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# The perceived importance of external ties and the performance of small owner-managed firms

## **Abstract**

*The effects of perceived importance of external ties, a dimension of tie strength, on the performance of small owner-managed firms were investigated by using data from a survey of the owners of small owner-managed firms in Scotland and New Zealand. Ties rated as highly important were found to promote growth in sales. In contrast, weak-in-importance ties were found to suppress growth in sales. The results support the core competence perspective on the configuration of external ties, suggesting that firms should focus on important external ties that contribute to their core competencies.*

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## **Introduction**

A growing body of literature suggests that networks of ties between owners/managers of small firms and external organisations and individuals may explain the differences in the firms' performance (Amoako and Matlay, 2015; Acheampong et al., 2017; Pellinen, 2014; Jack et al., 2004; Söderqvist and Kamala Chetty, 2013; Stam et al., 2014). Such ties may be a source of emotional support or offer access to role models (Brüderl and Preisendörfer, 1998; Nanda and Sørensen, 2010), which may encourage entrepreneurs to persist in their efforts to establish and to grow their firms. Further, networks may be a source of knowledge and ideas (Uzzi, 1997; Molina-Morales and Martínez-Fernández, 2010); in particular, context-bound tacit knowledge may be unavailable from other sources. By associating with well-regarded organisations, a small firm may gain legitimacy (Elfring and Hulsink, 2003; Higgins and Gulati, 2003), and by forming ties of trust with customers or

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3 suppliers the focal firm can reduce transaction costs, resulting in benefits for all firms participating in  
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5 the network (Uzzi, 1997; McAdam et al., 2014).  
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7           However, such networks may also have negative effects. For example, diverse network ties  
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9 with varying role expectations may result in role conflicts forcing the manager to make decisions  
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11 that are not fully aligned with the interests of the firm (Wincent et al., 2016). External ties may  
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13 prevent the firm from adapting to changes in the wider environment beyond the scope of the  
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15 established network (Gargiulo and Benassi, 2000). Further, external ties consume resources such as  
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17 the manager's time. Forming and maintaining ties that do not bring benefits sufficient to justify their  
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19 opportunity costs may negatively affect performance (McFadyen and Cannella, 2004) and survival  
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21 (Acheampong et al., 2017). The present study contributes to our understanding of the effects of  
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23 external ties on firm performance by distinguishing the effects of ties perceived by managers as  
24  
25 important.  
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28           In his seminal paper, Granovetter (1973) introduced the concept of tie strength as a  
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30 combination of "the amount of time, the emotional intensity, the intimacy, and the reciprocal  
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32 services which characterize the tie" (page 1361), as well as "frequency of contact" (page 1371). He  
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34 anticipated that the issue of operationalising the concept of tie strength is going to be settled in  
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36 further research. For ties involving small firms, however, there is still no universal agreement on the  
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38 meaning of tie strength, as exemplified by the findings of the recent meta-analysis by Stam et al.  
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40 (2014). Stam et al. found it impossible to summarise the prior results of the effects of tie strength in  
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42 a broad sense and limited the analysis to studies interpreting ties with family and friends as strong  
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44 ties and the rest as weak ties (irrespective of other attributes of the tie, such as frequency of  
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46 interaction). Indeed, for ties involving small firms a unidimensional operationalization of tie strength  
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48 has never been established. For example, the attempt by Money (2004) to operationalise the  
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50 strength of ties involving small firms using a range of indicators suggested by prior research, such as  
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52 duration and frequency of contact, was not successful because of a lack of consistency across the  
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54 indicators. Money (2004) concluded that tie strength should be treated as a multidimensional  
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3 concept and argued that rather than considering tie strength in general, greater insights into the role  
4 of ties involving small firms can be achieved by considering different dimensions of strength, which  
5 do not necessarily strongly correlate with each other and which may affect outcome variables of  
6 interest in different ways.  
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10  
11 Jack (2005), in a longitudinal ethnographic study of ties maintained by small firms in  
12 Scotland, suggested that usefulness of a tie for the firm is a particularly salient dimension of tie  
13 strength (p. 1250). Ties remain latent and are reactivated when required, thus realising their  
14 potential (Jack, 2005; Jack et al., 2004). Usefulness of a tie in Jack's study is similar to a tie's business  
15 importance, a dimension of tie strength introduced by Money (2004). The present study follows  
16 Money (2004) in viewing business importance of a tie as a dimension of tie strength and focuses on  
17 the effects of strong-in-importance and weak-in-importance ties on firm performance.  
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26 We argue that strength as perceived business importance is the dimension of tie strength  
27 that is particularly relevant to viewing ties as resources, and thus to the resource-based view of the  
28 firm (Wernerfelt, 1984; Barney, 1991; Lavie, 2006; Newbert, 2008; Rice et al., 2013) and the core  
29 competence perspective (Prahalad and Hamel, 1990; Bhamra et al., 2011) which suggest that to be  
30 successful, firms should focus on establishing and maintaining bundles of resources that contribute  
31 to their core competencies, which are the roots of sustained competitive advantage (Prahalad and  
32 Hamel, 1990). For ties between the focal firm and external entities, the resource-based view  
33 suggests focusing on the ties that give access to external resources that contribute to such bundles  
34 (Dyer and Singh, 1998; Lavie, 2006). We argue that small firms are likely to regard such ties as  
35 important and to invoke them on occasions when their potential can be realised, which is a  
36 behaviour reported by Jack (2005). Street and Cameron (2007) highlighted the relevance of the  
37 resource-based view (RBV) of the firm to the study of external relations of small firms and called for  
38 future research from an RBV perspective. By studying the effects of the dimension of tie strength  
39 that is particularly relevant to the RBV, the present study contributes to answering their call.  
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3 The rest of the article is organised as follows. First, the article introduces perceived tie  
4 importance as a dimension of tie strength particularly relevant to the resource based view of the  
5 firm. Then, the article discusses the implications of the core competencies perspective and the  
6 strength of weak ties perspective for the effects of the strong-in-importance and weak-in-  
7 importance ties on small firm performance, and states the hypotheses suggested by the two  
8 perspectives. After that, the sample and the variables are introduced. Then, the descriptive  
9 characteristics of the respondents are presented, followed by the results of hypotheses testing.  
10 Finally, the implications of the findings are discussed, and conclusions are drawn.  
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## 22 ***Theory and hypotheses***

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24 Following the suggestion of Street and Cameron (2007), the present study builds on the  
25 extension of the resource-based view to incorporate network resources proposed by Lavie (2006).  
26 Following Lavie (2006), the broad definition of resources by Barney (1991) is adopted: resources  
27 "include all assets, capabilities, organizational processes, firm attributes, information, knowledge,  
28 etc. ... that enable the firm to conceive of and implement strategies that improve its efficiency and  
29 effectiveness" (p. 101). According to Barney (1991), to achieve sustained competitive advantage, the  
30 firm needs to develop and maintain bundles of resources that are valuable, rare, and imperfectly  
31 imitable (Barney, 1991: p. 106). The Lavie (2006) extension of the argument by Barney (1991)  
32 suggests that some of the resources in such bundles may be accessed via the firm's external network,  
33 rather than owned by the firm (Lavie, 2006: p. 641).  
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45 Although Lavie (2006) focuses explicitly on networks of inter-firm alliances, we argue that for  
46 small owner-managed firms this argument applies to all external ties. Thus, emotional support from  
47 relatives and friends, know-how possessed by the firm's competitors (Bengtsson and Johansson,  
48 2014), or the legitimacy of a well-regarded customer (that might enhance the legitimacy of the focal  
49 firm) can form part of the focal firm's resource bundles contributing to sustained competitive  
50 advantage for as long as these resources can be accessed via the firm's external ties.  
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3 External ties give access to resources. Extending the argument of Street and Cameron (2007)  
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5 regarding the applicability of RBV to ties involving small firms, we argue that a focus on developing  
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7 and maintaining idiosyncratic resource bundles contributing to sustained competitive advantage  
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9 (and thus contributing to the firm's core competencies, (Petts, 1997)) suggests investing in  
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11 maintaining the external ties that grant access to the resources included in such bundles (and thus  
12  
13 are important for the focal firm) and disinvesting in the rest of the ties.  
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15 The present study follows Money et al. (1998), Money (2000), and Money (2004) in  
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17 regarding perceived importance of external ties as a dimension of tie strength. An interpretation of  
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19 the strength of ties as their perceived importance was initially mentioned by Granovetter (1983) (p.  
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21 218). Following Money (2004), we view the strength of ties involving small firms as a complex  
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23 multidimensional concept that cannot be expressed with a single number. We focus on perceived  
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25 business importance as a particularly important dimension because of its relevance to the resource-  
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27 based view, based on an assumption that ties that contribute to a small firm's core competencies are  
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29 likely to be regarded by the firm as important.  
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32 For external ties formed by small owner-managed firms, other, more commonly considered  
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34 dimensions of the strength of ties can be seen as related to perceived tie importance. Considering  
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36 some of the dimensions of strong ties tentatively suggested by Granovetter (1973) (amount of time,  
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38 emotional intensity, intimacy, and reciprocal services) (p. 1361), one would expect that an  
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40 owner/manager would maintain ties considered as important for longer, would have stronger  
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42 feelings associated with such ties, and would invest in maintaining them and expect returns. Over  
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44 time, trust may build up resulting in intimacy (which may facilitate the exchange of tacit knowledge  
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46 (Uzzi, 1997)). Tie strength has been associated with perceived tie importance in qualitative studies of  
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48 networks centred on small or medium-sized firms (Uzzi, 1997; Jack, 2005; Jørgensen and Ulhøi,  
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50 2010). Nonetheless, there is no expectation that the perceived importance dimension would replace  
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52 other dimensions of tie strength, or even strongly correlate with other dimensions of tie strength in  
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3 all contexts. For example, it is conceivable that a relatively new tie offers opportunities that are  
4 highly salient to building the firm's core competencies and thus is considered important by the firm.  
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### 7 8 **Focus on core competencies and firm performance** 9

10 Following Rice et al. (2013) and Bradley et al. (2012), firm performance is conceptualised as  
11 growth in sales and growth in profits. As argued earlier in this article, the core competence  
12 perspective suggests that to achieve sustainable competitive advantage and, ultimately, growth in  
13 sales and growth in profits, a firm should focus on ties that contribute to the firm's core  
14 competencies. Such ties are likely to be perceived as important and thus are strong in importance.  
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16 At the same time, maintaining ties that are not contributing to the firm's core competencies may  
17 undermine the firm's focus on its core competencies and thus undermine its competitive advantage  
18 and, ultimately, performance, by diverting the owner/manager's attention, occupying employee  
19 time, or diverting resources from the core areas in other ways. Such ties are likely to be perceived as  
20 unimportant and thus are weak in importance. Based on this argument, the following hypotheses  
21 are formulated:  
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24 H1a. Strong-in-importance ties with external entities promote growth in sales.  
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26 H1b. Strong-in-importance ties with external entities promote growth in profits.  
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28 H2a. Weak-in-importance ties with external entities suppress growth in sales.  
29

30 H2b. Weak-in-importance ties suppress growth in profits.  
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### 33 34 **Weak ties theory and firm performance** 35

36 The strength of weak ties argument (Granovetter, 1973; Granovetter, 1983) suggests that  
37 weak ties are more likely than strong ties to be a source of new information resulting in innovation  
38 and, therefore, are more valuable than strong ties. In terms of the dimension of tie strength adopted  
39 in the present study, one may expect that an owner/manager would spend attentional resources,  
40 time, and effort on maintaining a tie believed to be important to the firm (a tie that is strong in  
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3 importance). The owner/manager would acquire better knowledge of such a tie and, therefore, is  
4 likely to learn to anticipate the kind of information that can be obtained via the tie. At the same time,  
5 casual ties that are not considered by the owner/manager as important have a greater potential to  
6 bring information and knowledge from entirely new areas, challenging the owner/manager's  
7 understanding of and beliefs about the firm and its environment and thus opening entirely new  
8 opportunities. Exploiting such opportunities may result in growth in sales and profits.

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11 As mentioned in the introduction, in their meta-analysis, Stam et al. (2014) found it  
12 impossible to summarise the results of prior studies of the effects of tie strength on firm  
13 performance within a single framework. Another review, by Jack (2010), explicitly highlighted that  
14 "the results for strong and weak ties are contradictory" (page 130). Indeed, even though Batjargal  
15 (2003) found weak ties to enhance performance (and strong ties to have no effect), Bradley et al.  
16 (2012) found weak ties to suppress performance (and strong ties - to enhance it) (both studies  
17 focused on the distinction between ties with friends and relatives, seen as strong, and the rest of the  
18 ties, seen as weak). Nonetheless, Stam et al. (2014) concluded that the overall evidence suggests  
19 that both strong and weak ties contribute to firm performance, even though the claim of the weak  
20 ties theory (Granovetter, 1973; Granovetter, 1983) that weak ties are more valuable than strong ties  
21 received little support. Based on the weak ties theory argument presented in the previous paragraph  
22 and, to an extent, based on the empirical results obtained for dimensions of tie strength that differ  
23 from the one emphasized in the present study, the following alternative hypotheses are formulated:

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26 H2a\*. Weak-in-importance ties with external entities promote growth in sales.

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29 H2b\*. Weak-in-importance ties promote growth in profits.

## ***Method***

### **Sample**

The hypotheses were tested using data obtained in a survey of small owner-managed firms in Scotland and New Zealand. Scotland and New Zealand, even though geographically remote from each other, are regions broadly similar in demographic characteristics (as seen from the recent official census data available from <http://www.stats.govt.nz/Census/2013-census.aspx> and <http://www.scotlandscensus.gov.uk>). Further, the comparison conducted by Smallbone et al. (2012) suggests that the two regions have similar institutional environments and sectorial composition for small firms. In view of the similarity of the two regions, in the analysis firms are treated as a single population; region is introduced as a control variable with an expectation that it will have no statistically significant effects. We argue that including firms from two similar, but culturally and politically distinct, regions affords, to an extent, an international corroboration in results.

To be considered a small firm, the firm had to employ between 0 to 49 employees. The firms were selected at random from the UK Yellow Pages online directory of business services (<http://www.yell.com>) (for Scottish firms) and from a database of small firms developed by the New Zealand Centre for Small and Medium Enterprises (SME) Research (for New Zealand firms). The sample included 635 Scottish and 300 New Zealand firms.

A pilot study was conducted to test the adequacy of the research instrument, and minor amendments were made as a result of this study. The survey proper was administered by telephone in early 2013. Firm owners/managers were the key informants. There were 302 respondents, 134 from New Zealand and 168 from Scotland, providing an overall response rate of 32 percent.

The present study is a secondary analysis of the data obtained in the survey, which was initially conducted to study market diversification. Therefore, data obtained for a relevant subset of the survey questions, not all of the data, are used in the present study. After removing cases with

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3 missing values for variables used in the present study, 285 cases were available for analysis (157  
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5 from Scotland and 128 from New Zealand), resulting in an effective response rate of 30.5 percent.

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7 To test the hypotheses of the present study, sales and profit growth, describing the firm  
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9 performance, were used as dependent variables, and the number of strong-in-importance ties and  
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11 the number of weak-in-importance ties were used as independent variables.

## 12 13 14 **Dependent variables**

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16 Following the review by Stam et al. (2014), three types of measures are relevant to  
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18 describing the performance of small firms: growth, profitability, and non-financial performance  
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20 measures. Performance data from independent sources, such as taxation authorities, were not  
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22 available. Profitability and non-financial performance measures were not included in the survey  
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24 because survey respondents tend to be reluctant when asked to provide profitability data (Bradley  
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26 et al., 2012), and using self-reported non-financial performance measures (Wach et al., 2015) would  
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28 have resulted in common method bias concerns (Podsakoff et al., 2003). Therefore, the present  
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30 study used the two most commonly considered growth measures (Stam et al., 2014), growth in sales  
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32 and growth in profits, as describing firm performance.

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35 Respondents were asked to indicate if sales have declined, remained the same, or have  
36  
37 grown over the past three years. A similar question was used to elicit information about the growth  
38  
39 in profits. Ordered categorical variables were used to increase the likelihood of a high response rate  
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41 because, as outlined above, managers of small firms are known to be reluctant in providing detailed  
42  
43 financial information in survey responses (Bradley et al., 2012).

## 44 45 46 **Independent variables**

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49 Strong-in-importance ties and weak-in-importance ties were operationalised based on  
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51 asking the respondents to rate from 1 *very unimportant* to 5 *very important* the relative importance  
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53 of their firms' ties to nine different categories of external actors. The categories were based on  
54  
55 similar lists used by Gronum et al. (2012) and Gutierrez and Fernandez Perez (2010) and were  
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3 adapted to fit the Scotland and New Zealand contexts. Further, for each category the respondents  
4 were asked to indicate the number of ties. For each respondent, ties in categories rated as *very*  
5 *important* were considered as essential for maintaining or developing the firm's core competence,  
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7 and thus were interpreted as strong in importance. The rest of the ties were considered as playing  
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9 supplementary roles, and thus were interpreted as weak in importance. The numbers of strong-in-  
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11 importance and weak-in-importance ties, respectively, provided the values of the strong-in-  
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13 importance ties and weak-in-importance ties independent variables.  
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### 18 **Control variables**

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20 Even though firms from two distinct economies, New Zealand and Scotland, were  
21 represented in the sample, the region variable was not expected to affect the growth in sales or  
22  
23 profitability. Therefore, region was used as a control variable. Further control variables were the  
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25 firm's size (the number of employees, as reported by the respondents) and the firm's industry.  
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### 30 **Minimising the effects of command method variance**

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32 The following aspects of the present study minimise the likelihood of spurious results  
33 because of common method variance (Podsakoff et al., 2003). First, the survey questions were  
34  
35 simple and precise, and elicited factual information, rather than assessing the respondents'  
36  
37 perceptions. Second, the questions eliciting data used in the present study were embedded in a  
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39 larger questionnaire and the key independent variables - the numbers of strong-in-importance and  
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41 weak-in-importance ties, resulted from a complex calculation and thus were not visible to the  
42  
43 respondents. Therefore, the results are unlikely to be influenced by the respondents' perceptions  
44  
45 regarding the correlations hypothesised in the present study. Finally, post hoc analysis was  
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47 conducted using a marker variable technique (Lindell and Whitney, 2001; Williams et al., 2010;  
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49 Richardson et al., 2009). A variable for which no relationships to other variables used in the present  
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51 study were expected, with spouse (describing whether the business is run by spouses) was used as a  
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53 marker variable. Regression analysis revealed no statistically significant relationships between  
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3 strong-in-importance ties, weak-in-importance ties, firm size, sales, or profitability and the marker  
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5 variable, providing further evidence suggesting that common method variance did not affect the  
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7 results of the present study.  
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## 10 **Results**

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13 Descriptive statistics characterising the respondents are provided in Table 1. The responding  
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15 firms were from a range of industries, including tourism, forestry, construction and utilities,  
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17 professional services, fisheries, transportation, trades, personal services, and hospitality.  
18

19  
20 The number of strong-in-importance ties correlated with the number of weak-in-importance  
21  
22 ties, with Pearson's correlation coefficient of  $r=0.133$  ( $p=0.02$ ), and with the firm size ( $r=0.151$ ,  
23  
24  $p=0.01$ ). However, the correlation between the number of weak-in-importance ties and firm size was  
25  
26 not statistically significant ( $r=0.100$ ,  $p=0.09$ ). According to *t*-test results, there was no statistically  
27  
28 significant difference between firm sizes and the numbers of strong ties between the two regions;  
29  
30 however, New Zealand companies had more weak-in-importance ties ( $p=0.003$ ). Nonetheless, in  
31  
32 both countries firms tended to have more ties rated at higher levels (see Table 3). Because  
33  
34 maintaining ties consumes resources (Wincent et al., 2016; Portes and Sensenbrenner, 1993), it  
35  
36 makes little sense for small owner/managed firms to maintain unimportant ties.  
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39 As shown in Table 4, close to half of the strong-in-importance ties were with customers.  
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41 Strong-in-importance ties with suppliers and managers of other businesses (within the same or  
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43 within other industries) were also common in both countries.  
44

45 Insert Table 1. Characteristics of the sample.

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48 Insert Table 2. Average numbers of ties rated at different levels.

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51 Insert Table 3. Average importance ratings for different categories of ties.

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54 Insert Table 4. Distribution of numbers of strong-in-importance ties (ties rated as very important) by  
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56 categories of ties.  
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3 To test the hypotheses of the present study, a probit regression model with sales growth  
4 and profit growth regressed on the number of strong-in-importance ties, the number of weak-in-  
5 importance ties, region, size, and industry was estimated using Mplus software (Muthén and  
6 Muthén, 2015). The numbers of strong-in-importance and weak-in-importance ties affected the  
7 sales growth with standardised beta coefficients of 0.176 ( $p= 0.007$ ) and -0.146 ( $p=0.016$ ),  
8 respectively, but did not affect profit growth. As anticipated, the control variables (region, size, and  
9 industry) had no statistically significant effects. Thus, hypotheses H1a and H2a have been confirmed,  
10 and, correspondingly, hypothesis H2a\* has been disconfirmed. However, no conclusive results were  
11 obtained for H1b, H2b, and H2b\*.  
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## 24 ***Discussion***

25  
26 The purpose of the present study was to explore the effects of perceived importance of ties  
27 between a firm and external entities, such as customers and suppliers. Perceived tie importance is a  
28 rarely considered dimension of tie strength that is particularly relevant to the resource-based view  
29 of the firm. The results suggest that for small owner-managed firms, external ties that are  
30 considered by the owners/managers to be important (are strong-in-importance) contribute to sales  
31 growth. At the same time, ties that are not considered to be important (are weak-in-importance) not  
32 only do not promote sales growth but suppress it.  
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41 The negative effect of weak-in-importance ties can be attributed to the resources that they  
42 consume, such as the owner/managers' time and attention (Batjargal, 2003; Wincent et al., 2016). A  
43 further reason could be that benefits obtained via weak-in-importance ties are benefits for the local  
44 business environment, but not necessarily for the firm. A major benefit commonly attributed to  
45 weak ties is the fundamentally new information that they may provide, leading the firm to innovate,  
46 and thus to carry risks associated with innovation. However, recent research indicates that  
47 innovativeness may reduce the survival rates of new firms (Hyytinen et al., 2015). From the core  
48 competence perspective, the ability to innovate supported by network relationships can be a core  
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3 competence of a large firm (Kandampully, 2002; Osiyevskyy et al., 2017) because a large firm may  
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5 have the capacity to initiate large numbers of projects and let some fail in their search for innovative  
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7 products, services, or business models. However, small firms are not equipped to bear the risks of  
8  
9 ongoing radical innovation and should establish their core competencies elsewhere. As suggested by  
10  
11 Hyttinen et al. (2015), even though innovation by a small firm (which may be prompted by  
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13 information and influence arriving via weak-in-importance ties) may be of benefit in a broader  
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15 context (for example, it may contribute to knowledge spillovers promoting regional development),  
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17 for the firm itself it may be detrimental, rather than beneficial.

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20 Moreover, the results of the qualitative study by Jack (2005) suggest that successful small  
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22 owner-managed firms may access resources (such as new knowledge) available via weak ties  
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24 indirectly, via their strong (and, in particular, strong-in-importance) ties. Indirect access not only  
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26 reduces tie maintenance costs (by reducing the need to maintain weak ties), but also might mitigate  
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28 risks associated with acting on the knowledge thus obtained. Strong ties enable holistic, fine-grained  
29  
30 information transfer, and are likely to filter information to fit the local context (Uzzi, 1997).  
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32 Therefore, acting on knowledge obtained via strong ties may be less risky, as the joint problem  
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34 solving capability (Uzzi, 1997) of the local strong tie network supports the decision making of the  
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36 small firm owner/manager. Quoting the words of one of the participants in Uzzi's study (p 51), by  
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38 establishing a strong relationship with an external entity "you become important to them. And if  
39  
40 you're not important, you won't get quality". We argue that "quality" applies not only to tangible  
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42 materials, but also to information and advice.

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45 As mentioned earlier in this article, failing to distinguish different dimensions of strength  
46  
47 may lead to results that are not consistent across studies, in particular, for the effects of strong and  
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49 weak ties on firm performance (Stam et al., 2014). In the present study, the results of data analysis  
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51 indicate that perceived tie importance is a dimension of strength that captures an important  
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53 distinction because strong-in-importance and weak-in-importance ties were found to have opposite  
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3 effects. Further, one may expect that by focusing on strength-as-importance, greater consistency  
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5 can be achieved across contexts and stages or firm development.  
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7 For example, Batjargal (2003) found formal ties (ties that the participants did not describe as  
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9 ties with family or close friends) to enhance performance (and family or friend ties to have no effect)  
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11 for small firms in Russia, but Bradley et al. (2012) found formal ties to suppress performance (and  
12  
13 family and friend based ties - to enhance it) for small firms in Kenya. It is possible that in the harsh  
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15 context of a developing economy (Kenya), ties to family and friends gave access to resources that  
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17 supported the firms' core competencies (and thus were important from the perspective of the  
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19 owner/manager), and in the more resource-rich context of an emerging economy (Russia) there was  
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21 less reliance on family and friends in business matters, and formal ties were important. If this  
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23 assumption is correct, in terms of the dimension of tie strength emphasized in the present study, the  
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25 results by Batjargal (2003) and by Bradley et al. (2012) can be interpreted as consistently showing  
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27 the contribution of strong-as-important ties to firm performance (and the results of both studies are  
28  
29 consistent with the results of the present study). If, however, strong ties are interpreted as ties with  
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31 family and friends, irrespective of their relevance to the firm (which is a common practice (Stam et  
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33 al., 2014)), the results of the studies by Batjargal (2003) and by Bradley et al. (2012) are inconsistent.  
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36 The qualitative evidence by Uzzi (1997) and by Jack (2005) suggests that importance is a  
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38 characteristic of an external tie that is highly relevant to practitioners; for example, a participant in  
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40 the study by Jack (2005) highlights an external tie that "has saved ... money, time and trouble so it's  
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42 really important" (p. 1246). Because the conceptualisation of tie strength as their perceived  
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44 importance relies on language from practitioners' vocabulary, it is potentially particularly useful in  
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46 application to practice. Owners/managers of small firms should have no trouble in establishing  
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48 which ties they consider important. The implications of the results of the present study are that the  
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50 owners/managers should consider investing more in important ties, and disinvest in the ties they  
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52 consider to be less important.  
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3 The descriptive analysis of strong-as-important ties conducted in the present study suggests  
4 that the ties contributing to small firm performance are overwhelmingly ties with customers, even  
5 though ties with suppliers and other firms also have a sizeable presence. Therefore, it is likely that  
6 networking contributes to the small firms' core competencies by enabling them to provide better  
7 customer service. Indeed, small firms are in a position to know their customers very well, which may  
8 give them an edge in competition with larger rivals. Thus, rather than establishing broad networks in  
9 the hope that serendipitous encounters prompt radical innovation (which is associated with risks  
10 that small firms cannot afford), small firms should network closely with their customers to engage in  
11 joint problem solving (Uzzi, 1997) benefiting both the focal firm and its partners and ultimately  
12 improving the effectiveness and efficiency of the overall supply chain to which they all belong.  
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### 24 **Contributions of the study**

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27 The present study contributes by providing evidence that for small owner-managed firms  
28 strong-as-important ties contributing to the firm's core competence are beneficial, while weak (in  
29 importance) ties not only do not promote performance but undermine it.  
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33 Further, the study demonstrates the viability of interpreting the perceived importance of  
34 ties between small owner-managed firms and external entities as a dimension of tie strength.  
35 Strong-in-importance ties are conceptualised as ties that the owner/manager considers to be highly  
36 important.  
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### 42 **Implications of the study**

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45 The results of the study have clear and actionable implications for practice.  
46 Owners/managers of small firms should invest in establishing and maintaining ties that they consider  
47 to be important for the firm, and should not be lured by the possibility of obtaining new information  
48 into spending time and attention on establishing and maintaining ties with uncertain benefits. For  
49 most small owner-managed firms, this means focusing on maintaining ties with their customers.  
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## Limitations of the study and recommendations for future research

The present study used self-reported growth in sales and in profits as dimensions of firm performance, and no statistically significant effects on growth in profits were discovered. It is desirable that the study is replicated with a larger sample, in a context where independent data on performance, such as profitability data from tax authorities, is available. Further, the use of growth in sales as a dimension of firm performance might inadequately describe the performance of firms that limit themselves to a particular market niche or avoid growth as a deliberate choice.

The study was limited to small owner-managed firms in two small developed regions, and one should exercise caution in generalising the results to other contexts, such as firms in developing countries or in major metropolitan urban areas. In particular, the study did not detect negative effects of strong ties, consistently with the study by Jack (2005), conducted in a very similar context, and in contradiction with the study by Uzzi (1996), conducted with larger firms in a very different context of New York City. It is possible that scenarios similar to the scenario reported by Uzzi (1997), with smaller firms becoming dependent on a larger partner to which they are connected with strong ties experiencing difficulties when the larger partner goes out of business, are more likely in the context of New York City.

The study provided no indication why different firms had different numbers of external ties. Therefore, even though the results suggest that having more strong-as-important ties results in greater performance, the evidence is not sufficient to suggest having more strong external ties as a recommendation for practice. An optimal number and composition of important external ties may depend on the firm's internal resources, such as the owner/manager's ability to reconfigure the ties in response to changes in the environment. There is a potential that further insights into this issue may be gained by applying the notion of the dynamic capabilities of the firm (Woldesenbet et al., 2012; Rice et al., 2015).

## Conclusion

The purpose of the present study was to explore the effects of perceived importance of ties between a firm and external entities, such as customers and suppliers, thus focusing on a dimension of tie strength that is particularly relevant to the resource-based view of the firm, thereby answering the call by Street and Cameron (2007) to apply the resource-based view (RBV) of the firm to the study of external relations of small firms.

The effects of ties were investigated by using data from a survey of the owners of small owner-managed firms in Scotland and New Zealand. Interpreting the strength of ties between the focal firm and external entities as the importance of the ties for the focal firm allowed formulating hypotheses based on the core competence perspective in terms of the strength (strength-as-importance) of external ties.

The results suggest that for small owner-managed firms ties to other organisations and actors that are considered by the managers to be highly important (and thus, are strong ties according to our conceptualisation) contribute to sales growth. At the same time, ties that are less important (weak ties) not only do not promote sales growth but suppress it. Thus, the results of data analysis indicate that perceived tie importance is a dimension of strength that captures a salient distinction. The implication for practice is that owner/managers should focus on cultivating ties they consider highly important and disinvest into maintaining other external ties.

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For Peer Review

**Table 1**  
**Characteristics of the sample**

	<b>Strong-in- importance ties</b>	<b>Weak-in- importance ties</b>	<b>Size</b>	<b>Profits steady or growing</b>	<b>Profits falling</b>	<b>Sales steady or growing</b>	<b>Sales falling</b>
Scotland	19.3	22.1	6.33	123	34	117	40
New Zealand	16.9	31.4	5.72	97	31	91	37
All	18.2	26.3	6.06	220	65	208	77

*Note.* Averages per firm are given for strong ties, weak ties, and size (the number of employees). The rest of the numbers are counts of firms.

For Peer Review

**Table 2**  
**Average numbers of ties rated at different levels**

	Weak-in-importance				Strong-in-importance
	<i>Very unimportant</i>	<i>Unimportant</i>	<i>Neither important nor unimportant</i>	<i>Important</i>	<i>Very important</i>
Scotland	1.02	2.75	6.13	12.2	19.3
New Zealand	1.92	6.92	7.2	15.4	16.9
All	1.42	4.62	6.61	13.6	18.2

For Peer Review



**Table 3**  
**Average importance ratings for different categories of ties**

	Scotland	New Zealand	All
Clients / customers	4.18	3.93	4.07
Suppliers	3.82	3.39	3.62
General managers or directors of other businesses within the same industry	3.39	3.20	3.31
Financial institutions	3.36	2.59	3.01
Relatives and friends	3.29	2.41	2.89
General managers or directors of other businesses within other industries	3.01	2.57	2.81
Competitors	3.25	2.28	2.81
People from industry forums, trade associations, trade fairs or other industry events	2.88	2.17	2.56
Government officials	2.60	1.85	2.26

*Note.* The scale ranged from 1 *very unimportant* to 5 *very important*.

**Table 4**  
**Distribution of numbers of strong ties (ties rated as *very important*) by categories of ties**

	Scotland	New Zealand	All
Clients / customers	41%	54%	46%
Suppliers	16%	16%	16%
General managers or directors of other businesses within the same industry	9%	13%	10%
General managers or directors of other businesses within other industries	10%	7%	9%
Relatives and friends	8%	2%	6%
Financial institutions	6%	4%	5%
Competitors	5%	1%	3%
Government officials	2%	3%	3%
People from industry forums, trade associations, trade fairs or other industry events	4%	1%	2%