4, pp. 532-552.
- Shaw, J.D., Park, T. and Kim, E. (2013), "A resource-based perspective on human capital losses, HRM investments, and organizational performance", *Strategic Management Journal*, Vol. 34 No. 5, pp. 572-589.
- Shinnar, R.S., Giacomini, O. and Janssen, F. (2012), "Entrepreneurial perceptions and intentions: the role of gender and culture", *Entrepreneurship Theory and Practice*, Vol. 36 No. 3, pp. 465-493.
- Simmonds, M. (2012), "Feminist gender theory summary", available at: [www.aissg.org/PDFs/Gender-Theory-Summary.pdf](http://www.aissg.org/PDFs/Gender-Theory-Summary.pdf)
- Sinning, M., Hahn, M. and Bauer, T. (2008), "The Blinder-Oaxaca decomposition for nonlinear regression models", *The Stata Journal*, Vol. 8 No. 4, pp. 480-492.
- Skitka, L.J. and Maslach, C. (1990), "Gender roles and the categorization of gender-relevant behavior", *Sex Roles*, Vol. 22 Nos 3/4, pp. 133-150.
- Spring, A. and Rutashobya, L.K. (2009), "Gender-related themes in african entrepreneurship: introduction to the articles", *Journal of African Business*, Vol. 10 No. 1, pp. 1-10.
- Tavitayan, P., Qiu Zhang, H. and Qu, H. (2012), "The effect of competitive strategies and organizational structure on hotel performance", *International Journal of Contemporary Hospitality Management*, Vol. 24 No. 1, pp. 140-159.
- Thornhill, S. and Amit, R. (2003), "Learning about failure: bankruptcy, firm age, and the resource-based view", *Organization Science*, INFORMS, Vol. 14 No. 5, pp. 497-509.
- Vargas-Hernandez, J.G. (2013), "Strategies for creating new business, a sociocultural and institutional approach", *Equilibrium: Quarterly Journal of Economics and Economic Policy*, Vol. 8 No. 1, pp. 81-90.

Wooldridge, J. (2012), *Introductory Econometrics: A Modern Approach*, 4th ed., CENGAGE, Boston, MA, available at: [www.google.com/books?hl=en&lr=lang\\_en&id=aTsWAAAAQBAJ&oi=fnd&pg=PP1&dq=wooldridge+econometrics&ots=oWozwtVMMb&sig=b5AA23tGzBgHZ3FR-5NkqWGbDCg](http://www.google.com/books?hl=en&lr=lang_en&id=aTsWAAAAQBAJ&oi=fnd&pg=PP1&dq=wooldridge+econometrics&ots=oWozwtVMMb&sig=b5AA23tGzBgHZ3FR-5NkqWGbDCg) (accessed 21 October 2014).

Wu, W., Tsai, C. and Fu, C. (2012), "The relationships among internal marketing, job satisfaction, relationship marketing, customer orientation, and organizational performance: an empirical study of TFT-LCD companies in Taiwan", *Human Factors and Ergonomics in Manufacturing & Service Industries*, Vol. 23 No. 5, pp. 436-449.

Zilber, T.B. (2011), "The relevance of institutional theory for the study of organizational culture", *Journal of Management Inquiry*, Vol. 21 No. 1, pp. 88-93.

**Further reading**

Woldie, A., Mwita, J.I. and Saidimu, J. (2012), "Challenges of microfinance accessibility by SMEs in Tanzania", *Thunderbird International Business Review*, Vol. 54 No. 2, pp. 567-579.

**Appendix**

	1	2	3	4	5	6	7	8	9	10	11	12	13
Family enterprise	1												
Microfinance participation	0.160	1											
Urban	0.323	0.155	1										
Akan	0.111	-0.023	0.235	1									
Ownership of land	-0.188	0.069	-0.269	-0.066	1								
Number of savings account	0.154	0.300	0.348	0.279	-0.009	1							
Married	-0.182	0.104	-0.072	-0.081	0.111	0.074	1						
Age of family head	-0.223	-0.041	-0.108	-0.054	0.221	-0.052	-0.026	1					
Christian	0.096	0.017	0.194	0.402	-0.110	0.224	-0.127	-0.105	1				
Literacy of family head	0.141	0.043	0.371	0.262	-0.176	0.331	0.118	-0.217	0.352	1			
Health of family head	-0.009	-0.136	-0.029	0.056	-0.038	-0.024	-0.113	0.075	0.052	-0.003	1		
Family size	-0.145	0.040	-0.044	-0.066	0.185	0.097	0.182	0.404	-0.069	-0.059	-0.013	1	
Female	0.268	-0.002	0.103	0.099	-0.124	-0.028	-0.658	0.026	0.146	-0.159	0.102	-0.125	1

**Table AI.**  
Correlation matrix

**Corresponding author**

George Acheampong can be contacted at: [geoacheampong@ug.edu.gh](mailto:geoacheampong@ug.edu.gh)

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)