Firm resources, international experience and internationalisation speed of retailers

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Purpose – The purpose of this paper is to study draws on the resource- and knowledge based views (RBV/KBV) of the firm to explain the internationalisation speed of retail firms.

Design/methodology/approach – The authors use a panel data set of 144 international retailers over a ten-year period and employ feasible generalised least squares analysis in order to assess the effect of intangible assets and international experience on internationalisation speed.

Findings – The results support direct effects of intangible assets and international experience, while the latter effect is also moderated by firms' home-region concentration.

Research limitations/implications – The study investigates the determinants of retailers' internationalisation speed. While research stresses the positive performance effects of rapid internationalisation, future research should investigate the role of internationalisation speed for the performance of retailers empirically. The findings support the usefulness of adopting a RBV/KBV for explaining internationalisation speed.

Practical implications – The findings imply that firms need to have particular intangible resources before being able to internationalise rapidly. They also show that decision-makers need to be mindful of the effects of international experience in allowing them to expand overseas both within and outside their home region.

Originality/value – There has been very little research into the speed with which firms in general and service sector firms in particular expand their operations internationally. Through a theory-based analysis of a newly created panel data set this study provides novel insights into the factors that lead retail firms to internationalise rapidly.

Keywords Intangible assets, Retailers, Speed, Empirical study, International business, Internationalization, International retailers, Resource based view, Knowledge based view, Home-region concentration

Paper type Research paper

1   Introduction

While time has traditionally been a key concern in research on issues, such as new product development and introduction (e.g. Lee et al., 2000; Wong, 2002), research on the speed with which firms expand their operations internationally is scarce at best, in particular, when compared to other questions related to the international expansion such as, for example, entry mode choice (e.g. Blomstermo et al., 2006; Brouthers and Brouthers, 2003; Ekeledo and Sivakumar, 2004; Erramilli, 1991; Erramilli and Rao, 1990, 1993). Although time has been regarded as a central competitive dimension for service sector firms in general, and retailers in particular (e.g. Heskett et al., 1990; Mentzer et al., 2000), due to the simultaneity of production and consumption, intangibility, perishability, or need for customisation in these sectors (Boddewyn et al., 1986; Zeithaml et al., 1985), an " explanation of conditions under which the speed of international expansion increases or decreases" remains elusive (Luo et al., 2005, p. 755).

Prior research on Born Globals and New International Ventures, i.e. firms that are international from their inception or internationalise rapidly immediately after their inception, has investigated the time between the foundation of such organisations and their first internationalisation, but has paid little attention to explaining the internationalisation speed of firms after their first internationalisation. Research in this stream has also focused on small, entrepreneurial firms in the high-tech sector (Autio et al., 2000; Crick, 2009; Knight et al. , 2004; Li et al. , 2012; Loane and Bell, 2006; Loane et al., 2007; Luo et al. , 2005; Musteen et al. , 2010; Zahra, 2005), rather than traditional firms that may have operated domestically for various years, if not decades, before expanding overseas and that are generally assumed to internationalise incrementally, i.e. slow (Luo et al. , 2005). Yet, anecdotal and empirical evidence shows that (long-) established firms can internationalise rapidly as well (e.g. Vermeulen and Barkema, 2002). German footwear retailer Deichmann, for example, was founded in 1913 and started expanding its overseas operations rapidly only in the 1980s. The limited research into the factors that lead (established) firms to internationalise rapidly is particularly worrying given the evidence for the direct and indirect effects of internationalisation speed on firm performance (Chang and Rhee, 2011; Vermeulen and Barkema, 2002). Despite recent calls for more scholarly attention on internationalisation speed when studying various facets of firm internationalisation, for example, the performance effect of firm internationalisation (e.g. Bowen, 2007; Li and Li, 2007), research into the factors determining the speed with which firms internationalise their operations remains scarce.

To address this shortage of research into the determinants of firms' internationalisation speed we draw on the RBV/KBV to argue that internationalisation speed depends on the intangible resources that a firm possesses. Specifically, we argue that internationalisation speed can be explained by two types of

intangible resources: intangible assets and experiential knowledge of operating internationally. Although prior research has highlighted the importance of both intangible assets (Delios and Beamish, 2001; Meyer et al. , 2009) as well as international experience (Barkema and Drogendijk, 2007; Clarke et al. , 2013; Dikova et al. , 2010; Dow and Larimo, 2009; Lihong and Delios, 2008) as important determinants of the pattern and outcome of firms' internationalisation, their role in determining the internationalisation speed of firms remains underexplored.

In addition, we know very little about the degree to which the effects of firms' international experience on internationalisation speed varies with the nature of this experience. In particular, recent research has stressed the home-region concentration of firms in general and of firms in the service sector in particular (e.g. Mohr et al. , 2014; Rugman and Girod, 2003). However, the moderating role of this concentration for the link between international experience and internationalisation speed has not yet been investigated. We suggest that clarifying such an effect is important for understanding the complex role played by firms' international experience as an important intangible firm resource in the internationalisation process (Clarke et al., 2013).

Overall, our study thus enhances the existing knowledge of firm internationalisation by providing answers to the following research questions:

RQ1. What is the relationship between a firm' s intangible resources and its internationalisation speed?
RQ2. How does a firm' s adoption of a regional vs a global approach to international expansion affect the relationship between international experience and internationalisation speed?

We structure our paper as follows. The following section draws on the RBV/KBV to develop hypotheses on the effects of different intangible resources on the speed of internationalisation. This is followed by an explanation of our research context, empirical basis, as well as measurements. We then present and discuss our findings before concluding the paper and highlighting a number of limitations and areas for further research.

2   The contingent effect of intangible resources on internationalisation speed

The core assumption of the Resource Based View of the Firm (RBV) is that firms enjoy sustained competitive advantage if they hold resources that are valuable, rare, and difficult to imitate or substitute (Barney, 1991, Dierickx & Cool, 1989). Intangible resources, such as, trademarks, brands, customer lists, patents, but also knowledge and skills, are particularly likely to meet these criteria and thus play a central role in explaining firms' sustained competitive advantage. While both intangible

assets and knowledge have been viewed as core resources of firms (Barney, Wright, & Ketchen, 2001), the knowledge-based view (KBV) has extended the RBV by putting particular emphasis on the role that (different types) of knowledge play for firm competitiveness (Kogut & Zander, 1995, Zander & Kogut, 1995). In parallel, research on internationally operating firms has drawn on the RBV/KBV to identify and integrate firms' international experience and knowledge as a central intangible resource of such firms (e.g., Peng, 2001). We argue that both intangible assets (patents, brand value, etc) and the knowledge obtained through international experience will influence the speed with which (established) firms internationalise their operations.

The effect of intangible assets on internationalisation speed

We suggest that there are two mechanisms through which firms' intangible assets increase firms' internationalisation speed. We argue that intangible assets either *facilitate* firms' rapid internationalisation and/or *push* firms towards rapid internationalisation. First, intangible assets facilitate rapid internationalisation because they allow firms to both reduce and compensate the costs associated with overcoming their liability of foreignness in overseas markets (Hymer, 1960, Zaheer, 1995). By reducing the obstacles/problems associated (e.g. reducing local competition) with internationalisation, intangible assets also allow firms to internationalise faster when compared to firms that need to spend more time and resources on overcoming their liability of foreignness. For instance, Luo et al. (2005) argue that marketing capabilities increase the internationalisation speed of e-commerce firms because these capabilities allow firms to deal with the uncertainties faced in overseas markets and to build a their reputation and customer loyalty.

Second, because of the nature of intangible assets, they increase the pressure for firms to leverage these assets rapidly and thus push them to internationalise rapidly. Intangible assets based on advanced technology may become obsolete and brands may lose their power to attract and retain customers over time. Rapid internationalisation thus allows firms to exploit and benefit from intangible assets before they lose their value. In addition, intangible assets may also be replicated by competitors. RBV suggests that assets provide firms with sustained competitive advantage only if these assets are valuable, rare, and difficult to imitate and substitute (Barney, 1991). Over time, competitors might be able to imitate or substitute these assets, and even though some firms may be able to sustain their competitive advantage longer than others there is a fundamental pressure for the firm to exploit their advantages quickly. While not the only means, rapid international expansion is a particularly important way to do so. Luo et al. (2005), for example, explain the high speed in the internationalisation of e-commerce firms by their objective to leverage their innovative capability. Further, research on the benefits of internationalisation has stressed that geographical diversification allows firms the amortisation of their investments in intangible resources (e.g., Contractor, Kundu, &

Chin-Chun, 2003). Rapid international expansion thus allows for a *faster* amortisation of investments into intangible assets, e.g. where particular brands may have been acquired by retailers. Thus, even in cases where firms have strong brands firms may internationalise rapidly not because of a threat to their intangible resources, but in order to quickly recoup their investments in the development and/or acquisition of such intangible resources. Further, although the push- and facilitating effects of intangible assets may overlap, we suggest that certain intangible assets can push firms to internationalise rapidly, irrespective of whether these assets facilitate internationalisation; e.g. high levels of investment into developing a globally recognised brand will push firms to recoup their investment through international operations irrespective of whether that global brand will facilitate entry.

Overall, we therefore expect intangible assets to have a positive effect on firms' internationalisation speed and formulate the following hypothesis.

> *H1. Intangible assets have a positive effect on firms' internationalisation speed.*

The effect of international experience

The vast majority of RBV-based studies in international business research have focussed on the role that intangible assets, such as, patents, play in for the internationalisation activities of firms (López Rodríguez & García Rodríguez, 2005). Recent international business research drawing on the RBV, however, has stressed that the knowledge resulting from firms' international experience should be viewed as a critical intangible resource for internationally operating firms (e.g., Fang, Wade, Delios, & Beamish, 2007, Peng, 2001). In research on firm internationalisation, international experience generally refers to the "experience that firms accrue from operating internationally" (Clarke, Tamaschke, & Liesch, 2013: 265).

This experience allows firms to develop knowledge and skills that are useful for internationalising their operations. Specifically, international experience improves a firm's ability to overcome its liability of foreignness and reduces the costs and time of doing so (Barkema, Bell, & Pennings, 1996). Internationally experienced firms are able to transfer their experiential learning into new contexts to overcome their liabilities of foreignness more rapidly. Such firms are thus able to internationalise more rapidly when compared to firms without international experience. For example, experience with establishing and managing operations in other countries allows firms to adjust to host country particularities such as consumer demands or legal restrictions, more rapidly. The experiential learning associated with international experience thus facilitates the rapid internationalisation of firms' operations.

In addition to this facilitating effect of international experience we suggest that international experience can also "push" firms to internationalise rapidly. Managers of firms with international experience are more likely to have an international mindset, and are thus likely to view their firms' markets as international. Such an international mindset also makes managers more likely to look for growth opportunities outside the firm's home-country, increasing the speed of firm internationalisation. RBV-based research has highlighted top managers' international experience as a source of firm-specific, inimitable and tacit knowledge that affects the internationalisation of firms (Barney, Wright, & Ketchen, 2001). Research on entrepreneurship in general, and on International New Ventures/Born Globals in particular, has highlights that entrepreneurs learn from their experience and become more likely to spot new opportunities in general, or new opportunities for international expansion in particular (Luo, Zhao, & Du, 2005, Musteen, Francis, & Datta, 2010).

Based on this discussion of the effects of international experience on firm internationalisation, we formulate the following hypothesis:

> *H2. International experience has a positive effect on firms' internationalisation speed.*

The moderating effect of firms' home-region concentration

Recent research has underlined the importance of accounting for different types of firms' international experience as not all experience may lead to knowledge that can successfully applied to in different contexts (e.g., Barkema, Bell, & Pennings, 1996, Casillas & Moreno-Menéndez, 2013). Nadolska and Barkema (2007), for instance, argue and find that whereas prior experience with acquisitions increases the pace with which firms carry out subsequent acquisitions, prior experience with joint ventures has no such effect on the pace of acquisition. The effects of experience depend on the degree to which there is a "fit" between the type of experience and the context in which this experience is used. We adopt this general logic in our explanation of internationalisation speed and suggest that the effect of firms' international experience (as an intangible resource from the RBV) depends on the level to which firms' international experience has been obtained and is being used within the firm's home-region. Prior research has shown that retailers in particular are often concentrated in their home-region (e.g., Mohr, Fastoso, Wang, & Shirodkar, 2014, Rugman & Girod, 2003).

We suggest that firms' home-region concentration will moderate the effect of international experience on internationalisation speed because the liability of foreignness a firm faces and has to overcome when entering a foreign market, will be comparatively greater when this foreign market is outside the firm's home-region. Because of the greater degree of similarity among countries within the same geographical region, recent research has called for a distinction between an *inter*-regional and an

intra-regional liability of foreignness (Rugman & Verbeke, 2004). Firms internationalising within their home region face the (lower) intra-regional liability of foreignness, whereas firms internationalising outside their home region face the (higher) inter-regional liability of foreignness. Moreover, experience gained from operating in a particular home-region may be home-region bound and thus not directly applicable to overcoming firms' liability of foreignness outside their home-region (Clarke, Tamaschke, & Liesch, 2013). However, such intra-regional experience will be particularly useful for firms internationalising within their home-region thereby strengthening the positive effect of international experience on internationalisation speed. Although referring to cultural blocs rather than (geographical) regions, Barkema and Drogendijk (2007: 1143), for example, find that firms' international experience is of greater value when they internationalise within their own cultural bloc as they would be better able to exploit their existing knowledge.

Accordingly, we formulate the following hypothesis

> *H3. Firms' home-region concentration will strengthen the positive effect of international experience on internationalisation speed.*

Figure 1 summarises our research model based on the RBV/KBV of the firm. While we expect direct effects of intangible assets and international experience on internationalisation speed, we also expect the nature of the effect of international experience on internationalisation speed to vary with firms' home-region concentration.

*** Insert Figure 1 here ***

3   Data and methods

Research setting

The setting for our study is the retailing sector. Research has stressed the importance of time-based competition for service sector firms in general, and retailers in particular (e.g., Heskett, Sasser, & Hart, 1990, Mentzer, Min, & Zacharia, 2000). This is due to the simultaneity of production and consumption, intangibility, perishability, or need for customization characterising the service sector (Boddewyn, Halbrich, & Perry, 1986, Zeithaml, Parasuraman, & Berry, 1985). There is also anecdotal evidence highlighting the importance of time-based competition in the retailing sector and the associated rapid international expansion of, for example, fashion retailers, such as Zara (e.g., Ghemawat & Nueno, 2006, Quinn & Falley, 2010) or super-/hypermarket market chains, such as Tesco or Carrefour (e.g., Coe & Hess, 2005, Coe & Wrigley, 2007, Lowe & Wrigley, 2010).

Similarly, Coe and Wrigley (2009) consider the speed of internationalisation as a key characteristic of the latest phase of retail internationalisation.

Given the large number of retailers without any international operations we based the search of the initial population of international retailers on the company rankings provided by three different sources: (i) PlanetRetail's Top Global 250 Retailers (2012); (ii) Deloitte's Top 250 Global Retailers (2011); and (iii) UNCTAD's ranking list of the top 100 transnational corporations (2012). The amalgamation of all the aforementioned lists resulted in a total of 189 retailers with international operations. For those international retailers longitudinal data for a 10-year period (2003-2012) was collected from the PlanetRetail database. Furthermore, we complemented our data set with financial data from ORBIS database. Given that ORBIS provided no or very limited information on some of the 189 retailers, our final sample consists of 144 international retailers. After accounting for missing data we were able to analyse 945 firm-year observations.

Table 1 provides information on country of origin, number of firms from each country, average number of host locations, and average number of total and foreign outlets established in the 10-year period of examination. The firms in our sample originate from 29 different countries. A majority (64.58%) of the firms originate from five major economies (47 from the United States, 14 from the United Kingdom, 11 from Japan, 11 from France, and 10 from Germany). Table 1 also shows the rapid growth of both the average number of total and overseas outlets, as well as of the average number of locations where the firms operate. Precisely, the vast majority of the examined firms show higher growth of their foreign outlets compared to the growth of their total outlets. At the same time the huge growth of the average number of foreign countries of operation supports that internationalisation speed should be considered an important facet of firm internationalisation (Casillas & Moreno-Menéndez, 2013).

*** Insert Table 1 about here ***

Measures

We measure our *dependent variable*, i.e. speed of internationalisation, as the the average number of foreign outlets divided by the number of years since the firm's first international expansion. This measure has been used in previous studies on internationalisation speed (e.g., Chang & Rhee, 2011, Mohr, Fastoso, Wang, & Shirodkar, 2013, Vermeulen & Barkema, 2002). We thus measure the speed with which firms expand into *multiple* countries. This differs from other measures of speed used in research on the speed with which firms expand their operations within *individual* overseas markets (e.g., Barkema & Drogendijk, 2007, Gao & Yigang, 2010, Pedersen & Petersen, 1998)

We measure our *independent and moderating variables* as follows. In line with Chang et al. (2013) we measure intangible assets as the percentage ratio of intangible fixed assets to total assets. This data was taken from the ORBIS database. We measure firms' international experience using two different measures in line with recent research suggesting a more differentiated view of international experience accounting for different sources of experiential learning (e.g., Casillas & Moreno-Menéndez, 2013, Clarke, Tamaschke, & Liesch, 2013, Dow & Larimo, 2009).[1] Following these suggestions we distinguish between the depth and the breadth of a firms' prior international experience. A first measure relates to the *depth of firms' international experience*. This is measured as the total number of years a firm has operated in each different foreign country (similarly, see Mohr et al., 2014). We also measure the *breadth of firms' international experience* as total number of foreign countries in which the MNE has established at least one outlet. This measure has been used by previous studies researching the moderating effect of internationalisation speed (see Chang & Rhee, 2011, Vermeulen & Barkema, 2002). However, both studies have used this measure as a proxy for the geographic scope of the firm, while in our study this measure acts as an additional measure of international experience capturing this time, not the duration/length of international experience (i.e. depth of firms' international experience), but the size/extensiveness of international experience (i.e. breadth of firms' international experience). This data was taken from PlanetRetail. To measure the degree of firms' home region concentration as our moderating variable we calculated the ratio of firms' home-region-sales to total sales. This data was also taken from PlanetRetail. This variable was calculated using Rugman and Verbeke's (2004) broad triad (North America, the European Union and Asia Pacific) to decide whether or not a particular country belongs to the firm's home region and thus whether or not the firm's sales in this country count towards the firm's home region sales.

We incorporate a number of *control variables* in order to reflect three traditionally important aspects of firm internationalisation strategy; firm resources and strategy, competitive pressure, and country-level characteristics. For the firm resources and strategy group of control variables we include the following; Firm *age*, measured as the year of observation minus year of inception; Firm *size* measured as the natural logarithm of MNE's total number of assets; *Performance*, calculated as return on sales (ROS), i.e. the ratio of net income to total sales; *Rhythm* of internationalization, i.e. the evenness of firms' international expansion (Vermeulen & Barkema, 2002) is measured by the kurtosis of the count of new international expansions (i.e. outlets) made by a retailer each year until the final year of our dataset's observations (e.g., Chang & Rhee, 2011, Vermeulen & Barkema, 2002). We also take into account the competitive pressures in the global retail marketplace. Accordingly we include the following two variables: *Retail market share*, measured as the worldwide (retail format) market share of the firm in the given year; *Market position*, calculated based on the ranking difference (in terms of

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[1] We would like to thank one of the anonymous reviewers for highlighting the importance of alternative measures of international experience.

sales) between a firm and the market leader in the respective retail segment. Accordingly the greater (smaller) this difference, the weaker (stronger) the market position of the retailer in its market segment. We further include two traditionally important country-level control variables that are expected to have an effect on the internationalisation strategy of the firm. First, we incorporate the (average) *cultural distance* between the firms' home country and the target countries in the given year. In order to calculate this measure we used Kogut and Singh's (1988) formula and Hofstede's four dimensions of national culture (i.e. Power Distance, Individualism versus Collectivism, Masculinity versus Femininity, Uncertainty Avoidance). Second, we include the *Home market size* measure in order to control for the possibility that firms' from smaller markets internationalise more rapidly than firms from larger markets. For the calculation of this variable we took the natural logarithm of the home country's Gross Domestic Product (GDP). Finally, we include dummies based on the first 2 digits of firms' SIC codes to control for variation across different segments. We also include year dummies for the ten-year period of our analysis, and home country dummies for the five most internationalised home countries of our sample (i.e. France, Germany, Japan, United Kingdom, and the United States). Table 2 provides variable definitions and data sources.

*** Insert Table 2 about here ***

Methodology

Our sample is a ten-year panel dataset consisting of 144 retail MNEs. The majority of our variables are in time-series formation (i.e. they change over time), but we control for possible unobserved heterogeneity (Wooldridge, 2008) by incorporating several dummy variables which lack time dimension (e.g., firms' home country and industry). Using a Pooled Ordinary Least Squares (POLS) model is the most efficient way to estimate as much unobserved heterogeneity in panel data. Yet, the diagnostic tests we ran to assess the efficiency of the POLS estimates (White test, Wooldridge test) identify heteroskedasticity and autocorrelation as possible concerns for our estimations. We therefore use Feasible Generalised Least Squares (FGLS) which gives an effective solution to the problems of heteroskedasticity and autocorrelation, as it provides asymptotically more efficient parameter estimates. In our case we employed an FGLS estimator that is robust to first-order panel-specific autocorrelation (AR1) and heteroskedasticity.

4   Results

Table 3 shows the descriptive statistics and the correlations among our variables. In order to eliminate any issues related to multicollinearity arising from the interaction effects that are introduced in Model 4, we mean-centred the respective variables (Aiken & West, 1991). The last row of the table reports the estimated Variance Inflation Factors (VIFs) for our final model (Model 4). The highest VIF (3.77)

is below the threshold of 5.0, which is the most commonly used cut-off point for possible presence of multicollinearity. Additionally, Table 4 shows the results of the FGLS regression. Additionally, the last two rows of each column report the White-test for heteroskedasticity and the Wooldridge-test for autocorrelation[2].

*** Insert Table 3 & 4 about here ***

Model 1 is the baseline model including only the control variables (i.e. age, size, performance, rhythm, retail market share, market position, average cultural distance, and home country size). In Model 2 we add the intangible assets variable to the baseline model to test *hypothesis 1* suggesting a positive effect of intangible assets on the speed of internationalisation. Our empirical findings support this hypothesis as the respective coefficient is positive and statistically significant ($p < 0.001$). Model 3 includes the two international experience variables, depth and breadth of international experience to test *hypothesis 2*. In this hypothesis we expected a positive effect of international experience on the speed of internationalisation. The results support this hypothesis, since both depth and breadth of experience have a positive effect on internationalisation speed, with a significance level that lies within 10% and 0.1% respectively. Additionally, the intangible assets retains its positive and significant effect on internationalisation speed, further supporting *hypothesis 1*. Model 4 is the final model which tests *hypothesis 3* regarding the moderating effect of home region concentration on the relationship between international experience and internationalisation speed. The coefficient for the moderating effect of home region concentration on the role of firms' breadth of international experience is positive and statistically significant ($p < 0.01$), supporting *hypothesis 3*. In contrast, the coefficient for the moderating effect of home region concentration and depth of international experience is negative and statistically significant ($p < 0.05$). As a result, there is only partial support for *hypothesis 3*. Our three independent variables (i.e. intangible assets, depth of experience, breadth of experience) remain positive and statistically significant in Model 4, indicating that our support for *hypotheses 1* and *2* is robust to the addition of moderating effects.

5   Discussion

Our study was motivated by the mismatch between the importance of internationalisation speed for firm performance and the limited empirical research into the determinants of internationalisation speed. To address this under-researched topic we used RBV/KBV to investigate the role of intangible resources for the internationalisation speed of firms in the retailing sector.

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[2] We also ran additional regressions for all models using one-year lag for our independent, moderating and control variables in order to test for possible endogeneity. The results from the lagged estimations are similar to those reported in Table 4. These are available from the authors upon request.

In our *hypothesis 1* we argued that intangible assets have a positive effect on internationalisation speed based on their push- and facilitating-effects. Our findings support this effect. This finding is in line with existing research that highlighted the importance of intangible assets for the speed of internationalisation of predominantly young, high-tech firms, e.g., e-commerce firms (e.g., Autio, Sapienza, & Almeida, 2000, Luo, Zhao, & Du, 2005). Our findings provide evidence that intangible assets are also important determinants of the internationalisation speed of mature firms in the retailing sector[3]. While previous research has not investigated the effects of tangible assets on internationalisation speed, we argued and found empirical support that these assets also play a role in explaining firms' internationalisation speed. Our support for a direct effect of intangible assets on the internationalisation speed complements the results of Chang and Rhee (2011) who argued for a moderating effect that intangible assets have on the association between internationalisation speed and firm performance. Our choice of intangible assets as direct determinants rather than moderating factors was based on the logic of the RBV, but combining the two sets of results underline the important role of intangible assets both as determinant and as moderator of (the effects) of internationalisation speed.

Our results support *hypothesis 2*, which suggested that international experience has a direct effect on internationalisation speed based on the role of international experience in helping firms reduce or overcome their liability of foreignness (Barkema, Bell, & Pennings, 1996). Accounting for recent calls and suggestions to account for different types of firms' international experience (e.g., Casillas & Moreno-Menéndez, 2013, Clarke, Tamaschke, & Liesch, 2013, Dow & Larimo, 2009), we tested the effects of both depth and breadth of firms' prior international experience for internationalisation speed and found support for both.

We only find partial support for *hypothesis 3* which suggested a positive moderating effect of firms' home region concentration on the association between international experience and internationalisation speed. The expected moderation of this effect by firms' home region concentration was based on recent research that distinguishes intra-regional liability from inter-regional liability of foreignness and has argued that the latter is higher than the former (e.g., Rugman & Verbeke, 2004). While we find support for the expected positive moderation effect of firms' home-region concentration on the association between the breadth of firms' prior international experience and their internationalisation speed, our findings show a negative moderating effect of firms' home-region concentration on the association between the depth of firms' international experience and their internationalisation speed. One possible explanation for the unexpected negative moderating effect of home-region concentration on the link between the depth of international experience and internationalisation speed may be that deep knowledge of a very small number of overseas markets

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[3] The average age of the firms in our sample is about 51 years.

within a firm's home-region acts as an impediment to its internationalisation. On the one hand, this may be due to the fact that routines and processes that have been developed over an extended period of time for operating in a very narrow set of countries have become rigid and firms may not be able to unlearn or adjust these routines and processes to operate in other overseas markets, even if those markets are in the same region. For example, a German retailer may have developed routines and practices that suit the conditions in a small number of German-speaking European countries, but might not facilitate rapid expansion into other European countries. This would support the idea that certain types of international experience can lead to firms developing rigidities that are detrimental to further internationalisation (see also, Casillas & Moreno-Menéndez, 2013). On the other hand, the negative moderating effect of firms' home-region concentration may be due to the fact that instead of pushing firms to internationalise rapidly, in-depth experience gained in a comparatively small number of markets limits decision-makers' exposure to international markets and prevents them from developing an international mindset that allows for spotting new opportunities in new markets; instead, decision-makers may favour expanding existing operations in existing countries reducing the speed of further international expansion. Under conditions of high home-region concentration the push-effect of international experience may thus turn into a pull effect, further strengthening a potential "home-grown mindset" (Nadolska & Barkema, 2007: 1172) preventing firms from rapidly internationalising their activities. Overall, although we find direct positive effects of both facets of firms' international experience on their internationalisation speed, our findings with regard to the moderating effects of home-region concentration underline the need to differentiate between different types of firms' international experience (e.g., Casillas & Moreno-Menéndez, 2013, Clarke, Tamaschke, & Liesch, 2013, Dow & Larimo, 2009).

Overall, our findings have a number of implications for research and practice. From a *research perspectiv*e, the study has provided useful insights into the factors that influence firms' decisions to international rapidly. Despite long-standing and repeated calls for more work on the role of internationalisation speed, it remains an under-researched aspect of firm internationalisation, in particular when compared to issues such as market entry strategy. By analysing the determinants of internationalisation speed from a RBV/KBV perspective, our study complements the findings of Chang and Rhee (2011) and Vermeulen and Barkema (2002) who highlighted the consequences of internationalisation speed but did not study its determinants. Our findings based on large, established international retailers, also complement existing studies into the determinants of internationalisation speed of young, high-tech firms (e.g., Luo, Zhao, & Du, 2005). In general, our findings show that RBV/KBV can be usefully employed to explain internationalisation speed and thus complement explanations of other facets of firm internationalisation which have so far been predominantly based on internalisation theory (e.g., Buckley & Casson, 1976, Hymer, 1960, Meyer, Estrin, Bhaumik, & Peng, 2009). In addition, our findings contribute to extending the scope of RBV/KBV by using its

central notions in our explanation of variations in firm internationalisation speed. Our findings may be usefully brought back into the "core" of RBV/KBV to provide a clarification of the context-boundedness of international experience as an important intangible resource of firms.

From a *practical point of view*, our findings can be used by firms to assess their ability to quickly internationalise when deciding on expanding their operations overseas. Our findings indicate that the existence of both intangible assets and international experience are important for rapid firm internationalisation. This also implies that a lack of these resources is likely to prevent firms from internationalising rapidly. To some extent our findings thus contrast with recent research on the internationalisation of emerging market firms that suggests that firms from these countries internationalise rapidly in order to acquire particular assets (e.g., Luo & Tung, 2007). Our findings from the retailing sector do not provide any evidence for internationalisation without such assets, although the number of firms headquartered in emerging economies was comparatively low (totally 10 firms out of 144). Taking this into account, our findings thus imply that firms need to have intangible resources before being able to internationalise rapidly.

Although we find support for positive effects of different types of international experience, we find that these effects depend on whether firms' adopt a regional vs. a global approach to their operations. Decision-makers thus need to be mindful of the variation of the effects of international experience depending, in particular, on the possibility that in-depth international experience obtained from operations in a small set of countries in firms' home-region, may in fact prevent firms from internationalising rapidly. In general, firms are well-advised to clarify the facets of their international experience and the respective applicability in their internationalisation. Overall, firms would benefit from a better understanding of the determinants of internationalisation speed given the importance of rapid internationalisation in general (Chang & Rhee, 2011) and in the services-sectors in particular (e.g., Heskett, Sasser, & Hart, 1990, Mentzer, Min, & Zacharia, 2000).

This study has a number of limitations. A first limitation concerns some of our measurements. While we have used measures that have been suggested in prior research, some of these measures may not have been ideal given the nature of the data available to us. For example, including advertising spending as an additional measure of firms' intangible assets may have provided more comprehensive insights into the role of different intangible assets and would have made our findings more comparable with prior studies that used advertising spending as a proxy for intangible assets (e.g. Lu and Beamish, 2004).

A second limitation relates to our sample and the question in how far our findings are generalisable to other types of retailers and to firms in other (service) industries. Our study focused on explaining the

speed with which " brick-and-mortar" retailers expand internationally through the establishment of outlets in overseas markets. In contrast to these traditional retailers, e-retailers are able to enter and operate in foreign markets without a physical presence in these markets. Although we would expect intangible assets and international experience to be important determinants of the internationalisation speed of e-retailers as well, macro-level factors, such as, for example, countries' internet penetration rates, are likely to play a comparatively more important role for such firms (e.g. Luo et al., 2005). Further, research has stressed the particular nature of the retail sector highlighting characteristics such as the capital-intensity (Contractor et al., 2003) or the high-level of home region concentration (Rugman and Girod, 2003) when compared to other (service) sectors. In as far as retailers are similar to other service sector firms with regard to the common characteristics of services (Boddewyn et al., 1986; Zeithaml et al., 1985) we think that our findings can be extended to such firms. To the extent that firms in other (non-service) sectors rely on intangible assets, we suggest that our arguments also apply outside the service sector although future research is needed to confirm this empirically.

In addition to overcoming these limitations, there are a number of possible extensions to our study that would be of interest. Since our study was focused on explaining the determinants of internationalisation speed, future research should investigate the outcomes of rapid internationalisation. Existing research on this issue remains scarce (e.g. Chang and Rhee, 2011) and besides clarifying performance outcomes of rapid internationalisation, future research could investigate if firms that internationalised quickly are also more or less likely to withdraw from the respective international engagements. We think these are worthwhile questions that could guide future research to overcome the scarcity of research into the speed of internationalisation not only among services firms, but also among firms in other sectors.

6   Conclusion

Service sector has become an overly important part of today's global business activities. Despite the fact that business activities originating from service sector firms account for almost two-thirds of world GDP (WTO, 2010), service multinationals is still considered an under-researched topic in the International Business. What we also know is that service firms are characterised by a particularly lively international activity. Given the limited research activity on internationalisation activities of service sector firms, this paper aimed to give answers to important under-researched questions. Further, our study responds to calls for more research on service sector firm internationalisation (Kundu & Merchant, 2008, Merchant & Gaur, 2008) and in particular to calls for more attention to the role of speed in the internationalisation of firms (e.g., Andersen, 1993, Bowen, 2007, Li & Li, 2007). Anecdotal evidence and evidence from case studies highlight the increasing importance of time-based competition in general and in particular in the retail sector (e.g., Ghemawat & Nueno, 2006, Lowe &

Wrigley, 2010). There is thus a need for a better understanding of the factors that affect firms' decision to internationalise rapidly as one crucial facet of retailers' response to this time-based competition. By providing novel insights into this issue based on both theoretical and empirical analyses, our study contributes to our understanding of internationalisation speed as an important, yet under-researched phenomenon.
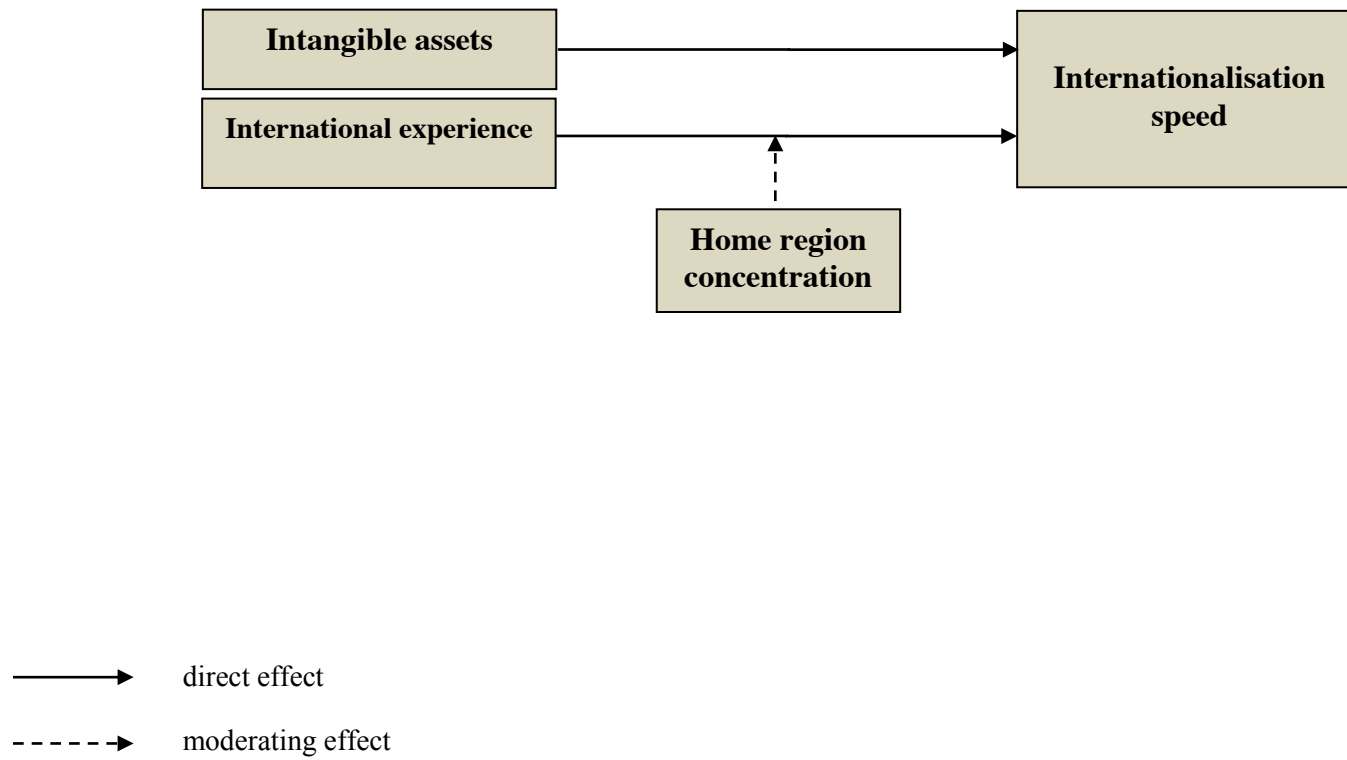
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FIGURES

Figure 1. Conceptual framework

| Intangible assets |
| International experience |

| Internationalisation speed |

| Home region concentration |

⟶   direct effect

- - - ⟶   moderating effect

TABLES

Table 1. Sample characteristics

Country of origin	Number of firms	Average number of total outlets		Average number of foreign outlets		Average countries of operation	
		2003-2007	2008-2012	2003-2007	2008-2012	2003-2007	2008-2012
Australia	4	2,021.11	2,867.85	73.72	111.35	3.22	3.55
Austria	3	2,111.47	2,816.60	1,209.20	1,808.93	8.93	10.13
Belgium	3	1,500.93	1,709.60	884.93	1,037.07	6.6	6.4
Canada	3	2,188.57	3,378.87	299.43	1,101.40	4.71	14.53
Chile	1	381.67	797.2	19	88.6	3.33	5.4
China	1	1,426.00	1,598.00	290.67	950.75	1.75	16
Denmark	1	1,515.75	1,569.40	542.75	728	6.75	10.8
Finland	2	1,120.25	1,916.60	161.5	474.1	3.75	16.4
France	11	2,964.03	4,698.00	1,014.06	1,771.93	8.51	13.56
Germany	10	2,525.16	3,907.00	933.72	1,617.68	7.35	12.04
Hong Kong	3	1,686.36	3,357.20	304.5	1,077.13	7.14	14.07
Ireland	1	719.6	874.2	45.2	89.6	3.4	4.4
Italy	1	941	1,611.20	428.25	1,050.25	12.6	16.2
Japan	11	2,172.12	3,414.24	754.2	1,344.58	8.9	13.02
Korea	2	3,758.63	5,788.90	726.38	1,771.70	10.5	15.7
Mexico	3	2,956.71	5,973.20	1,106.14	2,330.47	7.64	16.8
Netherlands	4	2,767.33	4,518.84	954	1,978.84	6.62	12.16
Norway	2	1,622.75	2,286.20	846.75	1,084.60	10.25	12.7
Portugal	2	3,280.50	5,116.80	432.13	1,609.00	9.75	19.7
Russia	1	860	2,608.60	28.4	16.8	2.4	2.4
South Africa	3	1,121.60	1,606.40	283.33	575.8	9.4	13.8
Spain	3	1,744.53	2,178.60	493.5	745.64	9.2	12
Sweden	2	1,501.67	4,960.40	136	2,078.30	10.89	23.4
Switzerland	2	1,136.90	1,612.60	259	589.6	8.4	10
Taiwan	1	2,962.25	3,559.80	304.5	796.8	3	3.2
Thailand	2	4,928.10	5,385.70	2,457.50	2,641.30	10.3	9.5
Turkey	1	1,581.00	4,937.60	704	1,823.80	5.75	17
United Kingdom	14	3,337.08	4,606.70	1,179.79	1,693.77	10.32	13.91
United States	47	3,444.17	3,982.45	1,299.50	1,568.38	12.43	14.68

Table 2. Variables, definitions and sources

Variables	Definition	Source
Dependent		
Speed	The average number of foreign outlets divided by the number of years since the firm's first international expansion.	PlanetRetail
Independent		
Intangible assets	Ratio of intangible fixed assets to total assets	ORBIS
Depth of experience	MNE's cumulative number of years in all foreign markets since its first international expansion	PlanetRetail
Breadth of experience	The total number of foreign countries the firm operates in.	PlanetRetail
Moderating		
Home region concentration	Ratio of home region sales to total sales	PlanetRetail
Control		
Age	Year of observation minus year of inception	ORBIS
Size	Natural logarithm of MNE's total assets	ORBIS
Performance	Ratio of net income to total sales	ORBIS
Rhythm	The kurtosis of the count of new international expansions made by a retailer each year	PlanetRetail
Retail market share	The worldwide (retail format) market share of the firm in the given year	PlanetRetail
Market position	A firm´s gap from the market leader (of the retail segment) in terms of total banner sales	PlanetRetail
Average cultural distance	Using Kogut and Singh's (1988) formula and Hofstede's indices we calculate the average cultural distance between the MNE's home country and the target countries in the given year	The Hofstede centre
(Ln) Home market size	The natural logarithm of home market's Gross Domestic Product (GDP)	World Bank Indicators

Table 3. Descriptive statistics and pair-wise correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Speed	1														
2	Intangible assets (%)	0.11	1													
3	Depth of experience	0.41	0.14	1												
4	Breadth of experience	0.49	0.15	0.77	1											
5	Home region concentration (%)	-0.30	-0.19	-0.38	-0.41	1										
6	Depth of experience x Home region concentration	-0.20	-0.03	-0.37	-0.61	0.27	1									
7	Breadth of experience x Home region concentration	-0.16	-0.07	-0.47	-0.45	0.12	0.71	1								
8	Age	-0.02	0.08	0.09	-0.03	-0.09	-0.13	-0.09	1							
9	Size	0.06	-0.02	-0.02	-0.14	0.09	-0.09	0.00	0.02	1						
10	Performance (%)	0.04	-0.04	0.12	0.27	-0.20	-0.07	-0.16	-0.04	-0.11	1					
11	Rhythm	-0.05	-0.01	-0.06	-0.09	0.10	-0.01	0.00	0.08	0.07	-0.13	1				
12	Retail market share	0.33	0.04	0.13	0.11	-0.04	-0.02	0.01	0.00	0.18	-0.09	0.00	1			
13	Market position	-0.04	-0.22	-0.16	-0.21	0.05	-0.01	0.02	0.05	0.08	0.03	0.06	-0.27	1		
14	Cultural distance	0.13	-0.11	0.19	0.22	-0.32	0.02	0.20	0.11	0.03	0.01	0.03	0.07	0.05	1	
15	(Ln) Home market size	0.06	0.08	0.05	0.19	-0.03	-0.03	0.09	-0.13	-0.02	0.04	-0.05	0.18	-0.40	0.00	1
	Mean	47.15	10.70	66.29	10.93	88.93	5,155.27	923.10	50.76	16.04	7.50	0.73	0.14	42.32	2.09	28.60
	Std. Dev.	70.86	13.36	99.15	16.58	20.20	6,892.87	1,123.25	45.70	2.82	7.98	2.94	0.28	49.60	1.27	1.43
	VIFs (Model 4)		1.19	3.77	3.51	1.52	3.24	2.95	1.14	1.10	1.17	1.05	1.16	1.40	1.48	1.30

Coefficients with values greater than |0.06| are significant at the 5% level of significance

Table 4. Feasible Generalised Least Squares (FGLS) regression estimates on internationalization speed

Dependent: Speed	Model 1	Model 2	Model 3	Model 4
Independent				
Intangible assets		0.239 (0.062)***	0.237 (0.058)***	0.215 (0.058)***
Depth of experience			0.025 (0.015)†	0.180 (0.057)**
Breadth of experience			2.633 (0.177)***	1.107 (0.563)*
Home region concentration				-0.374 (0.088)***
Moderating effects				
Depth of experience x Home region concentration				-0.001 (0.000)*
Breadth of experience x Home region concentration				0.017 (0.006)**
Controls				
Age	0.027 (0.025)	0.011 (0.027)	0.054 (0.019)**	0.045 (0.019)*
Size	0.870 (0.352)*	0.675 (0.634)	0.759 (0.530)	0.224 (0.568)
Performance	-0.034 (0.049)	-0.077 (0.051)	-0.052 (0.044)	-0.049 (0.044)
Rhythm	-0.033 (0.056)	-0.021 (0.059)	-0.003 (0.059)	0.009 (0.069)
Retail market share	0.631 (0.075)***	0.801 (0.077)***	0.608 (0.063)***	0.597 (0.063)***
Market position	0.026 (0.024)	0.015 (0.024)	0.015 (0.027)	0.002 (0.026)
Cultural distance	0.598 (0.491)	-0.273 (0.487)	-1.854 (0.414)***	-2.145 (0.572)***
(Ln)Home market size	-7.743 (2.024)***	-7.793 (2.302)***	-9.804 (1.606)***	-8.286 (2.226)***
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Home country dummies	Yes	Yes	Yes	Yes
Diagnostics				
N (observations)	949	949	945	945
Wald Chi-square	1,316.59***	972.70***	6,310.15***	5,446.31***
White-test (H0 No heteroskedasticity)	225.71***	248.77***	316.62***	403.40***
Wooldridge-test (H0 No autocorrelation)	49.18***	49.36***	51.32***	55.23***

FGLS estimator that is robust to first-order panel-specific autocorrelation (AR1) and heteroskedasticity. Standard errors in parentheses. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.