

## A Multiple Mediation Analysis of the Growth in New Ventures

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### Abstract

*The current research investigates the mechanism that how new ventures growth is affected through entrepreneurial business ties. The study introduces multiple mediators to the model to clearly establish the link between business ties and new ventures growth. To test the hypotheses, data were*

### Key Words

Entrepreneurial Business Ties, Resource Bundling, Resource Acquiring, Resource Leveraging, New Venture Growth

*collected from 325 new ventures operating in Pakistan from 2015 to 2017. We found a positive and significant relationship between business ties and new ventures growth. We also found that resource leveraging, resource bundling and resource acquisition fully mediates the stated relationship. Based on our findings we concluded that new ventures give more attention to resource leveraging and resources bundling as well in order to perform well. Managerial and theoretical implications are also discussed.*

### Introduction

In today's economies, the most dominant types of firms are new ventures as it plays a vital role in national development (Barringer et al. 2005). Such ventures are different from the old ones in terms of their newness, scarcity of resources, access to raw materials, inexperience employees and staff and high failure rate (Li and Zhang, 2007; Gilbert et al. 2006). To achieve reasonable growth in shorter period is also one quality of such ventures. Although, this is also a fact that such ventures face a great failure rate. However, there is number of new businesses that operate very well and become huge businesses in short period of time. Thus, there is a chance for new ventures to grow faster than older firms.

Previous studies on entrepreneurship focused on the benefits and importance of using entrepreneurial network ties as such ties help startup businesses to share experiences, alleviate transaction costs, implement strategies, capture opportunities and to acquire resources (Jack et al. 2004; Anderson et al. 2010; Zhang et al. 2011). The mixture of friendship, family and business ties are called entrepreneurial network ties (Anderson et al. 2005). Previous studies on family ties regarding entrepreneurial activities are found in western countries (Arregle et al. 2015). Thus, based on the importance of entrepreneurial business ties (EBT) in entrepreneurial activities make them interesting to know how business ties help new venture growth (NVG) (Li et al. 2014).

Moreover, based on Sirmon et al. (2007) resource management theory, most of the studies regarding entrepreneurial ties focus on resource acquiring phase and neglect the other phases like resource leveraging and resource bundling. For significant contribution to new venture growth, business ties must follow several resource management processes. Such business ties help new venture in many ways i.e. to overcome resource scarcity and to balance their weak capabilities through resource leveraging and bundling (Sirmon et al. 2007; Sirmon et al. 2008). Thus, to deeply study the phenomenon and to greatly know about how EBT may positively affect NVG need a detailed study to know the why and how the success of some new ventures occurs (Wang et al. 2019). Although, Wang et al (2019) explore this phenomenon in greater details in the context of China, however, further investigation is needed in other contexts to nourish this relationship.

Based on resource management perspective (Sirmon et al. 2008), the focus of the current research is on the mediating mechanism of three resources i.e. resource acquiring (RA), resource bundling (RB) and resource leveraging (RL) on the relationship between EBT and NVG in the context of Pakistan. Although, as mentioned earlier, previous researchers except from Wang et al. (2019) focuses on one dimension at a time like acquiring (Leung et al. 2006) and opportunity capture (Li et al. 2014). Thus, simultaneous investigation of multiple mediations may enhance the relationship and give a more accurate and comprehensive picture.

To answer the question of how EBT promote NVG through different resources i.e. RA, RB, and RL, we hope that the current study can contribute to the existing literature in the following aspects. First, we focus on how NVG occurs, rather than simply investigating what promote NVG. Second, the research provides deeper understanding as we study multiple resource management processes simultaneously. Finally, few researchers empirically tested resource management perspective in new ventures context (Wang et al. 2019; Yi et al. 2016; Sirmon et al. 2008).

## **Related Literature**

### **Entrepreneurial Business Ties and New Venture Growth**

There are certain reasons that may help to explain that entrepreneurial business ties may directly enhance new venture growth. First, business ties may help to overcome barriers to a new venture in resource acquisition, opportunities identification, lower transaction costs and expert opinions (Zhang et al. 2017; Pache and Santos, 2010; Sobel and Coyne, 2011; Batjargal et al. 2012; Wang et al. 2013). Second, such business ties may help new venture to pursue their business legally or acquire legitimacy. Here legitimacy means that whether the new venture grows and operate for a long period of time. Old or well-established organizations can enjoy legitimacy through intangible assets, famous brand, and profitability. Regardless of too many importance of legitimacy, new ventures may face legitimacy problem as because of small organization size and newness in the marketplace (Stem et al. 2014). Whenever new venture achieves legitimacy it will grow beyond the survival. Previous researchers argued that new ventures can achieve legitimacy through strong business ties (Shane and Cable, 2002; Stem et al. 2014). Third, a new venture can take help from business ties to explore and capture new opportunities (Li et al. 2014). Such ties also help new venture to know competitors' behaviors. Also, how they reduce transaction costs (Hite, 2004). Finally, Peng and Luo, (2000) suggested that business ties as critical resource for new venture. As per the Resource-based view (RBV), such resource may able new venture to compete successfully (Burney, 2001). Based on the above reasons we proposed that:

**H<sub>1</sub>:** Entrepreneurial business ties are significantly related to new venture growth

### **The Mediating Role of Resource Acquiring**

A new venture at the start of its birth needs resources from outside to finance their business. In such condition business ties help their new venture partner to acquire resources from outside easily and efficiently. There are many reasons to justify business ties facilitate new venture growth through resource acquisition like helping new venture to acquire scarce and valuable resources from the market (Jack et al. 2004). Thus, new venture gets valuable resources at early phases through such partner more easily (Peng and Luo, 2000). Furthermore, through such support from business ties help new venture to gain reputation in the market that will able new venture to acquire resources from other businesses (Zimmerman and Zeitz, 2002).

The new venture may get growth opportunity, enable their self to take risk and reduce resource scarcity through entrepreneurial business ties. To implement growth plan effectively, entrepreneur first collects the required resources in enough quantity (Arthurs and Busenitz, 2006). But as the failure rate of new ventures is high because of non-accessibility to scarce resources. A new venture may also take extra risk to invest in innovative projects based on their accessibility to valuable resources. Researchers like Arthurs and Busenitz (2006), Cardon, (2003) and recently Wang et al. (2019) empirically proved that acquiring valuable resources through business ties help new venture growth. Thus, based on the above suggestions we develop the following hypothesis:

**Hypothesis 2:** The significant relationship between entrepreneurial business ties and new venture growth is mediated by resource acquiring

### **The Mediating Role of Resource Bundling**

One possible reason why business ties help NVG as because such ties make at able new venture to bundle and deploy different resources effectively. To gain competitive advantages, resource management theory argued that organization's need integrated resources (Sirmon et al. 2008). The resource bundling process of new venture may enhance by business ties on certain reasons. First, in resource bundling process, such ties help new venture to reduce information asymmetry. Other organizations may protect their self and gain competitive advantage through

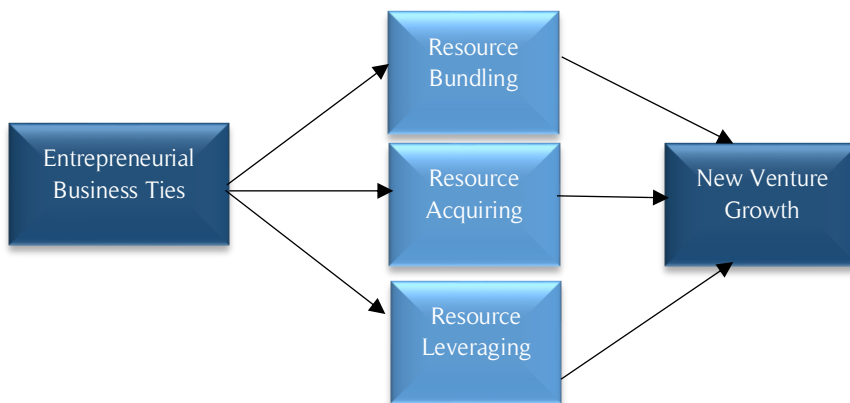
knowledge protection, secrecy over resources attributes, causal ambiguity and so on. In such situation, it is difficult for new venture because of their inexperience in resource management to merge acquired resources with existing resources. Hoang and Antoncic, (2003) argued that business ties can help new venture about how to manage resources based on their experiences. So, new venture having solid business ties properly bundle acquired and existing resources. Second, such ties can also help new venture to overcome incompatibility among resources (internal resources and external resources) (Yoon et al. 2016). New venture having good business ties understand human resources and their proper management and handle such problems effectively. Thus, business ties facilitate new venture growth through resource bundling. Based on the cited reasons we developed the following hypothesis:

**Hypothesis 3:** The significant relationship between entrepreneurial business ties and new venture growth is mediated by resource bundling

**The Mediating Role of Resource Leveraging**

To further strengthen the argument that business ties promote NVG by helping them about how to leverage resources. Sirmon and Hitt (2003) define resource leveraging as the process of coordinating, mobilizing and organizing acquired resources. This technique helps new venture to implement leverage strategy in effective and efficient way. Based on the above mechanism, business ties may promote new venture leveraging growth. Business ties can facilitate to know the nature of technological advancement and customer demand and to identify any flaw between them, which is considered the main hurdle to mobilize resources by new venture (Sirmon et al. 2007). Dong et al. (2013) argued that new venture may take help from business ties regarding marketing, engineering and research and development. Thus, for successful running and for rapid growth, effective and efficient resource leveraging is necessary for new venture. Also, business ties may help new venture through administrative skills and tacit management skills. Kiss and Barr (2015) argued that for successful operation new venture can timely adjust their activities as the environment is highly turbulent. Thus, we propose that:

**Hypothesis 4:** The significant relationship between entrepreneurial business ties and new venture growth is mediated by resource leveraging



*Proposed Framework of the Current Research*

**Method**

**Population and Sample**

To test the study hypotheses, we collect the data from new ventures operating in Pakistan. There are more than a thousand new businesses that start operation in the last five years. Thus, we conveniently select 500 ventures for data collection. Data from the respondents were gathered through adapted questionnaires. We received 325 usable questionnaires from the respondents with a response rate of 65%.

**Measure**

To measure new venture growth a scale consists of three items developed by Gilbert et al. (2006) was used. To measure entrepreneurial business ties a scale consists of three items developed by Li et al. (2014) was used. To

measure mediating variables (i.e. RA, RB, RL) a scale developed by Wang et al. (2019) was adopted and used. All these items were measured on five-point Likert scale indicating 1 for strongly disagree to 5 for strongly agree. Table 1 reports sample demographics characteristics.

**Empirical Results**

Table 1 given below highlights the scale reliability and construct validity through SPSS 21. Previous literature used the alpha coefficient for reliability measurement and the alpha value above 0.70 is considered adequate (Khattak et al. 2016; Khattak et al. 2017). In our case, all the values of alpha are above 0.70 confirming scale reliability.

**Table 1.** Reliability and Validity of the Scale

Constructs	Measurements Items	Standardized Loading
New Venture Growth $\alpha = 0.873$ AVE = 0.79	In the past three years, our venture has experienced a sustainable growth rate on sales	.829
	In the past three years, our venture has experienced a sustainable growth rate on market share	.921
	In the past three years, our venture has experienced a sustainable growth rate on employment	.928
Entrepreneurial Business Ties $\alpha = 0.916$ AVE = 0.85	Our entrepreneurs maintain strong relationship with suppliers	.885
	Our entrepreneurs maintain strong relationship with customers	.959
	Our entrepreneurs maintain strong relationship with peer companies	.934
Resource Acquiring $\alpha = 0.858$ AVE = 0.77	Our venture has acquired enough resources from outside:	.907
	Advanced technologies, materials and equipment	.905
	Financial resources	.834
Resource Bundling $\alpha = 0.914$ AVE = 0.85	Human resources	.834
	Through combining firm resources,	.951
	We make minor increment improvements to existing capabilities	.949
	We extend current capabilities	.870
	We create new capabilities	.870
	We are good at capturing new market opportunities	.968
	We are good at capturing new technological opportunities	.940
	We can identify the capabilities needed to support capability configurations necessary to exploit opportunities	.945
We can integrate identified capabilities into effective and efficient capability Configurations	.931	
use capability configurations to support chosen leveraging strategies	.886	

We confirm the scale convergent validity through factor loadings and average variance extracted (AVE) method. Good construct validity will be there if the factor loading value is above 0.70 (Field, 2013; Khattak et al. 2015). As depicted in table 1, the factor loading values of all 17 items is above 0.70 indicate close relationships between the items and their respective constructs. As the values of AVE is above the suggested value of 0.50 indicates that construct explains more variance as compared to error variance.

**Regression and Mediation Analysis**

**Table 2:** Mediation Analysis

Mediators	IDV $\rightarrow$ M IDV $\rightarrow$ DV	M $\rightarrow$ DV IDV $\rightarrow$ DV	DE	IDE	TE	Sobel Test
RA	.969, P > .05	.448, P > .05	.157, P =	.434	.592, P =	Z = .434, P =
	.592, P > .05	.157, P < .05	.17			
RB	.916, P > .05	.552, P > .05	.085, P =	.506	.592, P =	Z = .506, P =
	.592, P > .05	.085, P < .05	.28			
RL	.969, P > .05	.446, P > .05	.159, P =	.432	.592, P =	Z = .432, P =
	.592, P > .05	.159, P < .05	.16			

Table 2 (on the previous page) highlights mediation results of the three possible mediators i.e. resource acquiring (RA), resource bundling (RB), and resource leveraging (RL) on entrepreneurial business ties and new venture growth relation. The table summarizes the results of the total effect, direct effect, indirect effect and Sobel test. As highlighted, all our mediators i.e. RA, RB, and RL fully mediate the relationship between business ties and new venture growth. As the table shows the results of Sobel test, direct, indirect and total effect which confirming that the relationship between EBT and NVG is mediated by all the three mediators (i.e. RA, RB, and RL).

## **Conclusion**

The current research adds important insights to know how business ties enhance new venture growth through theoretical and empirical investigation. Our focus was to explore the mediating role of three resource management processes. We found that all the three resource management processes i.e. RA, RB, and RL fully mediates the relationship. Thus, based on the study results, it is concluded that for successful new venture growth resource acquisition is not enough, new venture must also give immense attention to resource bundling and leveraging. We expect further investigation from the researchers' side to more deeply explore how and why new venture grow successfully.

## **Managerial Implications**

This study has some practical implications for managers and owners of the new venture. First, we found that business ties significantly affect new venture growth. As new venture face lot of problems like resource scarcity, inexperience, and acceptability by a market, newness, and many more increase the failure rate. Thus, it is suggested to the owners and managers of new ventures to get in touch with their business ties to properly manage these difficulties and to become a successful venture. Secondly, based on the findings of the current research it is suggested to managers and owners of new venture to utilize their business ties for the purpose to properly manage the internal and external resources as we found that such resources fully mediate the relationship between EBT and NVG.

## **Theoretical Implications**

We studied this phenomenon in the emerging economy i.e. Pakistan. Our study contributes to the existing literature on NVG and business ties in several ways. First, we add to the existing literature on new venture growth by identifying how business ties help in new venture growth. Further, we add to the existing body of knowledge by using business ties as independent variable which is not highly explored in new venture growth except Wang et al. (2019), while the focus of previous studies was on family ties (Anderson et al. 2005; Arregle et al. 2015). Second, few researchers empirically tested resource management processes in entrepreneurship literature. Our findings recommended that only resource acquisition is not enough for new venture, but for successful operation new ventures must effectively, efficiently and proactively bundle and leverage the resources (Yi et al. 2016). This study also validates the framework of Sirmon et al. (2007) in new ventures context through discriminant validity of all the three resources i.e. RA, RB, and RL. Finally, we believe that testing multiple mediations simultaneously gives complete understanding about how business ties help new ventures growth. Wang et al. (2013) explored only resource acquisition as a possible mediator that business ties used to help new ventures. However, Wang et al. (2019) used all three resources i.e. acquisition, bundling and leveraging to explore business ties and new ventures relationship in the context of China. This study also used all three resources in the context of Pakistan while studying business ties and new ventures relationship.

## **Limitations and Future Research Directions**

Our research contributes to the existing literature in many ways, but our study has some potential limitations as well. First, we select only those firms that start their operations from the last five years and exclude the rest one, however, previous studies on business ties and new ventures did not limit their self to such condition (Wang et al. 2019). In the future, all those ventures will be selected that help from business ties and grow successfully. Second, we collect the data from the respondents based on our convenience that may create results generalizability. Our model did not select any control variables like ownership, venture age, and venture size to clearly investigate the relationship. Future researchers may use these control variables on business ties and new ventures relationships. Lastly, we study this relationship in Pakistani context. Future researchers are welcome to replicate the study in different context.

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