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The Impact of Co-opetition on the Challenges of Internationalisation for SMEs on the Chinese market

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ABBREVIATIONS

CBU	Completely Build Unit
CKD	Completely Knocked Down
EU	European Union
IT	Information Technology
MNC	Multinational Corporation
R&D	Research and Development
SAIC	Shanghai Automotive Industry Corporation
SMEs	Small and Medium-sized Enterprises
UK	United Kingdom
UN	United Nations
VW	Volkswagen

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ABSTRACT

The world's economy is approaching to be integrated as a whole and the interactions between companies from different countries are closer and easier than ever. Under such a context, SMEs are evolved from local actors into international players. During the process of internationalisation, SMEs are benefited from international opportunities in developing their competitiveness and improving their overall performances. At the same time, a number of challenges are accompanied creating obstacles for SMEs in achieving their business targets. The degree of challenges is found to be increasing while the international operations spread into emerging markets like China. It is advised to overcome the challenges of internationalisation through forming cooperative alliances with other companies. Among different types of cooperation, co-opetition, a relationship consists of simultaneous cooperation and competition, receives scarce attention. Whether co-opetition could positively impact on solving the challenges of internationalisation for SMEs has not widely studied and then becomes the interest of this work. A qualitative research was conducted on four case organisations that are all SMEs from European automotive industry and involved in co-opetitive relationships on the Chinese market. A conclusion is arguably drawn to evidence that a list of benefits of co-opetition can positively solving numerous challenges that SMEs confront during their internationalisation.

KEYWORDS: Co-opetition, Co-opetitive relationship, Internationalisation, SMEs, Automotive industry, Chinese market.

1 INTRODUCTION

Along with the trend of reduced barriers in global commerce and increased integration of global economy, internationalisation becomes an important strategy for firms at all sizes (Kauppinen & Juho 2012), including small and medium-sized enterprises (SMEs) (Knight 2001; Lu & Beamish 2001). The notion of internationalisation refers to "*the process of increasing involvement in international operations*" (Welch & Luostarinen 1988: 84). Through those operations, business growth is the central issue that firms expect to achieve based on a number of potential factors, such as risk balance between markets, enlarged customer groups, diversified investment opportunities, prolonged product life-cycles and possible reduction of costs (Rodriguez et al. 2010). Internationalisation brings opportunities for the development of firms; it is then critical for firms to seize the opportunities and integrate them with own development. However, it is found that challenges are usually comprised in the process of internationalisation with opportunities (Calabrò & Mussolino 2013). For offsetting the challenges of internationalisation, studies suggest firms establishing alliances with other organisations to further strengthen their advantages and complement their scarcities (Amal & Rocha Freitag Filho 2010; Kennedy & Keeney 2009).

The cooperation with other organisations has evolved into a greater scope and covers various actors from business networks, including the cooperation with competitors, namely co-opetition (Bengtsson & Kock 1999; Kock et al. 2010; Fernandez et al. 2018). The co-opetitive relationship can exist at any level for a focal organisation, whether vertically or horizontally, when involving in simultaneously cooperative and competitive interactions (Bengtsson & Kock 2014). In this case, cooperation is achieved while the competitive activities remain in place; business opportunities may also be discovered through this type of relation (Kock et al. 2010). When considering co-opetition in an international environment, positive impact may be found on operations and performance that could not be achieved by organisations in foreign markets through other types of relations (Ritala et al. 2014). Bengtsson et al. (2013) reviews relevant studies for the role of co-opetition on the internationalisation of organisations; it shows limited availability in this regard.

However, the studies on internationalisation including the challenges and potential solutions to the challenges are, traditionally, scattered and mainly focused on large companies; a common conceptual framework focuses on SMEs is found to be scarce (Prater & Ghosh 2006; Amal & Rocha Freitag Filho 2010). Meanwhile, the research focus of co-opetitive relations is also on large firms (Bengtsson & Johansson 2014; Tidström 2014). When reviewing co-opetitive relations in the process of internationalisation, few research works can be found from, e.g. Chetty and Wilson (2003), Holmlund et al. (2007), and Kock et al. (2010). This piece of work aims at fulfilling such research gap by studying the impact of co-opetition on the internationalisation of SMEs, particularly, on the Chinese market.

1.1 Background and focus of the study

SMEs are developed into a strong force and key role in modern economy (Hessels & Parker 2013; Raymond et al. 2014; Gancarczyk & Gancarczyk 2018). Statistics show that the labour employed by SMEs in developing countries and developed countries are more than 90% and over 50% respectively (UN 1992). In EU, at least 97% of business entities are SMEs (Benzing et al. 2009). Such dominate role can be found in various business sectors, especially in one of iconic industries of Europe – the automotive industry. The European automotive industry involves a total of 20,500 enterprises and most of them are SMEs (Vošta & Kocourek 2017). When considering the process and influence of internationalisation on industries, the European automotive sector has already been engaged in internationalisation for over half century and claimed to be one of the most successful beneficiaries (Lamming 1989; Carr 1990; Soejachmoen 2016), particularly due to the deep operations on the Chinese market (Li 2004; Zhao & Gao 2009; Soejachmoen 2016).

Back to 1984, Shanghai Automotive Industry Corporation (SAIC) established the first Joint-Venture in Chinese automotive history with Volkswagen (VW) from Europe (Li 2004). In less than thirty years, China became the largest and most attractive automotive market since 2009; in turn, European automotive organisations have achieved remarkable success in China as well by following the successful pattern as VW that establishing cooperation with Chinese competitors (Baker & Hyvonen 2011; McCaleb 2015; Tauber & Zhen 2017; Kefferpütz 2018). When large European automotive firms expand their success on the Chinese market, more and more SMEs from automotive industry are also actively participating in such trend. However, the involvement in internationalisation, especially in emerging markets like China, is more complex and risky for SMEs than for large enterprises (Kubíčková et al. 2016). Therefore, it entails the focus of this work is to investigate whether the successful co-opetition strategy on large European automotive firms in China would apply to SMEs. In other words, the design, process and result of this research work is specifically customised for the context of the Chinese market and may not be applied on other markets.

1.2 Research questions

Based on the background and focus of the study, four research questions are defined as below for achieving the purpose of exploring how co-opetition can positively impact on the challenges of internationalisation on the Chinese market for SMEs from European automotive industry:

1) *According to existing academic literature, what challenges can be identified for internationalisation for SMEs on the Chinese market?*
2) *According to current research works, what benefits can be demonstrated by co-opetitive relations?*
3) *Based on the literature studies, what benefits can be offered by co-opetition on solving the challenges of internationalisation on the Chinese market for SMEs?*
4) *Based on the empirical work, how co-opetition can positively impact on the challenges of internationalisation on the Chinese market specifically for European SMEs in automotive industry?*

1.3 Structure of the work

This work starts with literature review on two main academic streams: the challenges of internationalisation on the Chinese market for SMEs, and the benefits of co-opetitive relations. The first stream is presented at both macro-level and micro-level about the potential challenges SMEs may face during their internationalisation on the Chinese market. The second stream is demonstrated by an introduction and benefit analysis of co-opetition. Then, a synthesis is followed to summarise the integration of the two streams and end up the literature review. Next, the research methodology is introduced to describe how this research work is guided and conducted. After this, empirical findings are discussed and analysed about how co-opetition, in practice, is benefiting the internationalisation on the Chinese market for SMEs from European automotive industry. At the end, this study is concluded by a discussion about the theoretical and managerial implications, as well as research limitations and future suggestions.

2 LITERATURE REVIEW

Internationalisation is seen as a global economic phenomenon (Che Senik et al. 2014) and attracted great attention not only in academic research but also in practical application. One of the earliest and yet one of the most important academic studies on internationalisation is the Uppsala Model (Johanson & Wiedersheim-Paul 1975), which describes internationalisation as a gradually evolving process that consists of various stages for conducting international activities from the start in nearby markets to far areas. Though Uppsala Model has its contribution in the research of internationalisation, many studies argue that limitations can also be found on this linear approach, for instance, business opportunities may be slipped from far areas when the linear mechanism is strictly followed (Amal & Rocha Freitag Filho 2010). In practical application, it is a fact that when traditional western enterprises spread their businesses from home countries into emerging markets, challenges often appear in the internationalisation process of those organisations (Kraus et al. 2017). However, traditionally studies mainly focus on large enterprises despite the important role and increasing presence of SMEs in international economy (Calabrò & Mussolino 2013; Hofer 2015).

Meanwhile, Chinese market, which is reputed as a high dynamic market with fast growth rate and welcomed business environment for international capitals, is considered to be one of the most attractive destinations of internationalisation among other evolving and emerging new economic regions (D'Artis 2010). However, for European SMEs, a high cultural and geographic distance on the Chinese market can also be found comparing to the closer and developed markets in Europe. Taking an internationalisation step into the Chinese market is perceived as very risky for European SMEs by many recent studies (Kraus et al. 2015). Therefore, how the challenges can be avoided, reduced or solved, is becoming important for the success of internationalisation on the Chinese market. A number of studies discuss about the positive effect that cooperating with other firms may offer for reducing the challenges in the internationalisation process (Lu & Beamish 2001). Co-opetition, a type of cooperation between competing organisations at either horizontal or vertical levels (Bengtsson et al.

2010), then seems to be one potential tool that can be utilised for dealing with the challenges of internationalisation on the Chinese market. However, the research emphasis of co-opetition is more related to large firms (Tidström 2014). More concrete studies on solving the challenges of internationalisation by co-opetition need to be conducted in relation to SMEs.

In this section, a review about challenges at macro-level on the Chinese market including psychic distance and industrial context will be firstly presented. After this, a further review on the major micro challenges of internationalisation inside SMEs, including resources and capabilities, is conducted. Then, a discussion about the topic of co-opetition, which may be a solution in responding to the challenges, is carried out. At the end, a synthesis of applying co-opetition on answering the challenges of internationalisation is demonstrated.

2.1 Macro-challenges on the Chinese market

During the process of internationalisation, firms find the conditions and situations of markets are different from each other. Those differences can exist in various forms; but two macro-level differences can be clearly identified – psychic distance (Johanson & Wiedersheim-Paul 1975) and industrial difference (McGahan & Porter 1997). A review about these two forms of challenges on the Chinese market is exhibited by the followings.

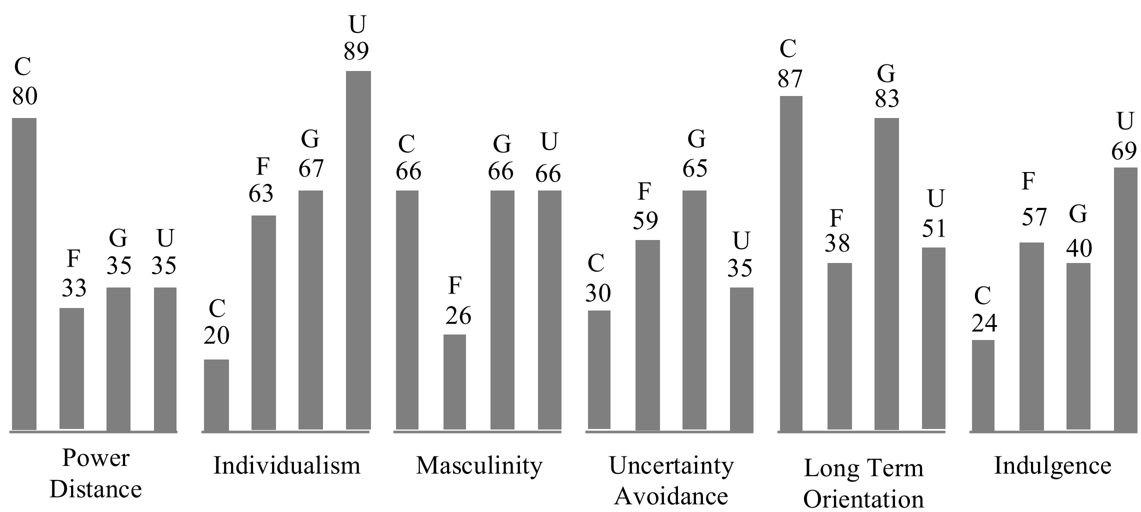
2.1.1 Challenges in psychic distance

Traditional internationalisation theories conceptualise the differences between countries as ‘psychic distance’. This concept has been presented and discussed in several internationalisation models (Johanson & Wiedersheim-Paul 1975; Bilkey & Tesar 1977; Johanson & Vahlne 1977). Among those models, the Uppsala internationalisation model initially developed by Johanson and Wiedersheim-Paul (1975) becomes one of the most popular models used for psychic distance research, which details the psychic distance as the difference in language, culture, political bureaucracy, level of education, and so forth. As

Uppsala Model foreseen, while the business expansion from typical western markets into newly developing emerging markets, such as China, psychic distance frequently emerges in the internationalisation process of enterprises, especially for SMEs (Kraus et al. 2017).

Cultural difference, perhaps the most mentioned challenge form of psychic distance in business practice of internationalisation, emerges from very beginning and may last longer than expected in international business activities. Hofstede (1991) defines culture as the collective programming of the mind which distinguishes the members of one group or category of people from another. By cross-studying the Uppsala model and Hofstede 'culture definition', it is possible to express that the longer distance where internationalisation reaches from home country, the greater cultural difference may exist. A practical cultural comparison can be made as figure 1 between selected European cultures and Chinese culture by adopting the six-dimension model from Hofstede (Hofstede et al. 2010).

Figure 1. Cultural comparison between selected European cultures and Chinese culture.



C: China; F: Finland; G: Germany; U: United Kingdom.

The figure 1 based on the six-dimension model from Hofstede (Hofstede et al. 2010) demonstrates that the Chinese culture is significantly different than all three selected European cultures in power distance, individualism and indulgence; in uncertainty avoidance and long term orientation aspects, the Chinese culture has big gaps with two selected European cultures; and in masculinity aspect, the Chinese culture is very different than one selected European culture. In other words, a great psychic distance in culture difference can be found between the Chinese culture and the selected three European cultures. At the same time, considering language differences between China and the selected European countries, i.e. Chinese vs. English, German and Finnish, in line with the Uppsala model, European SMEs are assumed to face complexities and obstacles in accessing and assessing relevant business information and data in China during their internationalisation process in the Chinese market than in Europe or other markets that have lower psychic distance (Ojala 2008).

Besides the challenge in psychic distance, another macro-level challenge can also be identified as the industrial context. Firms, including SMEs, are all belonging to certain industries, where they operate and compete in, whether at home markets or foreign markets. The challenges in industries on the Chinese market should also be noticed especially by SMEs due to the critical and direct effect of industrial context on the performance of firms, such as profitability, profit range and structural context (McGahan & Porter 1997). The potential challenges in industrial context on the Chinese market are illustrated below with a focus on competitive context.

2.1.2 Challenges in industrial context

During the process of internationalisation, firms find the situation of industry on different markets differs too. In order to analyse the competitive context and better position in new market, literatures offer several helpful tools, for example, the five-forces framework from Porter (1980), suggests five basic elements of industrial structure, namely threat of new entrants, threat of substitutes, bargaining power of buyers, bargaining power of suppliers, and rivalry among competitors; the value system that based on the organisational value chain by Porter (1985) maps important actors for the operation of a firm in an industry from upstream to downstream.

Understanding and analysing these macro-factors in the industrial competitive context, where firms compete in, is suggested to be helpful in the internationalisation of SMEs (Ivarsson & Alvstam 2013). Today, intensive competition against not only international rivals, but also local competitors is described to be one of the main drawbacks on the internationalisation of SMEs, particularly on the Chinese market (Che Senik et al. 2014). The open policy and market liberalisation that Chinese economy offers promoting China to be the world's second largest destination for FDI (Ivarsson & Alvstam 2013) and attracting talented organisations from all over the world. SMEs are competing in such a strong and rapidly growing competitive arena with both familiar and unfamiliar competitors in different sizes and qualities (Hashim & Hassan 2008).

Many SMEs pay enough attention to the opportunities arising from the ever-changing nature of the Chinese market, but neglect the threats in competition (Lee et al. 2013). In terms of competitors, SMEs are used to conducting careful and intensive studies on their international rivals, even including their local subsidiaries in China, regardless whether they have been previously competing on their home markets or other markets. The local Chinese competitors, on the other hand, are generally not receiving much attention.

In fact, resulting from the dynamic business environment with ambiguity, complexity and incentive policies (Yeung & Mok 2002), an increasing number of Chinese firms have developed themselves into competitive rivals not only on the Chinese market but also on international scale (Mu & Lee 2005; Lee et al. 2011). For example, the strategic frame work of 'The Belt and Road', which is initiated by Chinese President Xi Jinping promotes Chinese firms into international competitive entities (Johnson 2016); the incentive policy of 'Mass Entrepreneurship and Innovation', the brainchild of Chinese Premier Li Keqiang (2014), encourages enthusiasm in millions of Chinese individuals and SMEs in creating new job opportunities and innovation development. As a result, international organisations, especially SMEs, see a strong challenge in the rise of rapid growing amount of competitive Chinese enterprises become eventual rivals in all industries (Lee et al. 2013).

Such unique market setting in China creates perhaps the strongest competitive challenge that SMEs ever involve in the history of their internationalisation (Yeung & Mok 2002), in terms of diverse interaction and potential rivalry that continue to upgrade over time (Lee et al. 2013). Actually, even worse, the Chinese rivals may further challenge the internationalisation of SMEs on other markets outside China, especially in Asian region (Che Senik et al. 2014). Hence, besides the above macro-challenges on the Chinese market, SMEs are advised to evaluate and resolve the micro-challenges, that inside their organisations, restraining their internationalisation activities on foreign markets including the operations in China.

2.2 Micro-challenges of the internationalisation inside SMEs

Today SMEs are arguably grown to be the backbone of many economies and playing an increasingly important role in global markets. However, the transition from domestic actors to international players is an uncertain move for firms of all sizes. Despite the tremendous potentials, SMEs are still in a disadvantaged position with respect to essential business factors inside their organisations, such as capital, profitability, managerial skills, trained labour (Abe & Proksch 2017), international knowledge and timing management in internationalisation strategically and successfully (Erramilli & D'Souza 1993; Bell 1995, 1997; Coviello & Munro 1997). Thus, given their relatively low base of resources and capabilities compared to their larger rivals, the complexities and complications of internationalisation tend to be considerably more challenging for the SMEs (Coviello & McAuley 1999; Anderson et al. 2001; Knight 2001; Che Senik et al. 2014).

Therefore, in order to minimise the threats and seize the opportunities of internationalisation on the Chinese market, SMEs should also understand and prepare for a series of potential challenges inside their organisations.

2.2.1 Challenges in resources

An enterprise is seen as a whole of different resources, such as finance and labour (Che Senik et al. 2014), by the resource-based view (Penrose 1959; Wernerfelt 1984; Barney 1991). These resources are essential for creating and maintaining the competitive advantage of an organisation, which improve the performance of the organisation against competitors (Barney 1991); determining the strategic decisions and choices that compass the business direction of the organisation; and feeding the business activities and operations of the organisation, including internationalisation (Hessels & Parker 2013). The importance of resources for successful internationalisation is pointed out by a series of research works on internationalisation, especially in the filed of SMEs (Zhou et al. 2012). However, comparing to large enterprises, the required resources, particularly financial and human resources, for strategically and successfully managing internationalisation (Erramilli & D'Souza 1993; Bell 1995, 1997; Coviello & Munro 1997) seem to be restricted, sometimes even non-existed (Buckley 1989; Etemad 2004), in the internationalisation process of SMEs (Orengo 2012). Lack of sufficient resources and poor in the allocation of resources then become the characteristic (Buckley 1989; Etemad 2004) and major challenge of SMEs when going international (Peng 2001).

Lack of financial resources

One of the resources that is essential for the internationalisation of an enterprise is financial resources. Financial resources, among all resources that SMEs own, are particularly crucial for the implementation of internationalisation strategies (McNaughton & Bell 2004), development of required technologies, and production of superior products during the process of internationalisation on competitive markets (Kuivalainen et al. 2010). When considering the financing of international activities, there are several options available ranging from retained earnings, debt, to external equity (Kraus et al. 2017). Unfortunately, it is found to be common that most SMEs face challenge at different levels in all above options of acquiring financial resources, as well as financial management (Che Senik et al. 2014).

First of all, SMEs that finance their international endeavours with own equity are considered to be more successful than those that rely on debt (Kraus et al. 2017). However, the majority of SMEs, comparing to large enterprises, have limited budgets and have to focus such limited budgets on core activities, which either generate profits or improve productivity (Neo 2015). Meanwhile, retained earnings usually are not sufficient in SMEs (Kraus et al. 2017). As a result, it is often unrealistic to approve the expenditure that is highly required for performing the activities of internationalisation (Neo 2015). Thus SMEs, generally, are struggling in raising sufficient working capital for covering the vast investment in internationalisation by themselves (Neo 2015) and have to, in many cases, seek for the possible financing from external sources (Kraus et al. 2017).

Debt, mostly bank loans, is a major external source that SMEs are looking for when lack of internal funds (Kraus et al. 2017). When negotiating with debt providers, detailed and structured financial and operational information shall be required in order to perform the risk evaluation and information clarification (McNaughton & Bell 2004). For larger enterprises, due to their sophisticated accounting and reporting system, the required information can easily be provided with high standard. SMEs, in contrast, are less able to provide such information with required standard as good as larger enterprises (McNaughton & Bell 2004). Such difference would result in favouring larger enterprises over SMEs in raising debt (Chittenden et al. 1996).

Similar to debt raising, it would not be an easy task for SMEs to attract and convince investors for acquiring external equity that will be used for internationalisation. Investors may not be as critical as banks in terms of financial information and reports; they can be sensitive in other issues, such as the potential risks arising from external environment of SMEs. Higher agency cost is one of the risks that in the consideration of investors about SMEs' internationalisation (Chen et al. 1997). In the (potential) process of internationalisation, SMEs will compete in different external conditions with higher dependency and passiveness than their existing home markets. In such conditions, complexity is increased (Sanders &

Carpenter 1998) and uncertainty is highly associated (Abor et al. 2014). The risk in higher agency cost can then be expected because SMEs are less able to resolve the risk due to their limited resources comparing to larger enterprises. Consequently, SMEs will be required for more efforts in order to convince investors for their funds.

Besides the difficulties in fund raising, SMEs that successfully acquire external financing, including debt and external equity, may not be as benefited as expected. Due to the common nontransparency of SMEs, the agency costs of debt is actually higher in SMEs that actively involved in internationalisation (Burgman 1996; Doukas & Pantzalis 2003). In the contrast, some highly leveraged SMEs may underinvest in internationalisation, because their debt providers may be benefited the most due to the increased overall value of enterprises arising from the investment in internationalisation (Myers 1977). Lack of financial management (Che Senik et al. 2014) may negatively affect the internationalisation of SMEs (Aivazian et al. 2005; Park et al. 2013) despite the success in fund raising.

Therefore, many SME managers find financing is the arguably biggest challenge in internationalisation (Kraus et al. 2017). Without overcoming their financial challenges, SMEs can be foreseen involving in difficulties during the process of internationalisation (Bellone et al. 2010). In addition to the lack of sufficient financial resources, lack of labour resources is another challenge in resources that SMEs confront.

Lack of labour resources

Labour, especially skilled labour, is one of the most valuable resources that every firm expect to possess (Covin & Slevin 1991). Skilled labour is able to optimise and transform the available resources of an enterprise into actual business growth, enable the strategy of the enterprise to be properly implemented, and assure the business target of the enterprise to be advantageously achieved. Furthermore, skilled labour deems to be an intangible resource that are not easily be imitated by competitors (Barney 1991). However, many enterprises express a situation that it is hard to attract skilled labour (Hessels & Parker 2013). Particularly, the shortage of skilled labour is one of the most pressing constraints for SMEs, not only in the tangible amount of skilled labour, but also in the intangible characteristics, such as quality and loyalty.

A realistic factor that SMEs face in their internationalisation is lack of manpower (Neo 2015), especially the skilled labour. This can be discussed from twofold: first, due to the smallness of SMEs, they usually utilise their limited manpower in their home countries for core businesses (Neo 2015). When there is conflict on the availability of labour between core business and internationalisation, the one that wins the battle of manpower often is core business. Thus shortage in proper or sufficient manpower from home country often emerges for the international activities of SMEs (Neo 2015). Furthermore, many researchers express the fact that internationalisation often involves the destruction of labour structure and a potential negative impact on labour condition in home country (Williamson et al. 2003; Levy 2005).

Second, when SMEs start internationalisation into foreign market, lack of manpower also emerges, particularly in the Chinese market. China has benefited from its open policy and market liberalisation (Hashim & Hassan 2008) by attracting enormous amount of foreign enterprises with funds, knowledge and technologies into the Chinese market; equally, foreign enterprises also enjoy profit and other advantages they take from the Chinese market. While cheering the growing benefit from the market, foreign enterprises find the bar of competition is raised higher too, including the competition of attracting and retaining skilled labour. In a research conducted by Bretos and Errasti (2018), skilled workers are well paid so that many of them usually return back to their origins as soon as they have sufficient amount of savings. Meanwhile, workers with skills are constantly switching among enterprises, because there is no lack of work on the market. Low switching cost for skilled labour, on the other hand, also increase the labour cost for employers. Therefore, it is a challenge for many SMEs to retain sufficient skilled labour and create their loyalty due to the instable workforce.

Additionally, when the amount of skilled labour is insufficient, large enterprises often consider the grooming of human capital development for creating the required skills of internationalisation by e.g. organising training and development programmes (Che Senik et al. 2014). Unfortunately, SMEs, in general, do not have a culture and financial resources engaged with the provision of training and development programmes (Scott et al. 1996; Storey & Westhead 1997); but the workload of SMEs normally is heavier comparing to large enterprises (Gibb 1998). This further stretches the desire for skilled labour and represents the situation that the shortage in proper and sufficient labour for internationalisation from both home country and target market seems to be more severe for SMEs than larger competitors.

The lack of resources in finance and labour creates strong challenges in the internationalisation of SMEs. But they are not the only challenges in resources laying in front of SMEs. The next challenge in resource will be discussed is about the challenge related to knowledge.

Lack of knowledge resources

Knowledge is seen to be an important element of resources (Barney 1991), and the main determinant of sustained competitive advantage and superior performance of a firm (Grant 1996). It is expressed by Johanson and Vahlne (1978) that the lack of knowledge about international environment is one of the greatest barriers to the initial internationalisation decision. In practice, decision-makers of SMEs also realise the crucial role that knowledge play in their decision-making of internationalisation (Reid 1981; Cavusgil 1984; Bloodgood et al. 1996; Chetty 1999); the lack of related knowledge indeed challenges their decision-making regarding the internationalisation into new markets where are, in many aspects, different from their home markets (Ojala 2008; Che Senik et al. 2014).

A key factor that could affect the amount and quality of knowledge that decision makers have about internationalisation is the accumulation and application of international experience (Chetty & Campbell-Hunt 2003). The international experience is found to have a significant and direct impact on the current and future international operating and competitive strategy of firms (Hill et al. 1990). For SMEs, the impact of international experience on influencing their international operating strategy is even stronger than for very large firms. Large firms generally have more alternatives for the formation and implementation of their international strategy, such as hiring professional but expensive external consultant. In other words, experience is not the only consideration that completes the strategy of large firms. On the other hand, SMEs rely on international experience not only in guiding their strategies, but also in managing their daily operations (Prater & Ghosh 2006). SMEs, without rich knowledge in the international experience, tend to face difficulties in entering international arena, forming internationalisation strategy, as well as taking advantage of different strategic situations (Ernst & Young 1995). However, to obtain and utilise international experience is found to be difficult for many European SMEs and their managers.

The first issue is related to the governing structure. The majority of SMEs in Europe are family-owned business (Mandl 2008). The family usually has intense involvement, influence, even dominance, on the establishment of governance, management and business goal due to the intention of sustainability over generations (Chua et al. 1999; Xi et al. 2015; Cesinger et al. 2016). This may limit the intention of collecting knowledge for risky and costly operations, such as internationalisation, and even becomes a deterrent and creates obstacles for internationalisation (Madhok 1997), including resource constraints (Claver et al. 2009; Muñoz-Bullón & Sánchez-Bueno 2012) and insufficient authorisation (Sirmon & Hitt 2003). For instance, non-family managers, who already acquired knowledge and have access to new knowledge of internationalisation that can be integrated as a firm competence, are not fully authorised and supported by the governing structure (Zahra et al. 2000). Without an atmosphere of supporting and allowing for practice in international activities, it is obviously difficult to acquire necessary knowledge of international experience.

The second issue is about strategic foresight. Many SMEs focus on short-term, low-risk, low-cost and familiar activities. However, the development and integration of new knowledge on internationalisation happens incrementally (Penrose 1959; Madhok 1997), which requires long-term participation and expenditure. A lot of SMEs, therefore, decide not to exploit and develop new knowledge even though the knowledge could be important and useful (Cohen & Levinthal 1989).

In addition to the accumulation of knowledge in international experience, the usage of acquired knowledge is another challenge for SMEs to overcome. Chetty and Campbell-Hunt (2003) see the primary concern for a firm starting internationalisation is how the previously accumulated knowledge can be adopted in a specific new market. The successful adoption of existing knowledge in new market brings several advantages against competitors, such as cost saving (Madhok 1997). Conversely, failure in transforming previous experience into operations in new market is expected to increase the cost for the firm in its internationalisation (Eriksson et al. 1997). Unfortunately, SMEs are often found to be weak in absorbing, developing and transforming their existing knowledge into future knowledge base for guiding their internationalisation (Chetty & Campbell-Hunt 2003).

Based on above discussions, lack of resources is challenging SMEs from different aspects in their development and implementation of internationalisation, including the lack of resources in finance, labour and knowledge. Next, a review on the challenge of capabilities will be followed.

2.2.2 Challenges in capabilities

The capability of a firm is defined by Teece et al. (1997: 516) as "*the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.*" It is seen as the source of advantage that a firm has (Teece et al. 1997), and the demonstrated and potential ability to accomplish the goal that the firm sets out against the opposition of circumstance or competition (Learned et al. 1969). Capability is utilised for the creation and capture of value, and the implementation and accomplishment of strategic goals that firms establish. Therefore, firms that successfully developed their capabilities not only understand themselves in deeper way but also understand their business context in better way than their rivals. The capability that a firm has will create competitive advantage in distinguishing the firm among its rivals and helping the firm to be competitive in the competing environment against their rivals; other firms that failure in developing the capability will likely to lose the competition against those successful ones.

However, many SMEs lack sufficient capabilities to explore or handle overseas business opportunities (Neo 2015). Research and development (R&D), a crucial capability for the product and production development of traditional manufacturing business (De Jong & Freel 2010), and Information Technology (IT), the key capability for the planning and management of modern manufacturing business (Prahalad & Doz 1987) are commonly challenging SMEs.

Weak in R&D capability

Product innovativeness and production effectiveness, which affect the international competitiveness of products, are significantly influenced by R&D (Hervas-Oliver et al. 2011; De Beule & van Beveren 2012). R&D capability is crucial for new product creation, production and technical process development, and strategic cooperation evaluation (De Jong & Freel 2010). Strong R&D capability allows SMEs launching satisfied product earlier and producing more efficiently than their industrial rivals, which will increase their chances of survival and growth (Laforet 2009); and further increases SMEs bargaining power in the relationships of strategic cooperation.

However, it is arguable that many SMEs are either neglect or unable to strengthen their R&D capability. Insufficient investment in R&D is a common problem for SMEs. Some SMEs are unwilling to spend investment in R&D activities (Avermaete et al. 2003). Such unwillingness may come from the concerns about the high level of risk in obtaining financing and managing R&D investment inefficiently, or failing to transform the outcomes of R&D into actual and profitable innovation (Laforet 2009).

In addition, large amount of SMEs is found to be over relying on external support and neglect the importance of developing own R&D capability. They are aware of the importance of R&D in the contribution of business growth and activities diversification (Rogers 2004). So they tend to search for external support for R&D. They absorb the knowledge created from external relationships and utilise the knowledge for improving their business performance (Cohen & Levinthal 1990; Rickne 2006; Gilsing et al. 2008). It may be too extreme to deny such activity as it could bring desired result with lower cost and less time (Raymond & St-Pierre 2010). But, at the same time, such dependence on external support may weaken the development of employment potential within the organisation (Hoffman et al. 1998; Colombo & Grilli 2007; Santarelli & Vivarelli 2007) and the strategic flexibility of the firm in cooperative networks (Eisingerich et al. 2009; Kindström & Kowalkowski 2009; Nunes et al. 2012).

The challenge in R&D capability of SMEs is often addressed in studies on internationalisation. In fact, it is also worth to discuss the challenge in another important capability of SMEs, i.e. IT capability.

Weak in IT capability

IT has been functioned not only as a tool of utility, but also as a form of capability that facilitates the performance and internationalisation of enterprises (Hagsten & Kotnik 2017). IT product is widely used from operational level, such as manufacturing software, designing interfaces and sales simulators; to executive level, for instance, operational supervising tools. The impacts that IT may provide for successful international operations include data management and analysis (Reuber & Fischer 2011), business relationship improvement (Morgan-Thomas 2009), resource planning and allocation, and strategy research and supervision (Prahalad & Doz 1987). Well installed IT infrastructure supports the development, management, communication and maintenance of both intra- and inter-organisational interactions (Handfield & Nichols 1999).

Though IT capability plays an important role in international operation, it is arguable to say SMEs typically lack of such capability. Basic office and financial software are the most common IT infrastructure available for SMEs. Reasons for the lack of comprehensive IT infrastructure may be high investment, complex operation and non-instant return (Hagsten & Kotnik 2017). However, international operation is full of complexity and risk in all aspects comparing to the business operation in home country. Sufficient IT capability becomes even more critical in supporting strategy formation and implementation for overcoming such complexities (Bagchi 1992) and ensuring the security of operation running for SMEs against potential emergent harm.

Along the increasing amount of international operations in SMEs, challenges, which are reviewed in table 1, often emerge and create barriers in terms of sensing and seizing international opportunities (Kock et al. 2010).

Table 1. Summary of challenges in SMEs' internationalisation.

Macro-level challenge	Psychic Distance	Unfamiliar Chinese conditions, such as language and cultural differences.
	Industrial Context	Growing amount of new competitors; Improving competitive quality of competitors.
Micro-level challenge	Resources	
	Finance	Limited capital from e.g. retained earnings; Difficult in acquiring debt and external funds; Weak in financial management.
	Labour	Small amount of skilled labour; Low level of loyalty in skilled labour; Restrained skill training for existing labour.
	Knowledge	Restrains of governing structure; Limited strategic foresight; Poor conditions of knowledge usage.
	Capabilities	
	R&D	Scarce in investment; Highly dependent on external support.
	IT	Less comprehensive due to high investment, complex operation and non-instant return.

From macro perspective, psychic distance between home market and the Chinese market, and the industrial context of China with strong competition are the two main challenges need to be resolved by SMEs from European automotive business. On the other hand, micro challenges that inside SMEs can also exist in relation to resources and capabilities. Financial resources, labour resources and knowledge are three major resources commonly found to be scarce in SMEs. R&D and IT are the two weak capabilities that SMEs usually confront with.

Therefore, researchers (e.g. Lu & Beamish 2001; Hessels & Parker 2013) propose that SMEs may reduce the level of challenges or even overcome the challenges through the establishment of relationships with external organisations. Comparing to other types of relationships, co-opetition is seen as an effective relationship in responding to the challenges by increasing competitiveness and exploring opportunities in international operations (Kock et al. 2010; Bengtsson et al. 2013). In the following section, a discussion will be conducted on co-opetition and the benefits that co-opetitive relationships about to offer.

2.3 Introduction and benefit analysis of co-opetition

Traditional research on business relationships focuses on the cooperative relationship between organisations. However, a business relationship is usually more complicated and contains elements of both cooperation and competition (Young & Wilkinson 1997; Håkansson 2010). Hence, more research into business relationships between competitors is at its demand (Tidström & Hagberg-Anderson 2012). Bengtsson and Kock (2014) state that the relationships between competing firms are not always balanced but evolved through interactive processes. A model is proposed by Bengtsson and Kock (1999) consisting of four types of relationships between competitors (as figure 2), including:

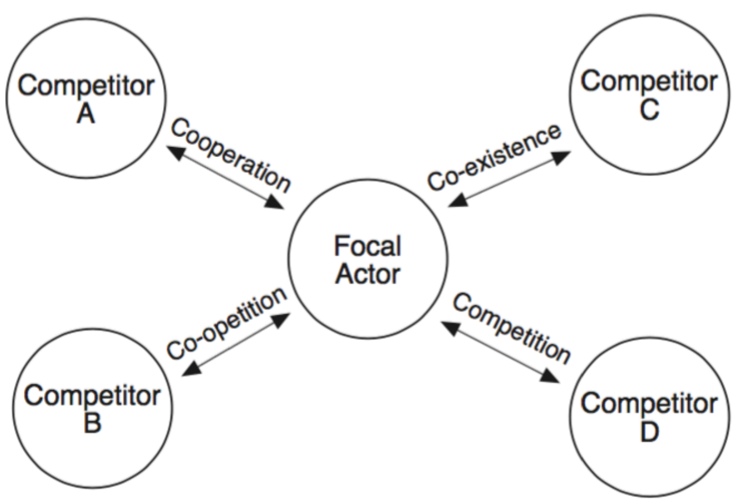
Coexistence. Firms are aware of the existence of other firms and informal institutions may be found for keeping the distance between them. But direct business interaction hardly exists at both strategic level and operational level.

Cooperation. Organisations share strategic goals at certain level and engage in operational exchange based on both formal and informal agreements. Business interactions between organisations are usually limited to functional and psychological issues; and benefiting both parties.

Competition. Actors often play a zero-sum game in their industrial environment. One's gain is the loss of others. They rise battles at both strategic level and operational level for increasing resources and customers of own and limiting their rivals'.

And *Co-opetition*. The interaction between firms is frequent and combining both competition and cooperation. Boundary and norms are normally clear in separating competing and cooperating tasks. Zero-sum perspective often exists in the competition side; and positive-sum perspective can be achieved from the cooperation side.

Figure 2. Relationships between competitors (Bengtsson & Kock 1999).



Among the four relationships of competitors as figure 2 illustrates, co-opetition is the most complicated one and becomes a common phenomenon in both research field and business practice since the 1990s (Brandenburger & Nalebuff 1996).

2.3.1 Definition of co-opetition

Several decades ago, the term of "*co-opetition*" appeared in order to grasp the paradoxical phenomenon of simultaneous cooperation and competition. Then, the neologism "*co-opetition*" was invented at the end of the twentieth century as a results of the combination of "*cooperation*" and "*competition*" (Fernandez et al. 2018). The utilisation of co-opetition in business world actually first started in the 1990s, when Ray Noorda, the CEO of Novell, described the relationships of firms that simultaneously cooperate and compete in IT industry (Brandenburger & Nalebuff 1996).

The "*co-opetition*" further gained attention from academic researchers and became an academic concept in the early 2000s (Fernandez et al. 2018). Bengtsson and Kock (1996) firstly named the co-opetition to be a relationship between competitors that consists of two visible elements – cooperation and competition; then specify co-opetition to be a situation where a firm simultaneously involves in both cooperative and competitive interactions with the same competitor at the same product area (Bengtsson & Kock 2000). Bengtsson et al. (2010: 200), who inspired from research works that studying co-opetition as an intersection between cooperation and competition (Gnyawali et al. 2006; Padula & Dagnino 2007; Walley 2007), define co-opetition as "*a process based upon simultaneous and mutual cooperative and competitive interactions between two or more actors at any level of analysis (whether individual, organisational, or other entities)*". Ritala et al. (2014), from a bigger picture, see the co-opetition simply as a collaboration between competing firms. In a recent research work of Bengtsson and Kock (2014: 182), a new definition for co-opetition emerges by covering more dimensional elements, i.e. "*co-opetition is a paradoxical relationship between two or more actors simultaneously involved in cooperative and competitive interactions, regardless of whether their relationship is horizontal or vertical.*" Table 2 below is a summary presenting the major definitions of co-opetition.

Table 2. The definitions of co-opetition.

Author	Definition
Bengtsson and Kock (1996)	A relationship between competitors that consists of two visible elements – cooperation and competition.
Bengtsson and Kock (2000)	A situation where a firm simultaneously involves in both cooperative and competitive interactions with the same competitor at the same product area.
Bengtsson et al. (2010)	"*A process based upon simultaneous and mutual cooperative and competitive interactions between two or more actors at any level of analysis (whether individual, organisational, or other entities).*"
Ritala et al. (2014)	Collaboration between competing firms.
Bengtsson and Kock (2014)	"*A paradoxical relationship between two or more actors simultaneously involved in cooperative and competitive interactions, regardless of whether their relationship is horizontal or vertical.*"

As table 2 demonstrates, a similarity in the definitions of co-opetition from different researchers is about the type of a business relationship, which refers to the simultaneous existence of both cooperation and competition in the same business relationship. At the same time, differences can also be found in other elements of definitions. Bengtsson and Kock (1996, 2000) and Ritala et al. (2014) focus on the relationships between competing firms. Bengtsson and Kock (2014) and Bengtsson et al. (2010), on the other hand, eliminate the focus on competing firms and enlarge the actor groups into different levels. Bengtsson and Kock (2014), in particular, define a wider coverage of business relations in co-opetitive networks by including horizontal and vertical relations. Therefore, for this piece of work, the definition from Bengtsson and Kock (2014) is adopted.

2.3.2 Benefits of co-opetition

Co-opetition, as many other phenomenon, initiates for reasons. Ritala et al. (2014) analyse the initiation of co-opetition to be a result of cognition from business firms that successful business performance could not be achieved by a single business entity alone. The drivers or motives for the initiation of co-opetition are often incorporated with value creation, value utilisation and value capture (Bengtsson et al. 2010; Ritala et al. 2014). Firms create value by sharing resources, knowledge and networks with other firms through cooperation; at the same time, they are forced by competition to capture and utilise the outcomes coming from cooperation (Bengtsson & Kock 1999, 2000). Nonetheless, the principle motivation of adopting co-opetition is to achieve growth over time (Dagnino & Padula 2002).

In fact, co-opetition offers benefits for satisfying motivations, such as better and faster accomplishing strategic objectives, achieving higher customer satisfaction, and reaching greater performance levels (Fernandez et al. 2018). As Bengtsson et al. (2010) and Fernandez et al. (2018) suggest, co-opetition, at its best, may have beneficial outcomes similar to the sum of cooperation and competition. There has been a growing consensus from academic field to business practice on co-opetition as an effective strategy of dynamic development and competitive advantage for business firms (Yami et al. 2010). In other words, a list of benefits can be identified about what co-opetition can arguably offer to business firms both strategically and operationally (Bengtsson et al. 2013).

Benefit on the improvement of competitiveness

An impact on the improvement of competitive advantages can be seen from co-opetition on firms (Bengtsson et al. 2013). A co-opetitive relationship requires each firm contributing with complement even core competence (Bengtsson & Kock 2000). This gives the participants a chance to gain necessary competence they lack of for improving their competitive advantages (Bengtsson & Kock 1996). In addition, when firms learn more about their competitors in their co-opetitive relationships, they tend to develop their efficiency in product development, daily operation and other activities (Bengtsson & Kock 2000). Consequently, the competitive advantage of firms can be developed through the interaction of co-opetition (Yami et al. 2010) and further transformed into potentially sustained superior business performance (Lado et al. 1997), which may improve firms' competitive position in their competitive industries (Dagnino & Padula 2002; Ritala et al. 2014).

Benefit on the development of technology innovation

The development of radical and incremental innovations on technology can be achieved through co-opetition (Bengtsson et al. 2013; Bouncken & Kraus 2013). It is arguable to state that firms in a co-opetitive relationship can acquire the information and data they need for increasing the speed and efficiency in product development (Bengtsson & Kock 2000; Gnyawali & Park 2009), reducing the risk and cost by sharing with other parties in the co-opetitive relationship through the economies of scale (Ritala et al. 2014). Furthermore, the improvement of innovation is positively engaged in relation to the larger investment in R&D (Gnyawali & Park 2011), better sharing of knowledge (Zhang et al. 2010; Li et al. 2011) and more dynamics of learning (Khanna et al. 1998) from the joint development in the co-opetitive network.

Benefit on market exploration

Several important supports are available from co-opetition to firms for increasing the size of current markets (Ritala et al. 2014) and exploring international opportunities (Brush 1992; Ritala et al. 2014). Firms can enlarge customer value of existing market by either increasing the level of competition against rivals or cooperating with competitors for increasing the size of whole market. Many firms are motivated by the latter “co-opetition” alternative due to the less involvement of competition. Then, exploring international opportunities is an important strategic option for creating new market (Brush 1992). Ritala et al. (2014) see the opportunity in creating new market for firms, especially with the participation of international competitors in co-opetitive relationships, through the sharing of important elements, e.g.

knowledge, expertise, strategies (Luo 2004), and technologies (Chetty & Wilson 2003). Additionally, marketing-related advantages can also be gained through co-opetition (Coviello & Munro 1995; Wang & Krakover 2008), such as market knowledge (Bengtsson & Kock 1996), reputation (Bengtsson & Kock 1996; Chetty & Wilson 2003), distribution channel and contact (Kock et al. 2010).

Benefit on international operation

Many empirical studies show that co-opetition may reduce the risk and uncertainty, and increase the speed and quality, related to international operation (Luo & Rui 2009) through the collaboration with competitors that are already internationally active. Cooperating with competitors will result in deeper learning about the advanced mechanism and better knowledge from competitors for overcoming limitations on distance and geographic boundaries during internationalisation (Brush 1992; Oviatt & McDougall 1995). New factors in internationalisation have contributed to the creation of new business models based on co-opetition (Ritala et al. 2014; Velu 2016). Hence, firms benefit from co-opetitive relationships on their international operations (Bengtsson & Kock 2000).

Benefit on accessing business resources

An access to required business resources can be created (Bengtsson & Kock 1996; Bengtsson et al. 2013) through co-opetition. Co-opetition will create positive network effect on firms by bringing opportunities in collaboration with other firms and participation in other networks (Bengtsson & Kock 1999, 2000; Tidström 2014). Firms are able to access information and status about different resources from the network (Gnyawali & Madhavan 2001). Put differently, based on the established relationships, resources available to each firm are linked together and can be exchanged within the network (Håkansson & Snehota 1989). The resources can assist firms in fund raising, expert approaching, cost reduction and time saving (Bengtsson & Kock 2000; Luo & Rui 2009; Ritala et al. 2014; Le Roy & Czakon 2016). Thus, firms that effectively utilise the co-opetitive relationship will benefit from the asymmetry of resources against other competitors (Gnyawali & Madhavan 2001). More importantly, firms can potentially gain resource efficiency and financial improvement through increased application and synergy of resources by cooperating with competitors in the same industry due to the large amount of similar resources among competing firms (Ritala et al. 2014).

The following table 3 concludes the key benefits of co-opetitive relationships for SMEs.

Table 3. Key benefits from co-opetition.

Improvement of competitiveness	Enriches the mode of entry into international markets, which may reduce resource pressures from finance and labour; Access to the required resources from co-opetitive networks; Improving competitive position in industry
Development of technology innovation	Offers more specific technology-related capabilities; Developing needed technological capability by sharing or joint development; Reducing R&D cost and time
Support in market exploration	Reduction in the level of competition; Local knowledge sharing; Ready knowledge for shorting incremental time and cost; Chance to know the potential industrial trend in foreign market; Easier for knowledge and experience transforming and absorbing
Contribution to international operation	Reduce the risk and uncertainty; Increase the speed and quality; Overcoming international boundaries; Creating new business models
Access in business resources	Strengthening competitive advantage; Enriching market opportunities and expansion; Reducing uncertainty and risk; Achieving resource efficiency and financial improvement

In a sum, a co-opetitive relationship offers a package of benefits to SMEs in strengthening their competitiveness (Bengtsson & Kock 1996) and opening accesses to opportunities (Ritala et al. 2014) for their international operations (Bengtsson & Kock 2000). The resources and accesses may also become the solutions for the challenges that SMEs face on their internationalisation.

2.4 Co-opetition as a strategic choice for the internationalisation of SMEs

SMEs, the major type of enterprises around the world, are strongly affected by a stream of internationalisation (Hashim & Hassan 2008) due to the great business potential of international markets comparing to their limit-sized home market (Khanna et al. 2005; Malhotra & Sivakumar 2011). Internationalisation brings various kinds of opportunities for SMEs in improving their business performance, as well as different threats, including challenges, that may even harm their business existence (Xie & Suh 2014).

Co-opetition, i.e. simultaneously cooperate and compete, aims at achieving beneficial outcomes similar to the sum of cooperation and competition (Bengtsson et al. 2010; Fernandez et al. 2018). A co-opetitive relationship is generally as an effective strategy of dynamic development and competitive advantage for business firms (Yami et al. 2010) and providing opportunities for synergistic associations with complementary specialties (Kauffman 1995; Karagozoglu & Lindell 1998; Lu & Beamish 2001; Fillis 2004; Park et al. 2004).

In the following, a discussion will be conducted whether and how co-opetition can impact on the challenges that SMEs face during their internationalisation.

2.4.1 Benefits of co-opetition on the international operations of SMEs

In order to resolve the challenges of internationalisation, SMEs may consider establishing external relationships with other organisations (Hessels & Parker 2013). Leveraging external relationships has been seen as an effective method of developing competitive advantage and enhancing organisational performance for SMEs during the process of internationalisation (Street & Cameron 2007).

Among the options of collaboration with different organisations, co-opetition is found playing important role for the internationalisation process of small firms (Bengtsson et al. 2013). Co-opetition may generally provide opportunities for synergistic associations with complementary specialties (e.g. Karagozoglu & Lindell 1998; Lu & Beamish 2001; Park et al. 2004); improve the strength and international competitiveness of firms (e.g. Lee et al. 2000; García-Canal et al. 2002); minimise potential internationalisation barriers (e.g. Lu & Beamish 2001; Fillis 2004); and allow firms quickly start internationalisation (Oviatt & McDougall 1994) and even leap-frog stages (Hedlund & Kverneland 1985). To be more specific, the common challenges that SMEs face in their internationalisation process will also be answered by co-opetition.

Answers to the difficulties in psychic distance

A list of outcomes is identified by researchers about the offers of co-opetition to the psychic distance during internationalisation process, including reducing the level of psychic distance (Madsen & Servais 1997), gaining foreign market knowledge (e.g. Bengtsson & Kock 1996), exploring market opportunities (e.g. Haahti et al. 2005; Jaw & Cheng 2006), limiting market uncertainty (Acs et al. 1997; Zaheer & Mosakowski 1997) and diminishing mistakes arising from the unfamiliarity of foreign markets (Lu & Beamish 2001).

*Answers to the difficulties in industrial cont*ext

A number of studies points out the importance of co-opetition in the joint development of competitive advantages and improvement of competitive positions against the competitors out of a co-opetitive network (e.g. Gnyawali & Madhavan 2001; BarNir & Smith 2002). Co-opetition can be further found effective in increasing competitiveness (Bengtsson et al. 2013) and preventing competitive attack (Lee et al. 2000) through positive network effect (Bengtsson & Kock 1999, 2000). The network effect may be related to several advantages in acquiring and joint developing resources, knowledge, international opportunities, and opening access to additional networks (Bengtsson et al. 2013). Then, co-opetition plays important role in market exploration, such as creating new market (Ritala et al. 2014) and building stronger market recognition (Inkpen & Beamish 1997).

Answers to the lack of resources

A group of scholars argue the benefits that co-opetition offers for developing and leveraging resources (e.g. Quintana-García & Benavides-Velasco 2004; Emden et al. 2006). Ivarsson and Alvstam (2013) suggest co-opetition enriches the mode of entry into international markets, e.g. joint ventures with competitors, which may reduce resource pressures from finance and labour. This means SMEs are potentially able to engage larger international projects with less financial commitment and risk (Elmuti & Kathawala 2001). A firm that gains access to resources through co-opetitive networks often retaining considerable independence – an important consideration for many SMEs (e.g. Wright et al. 2007; Zhou et al. 2007). Furthermore, co-opetition could provide access to the required resources from co-opetitive networks that would otherwise take years to establish and thereby enable an SME to buffer its lack of resources during the internationalisation process (Orengo 2012). Mathews (2002) even believes SMEs may leverage resources from co-opetitive network in new and creative ways comparing to traditional ways of developing and acquiring resources.

The lack of knowledge that many SMEs struggle in their internationalisation process can be complemented by co-opetition through collaboration with competitors that are already present in the marketplace (Elmuti & Kathawala 2001). A cluster of research indicates the importance of co-opetition in knowledge learning and sharing through co-opetitive networks (Powell et al. 1996). According to Penrose (1959) and Madhok (1997), the development and integration of new knowledge happen incrementally. Co-opetition provides ready knowledge for saving time and cost. Additionally, experience in absorbing the existing knowledge may also be taken from co-opetitive relationships, which helps in increasing the efficiency in the absorbing and application of knowledge (Chetty & Campbell-Hunt 2003).

Answers to the weak in capabilities

Suggestions are proposed by researchers (e.g. Booltink & Saka-Helmhout 2018) that SMEs may take advantage, such as human capital, knowhow, funding and innovation practice, from external collaborations on the complementation of their limited R&D and other technology-related capabilities (Hervas-Oliver et al. 2012), as well as the development of those capabilities. Co-opetition, as a major type of collaboration, offers even more specific technology-related capabilities that can be leveraged, because the technology-related capabilities are coming from competitors that are in the same industry (e.g. Quintana-García & Benavides-Velasco 2004; Emden et al. 2006). Booltink and Saka-Helmhout (2018) further point out that SMEs can then better utilise their technological investments to achieve higher performance through technology sharing or joint development.

2.4.2 Co-opetition influences the challenges of SMEs' internationalisation

To sum up, the capability that firms have in joining and managing co-opetitive relationships provides the possibilities for firms to conduct international expansion (Coviello & Munro 1997; Jones 1999; Harris & Wheeler 2005) and explore international business opportunities (Luo & Rui 2009; Kock et al. 2010). Such co-opetitive relationships allow firms compensate their shortage by taking advantages from the co-opetitive networks and jointly developing competitive advantages within the co-opetitive networks with reduced risks and costs related to the internationalisation. Table 4 below reviews the benefits of co-opetitive relations can provide to SMEs for overcoming the challenges in internationalisation.

Table 4. Synthesis between the challenges of internationalisation and co-opetition.

Challenges of internationalisation for SMEs		Key offers from Co-opetition
Psychic Distance	*Unfamiliar foreign conditions, such as language and culture.*	Familiar local condition for sharing.
Industrial Context	*Growing amount of new competitors;* *Improving competitive quality of competitors.*	Strengthening competitive advantage; Improving competitive position.
Resources		
Finance	*Short in own capital;* *Difficult to raise debt and external funding;* *Weak in financial management.*	Enriches the mode of entry into international markets, which may reduce resource pressures from finance and labour;
Labour	*Less skilled labour;* *Low level of loyalty in skilled labour;* *Scarce training for existing labour.*	Access to the required resources from co-opetitive networks; Achieving resource efficiency and financial improvement.
Knowledge	*Limited international experience;* *Difficult to accumulate and apply experience.*	Ready knowledge for shorting incremental time and cost; Easier for experience transforming and absorbing.
Capabilities		
R&D	*Insufficient investment;* *Over-relying on external.*	Offers specific technology-related capability; Sharing/joint development;
IT	*Low level of infrastructure;* *Lack of comprehensiveness.*	Reducing the cost and time of developing and implementing technology-related capability.

It is arguable to say that co-opetition can be seen as an effective strategic choice for the internationalisation of SMEs (Vanyushyn et al. 2009). But, whether this strategy is practically convinced on the Chinese market should be further examined by this study.

3 RESEARCH METHODOLOGY

Business research, "*a systematic inquiry that provides information to guide managerial decisions*", is often used by business organisations "*to reduce risk in managerial decision making*" and "*in turn, maximize business performance*" (Cooper & Schindler 2006). The central issue of a business research work is the methodology (Bradley 2010). Saunders et al. (2016: 4) define the research methodology as "*the theory of how research should be undertaken*". Put it differently, the research methodology describes a procedure and principles that guide the study of a research phenomenon and entailed research questions (Eriksson & Kovalainen 2016). Saunders et al. (2016) further describe a number of key elements that the research methodology involves: research philosophy, research design, data collection and analysis, and research evaluation. In the following, these elements will be introduced and discussed as a guide of this research work.

3.1 Research philosophy

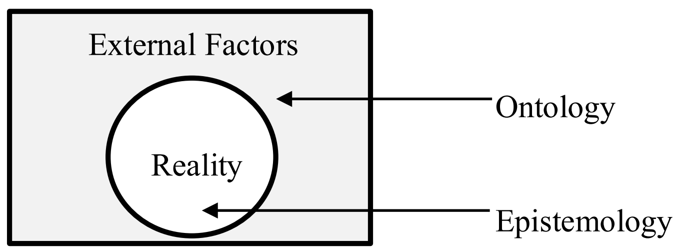
Saunders et al. (2016: 124) define research philosophy as a term "*refers to a system of beliefs and assumptions about the development of knowledge*". In other words, research philosophy can be understood as a research work, whether academic or practical, that aims at developing knowledge for a target field. Moreover, Saunders et al. (2016) also discuss that the research philosophy mainly consists of philosophical assumption and philosophical approach, which are presented as follows.

3.1.1 Philosophical assumption

When conducting a research work, philosophical assumptions can be found throughout the whole process of the research work (Burrell & Morgan 1979) from the formation of research questions, adoption of research methods, to the analysis of research findings (Crotty 1998). There is a number of philosophical assumptions available; but the most common ones adopted in business research are named ontology and epistemology (Bryman & Bell 2015).

The ontological assumption is about the reality encountered in a research, and the epistemological assumption refers to human knowledge (Saunders et al. 2016). As the following figure 3 shows, ontology may be understood in relation to the description about the existence and relationship that reality has with external factors; epistemology may be a step into the reality about how reality can be understood by human knowledge. A further discussion on those two philosophical assumptions is carried below.

Figure 3. Ontology vs. Epistemology on Reality.



Ontology

Ontology describes the nature of reality (Eriksson & Kovalainen 2016; Saunders et al. 2016) and focuses on the question 'what is there in the world' (Eriksson & Kovalainen 2016: 15). The essential issue of ontology is whether the reality exits as external to social actors or the reality is considered to be constructed by social actors (Bryman & Bell 2015). Put it differently, the existence and relationship between reality and people are the attentions ontology pays on.

A key task of ontology is about the division between objectivism and subjectivism. Objectivism emphasises on the independence of the world apart from human and human activities (Eriksson & Kovalainen 2016). This means the existence of social phenomena is independent without being influenced by people; and the nature of reality is not dependent on people and their actions (Bryman & Bell 2015). On the other hand, subjectivism, which is often termed to be constructionism, challenges the view of independence of reality that objectivism holds (Bryman & Bell 2015) and assumes the nature of reality is dependent on people and their activities (Eriksson & Kovalainen 2016). In this perspective, the existence of reality is an outcome of activities and interactions of people in their society; and the reality is continuously influenced by such activities and interactions of people. In other words, the ‘reality’, in contrast to the view of objectivism, is not beyond but within people and depends on the interpretations of people (Eriksson & Kovalainen 2016).

This study is conducted for searching the benefits of co-opetition on the challenges in internationalisation, which is deeply involved with human activities. Thus, a subjectivism view of ontology, i.e. the reality is integrated with human activities, is assumed.

Epistemology

Being a different philosophical assumption than ontology, epistemology holds its view from a perspective of knowledge (Saunders et al. 2016), including the availability, validity and reasonability of knowledge, as well as the transmission of knowledge between people (Burrell & Morgan 1979). Epistemology focuses on questions that explore different aspects of knowledge, such as ‘what is knowledge?’ and ‘what are the sources and limits of knowledge?’ (Eriksson & Kovalainen 2016: 15).

In the field of epistemology, two contrast positions are often identified, i.e. positivism and interpretivism. Positivism, which prefers adopting the way of studying the natural sciences in studying the social reality, claims that knowledge is arrived as a collection of facts and can be confirmed by the senses (Bryman & Bell 2015). Meanwhile, some researchers hold positivism perspective also describe knowledge as a result of experiences and is incremented along with the increase of experiences (Eriksson & Kovalainen 2016). To the contrary, interpretivism, that draws its interest in the differences between people and objects of the natural sciences (Bryman & Bell 2015), expresses the knowledge as the interpretation and understanding of people about social events. It means the availability of knowledge exists based on the shared understanding of how people interpret what happens and the reality is then constructed by social actors (Eriksson & Kovalainen 2016).

In addition, Saunders et al. (2016) further distinguish ontology and epistemology by falling both assumptions on the objectivism-subjectivism continua as table 5 illustrates. The objectivism associates the perspectives of the natural sciences. In this end of continua, the realistic side of ontology emphasises on the independence of reality as external to social actors, and the positivist focus of epistemology is on observing and measuring the reality by social facts. Meanwhile, the subjectivism associates with the perspectives of arts and humanities. In this point, the nominalistic side of ontology views the creation of social phenomena from the activities and interactions of people, and the interpretive focus of epistemology is on the influence of reality by the interpretations and shared understanding of people.

Table 5. The distinguishment between ontology and epistemology.

	Objectivism	**Subjectivism**
Ontology	Realistic Side Reality is independent and as external to social actors and their activities.	Nominalistic Side Reality is constructed by social actors and their activities and interactions.
Epistemology	Positivist Focus Knowledge is a collection of experience and fact; and Reality can be observed and measured by facts.	Interpretive Focus Reality is influenced by the interpretation and sharing of understanding from social actors.

This piece of research is in close relation to the experiences and understandings from practical situations, which is about the opinions from research interviewees how co-opetition can influence internationalisation. Hence the philosophical assumption of epistemology is assumed to be at the end of subjectivism, which means the knowledge on reality is dependent on the interpretations and understandings of social actors.

Based on above perspectives, this study respects the reality independence and knowledge increment, but focuses on the construction and influence of reality and knowledge by the social actors and their interpretation and understanding of related business experiences. This means the subjectivism view is applied for both ontology and epistemology as demonstrated in table 5.

3.1.2 Research approach

Research approach is about "*the nature of the relationship between theory and research*" (Bryman & Bell 2015: 19). There are, traditionally, two basic forms of research approach – deductive approach and inductive approach (Eriksson & Kovalainen 2016).

Deductive approach is arguably the most commonly used approach in dealing with the relationship between theory and research (Bryman & Bell 2015). This approach usually starts from reviewing existing theories that can be structured into a theoretical framework for explaining the topic of a research study. Then, hypotheses are assumed based on such theoretical framework and about to be examined by empirical study (Farquhar 2012). Next, empirical study will be conducted and the empirical findings will be used for analysing whether hypotheses are, fully or partly or not, supported. Finally, a conclusion is drawn about how the theories are tested by the research work (Bryman & Bell 2015). Thus, deductive approach is using theories as the source of knowledge (Eriksson & Kovalainen 2016: 23), and the research work is guided and aims at testing such theories (Bryman & Bell 2015). Moreover, deductive approach is normally adopted in quantitative research for generalising empirical findings to a population (Farquhar 2012) and seen not to be the optimum approach for most qualitative research (Eriksson & Kovalainen 2016).

In contrast to deductive research approach that starts from theory to empirical research, inductive approach follows the logic that begins with empirical research and ends at theoretical assumptions (Eriksson & Kovalainen 2016). In the first step, research topic and questions are normally formed based on the necessity of a phenomenon and the lack of existing theories (Eisenhardt & Graebner 2007). Then, empirical research will be carried out for exploring and understanding the phenomenon (Farquhar 2012). The next step is to analyse empirical materials and identify common themes and patterns for abstracting and developing theories that can represent such phenomenon and filling the research gap in exiting theories (Eriksson & Kovalainen 2016; Saunders et al. 2016). Hence, theory is not the guidance and first source of knowledge but a result of empirical research in inductive approach (Bryman & Bell 2015). Based on this characteristic, inductive research approach is widely used in qualitative research, which aims at developing theories through empirical data that represent the understanding of a phenomenon or practical situation (Farquhar 2012).

Additionally, many researchers claim the limitations of adopting a strict inductive or deductive approach in certain research areas. This entails the emergence of another research approach – abductive approach. The abductive approach refers to a logic that moves back and forth between theories and empirical research (Farquhar 2012). Theories are used to pre-understand a phenomenon and then empirical data collected from the phenomenon will be transformed into new theories or modify existing theories, which are subsequently tested through additional empirical materials (Saunders et al. 2016).

In practice, to clearly distinguish the styles of research approaches is not easy (Farquhar 2012) and, in many cases, a combination of research approaches is utilised in the same research project (Eriksson & Kovalainen 2016). It is actually the style this research work uses – a combination of deductive and induction approaches. The start of this research work is a review on existing literature that forms a conceptual framework. Then, empirical data is collected and compared with such conceptual framework. At the same time, an extension on the conceptual framework is expected. Nonetheless, this work does not aim at testing a theory, the style of research approach is considered to be semi-deductive.

3.2 Research design

Research design, the overall plan and blueprint of a research work, mainly consists of methodological choice and research strategy (Saunders et al. 2016). Methodological choice refers to the choice between two distinct forms of conducting a research work – quantitative and qualitative (Eriksson & Kovalainen 2016). Research strategy means the coherent link between research philosophy and research method of empirical data collection and analysis (Saunders et al. 2016). In other words, research design is planning the sources and ways of collecting and analysing empirical data for answering research questions (Cooper & Schindler 2006; Saunders et al. 2016).

3.2.1 Research technique

The objectives of a research project may be completed with different research techniques, either quantitative or qualitative (Cooper & Schindler 2006). Quantitative research refers to the research works that deal with numbers and statistics (Bradley 2010). The purpose of quantitative research is often related in measuring the amount, degree and/or frequency of the pre-designed objectives of a research target, e.g. the "*behaviour, knowledge, opinions or attitudes*" of certain group of people. At the same time, quantitative research aims at assisting researchers in searching answers to research questions in the forms of "*what, how much, how often, how many, when and who*" (Cooper & Schindler 2006: 198-199).

Besides of quantitative research, another frequently used research technique is called qualitative research. To be different than quantitative research, qualitative research refers to a technique that explores and understands a phenomenon through "*words, narrative, images, and concepts*" rather than quantifies it by "*numerical values*" (Bradley 2010: 230; Bryman

& Bell 2015: 392). The purpose of a qualitative research project is usually designed for responding to research questions that involve "*how (process) and why (meaning)*" by describing, explaining and interpreting a phenomenon (Cooper & Schindler 2006: 196).

In practice, quantitative research has, traditionally, a domination position in business research (Eriksson & Kovalainen 2016) although the exploration of a business phenomenon arguably depends more greatly on qualitative research (Cooper & Schindler 2006). Quantitative research experts often criticise qualitative research with several weaknesses, such as "*too subjective, difficult to replicate, problems of generalisation and lack of transparency*" (Bryman & Bell 2015: 413). As responds to such criticism, qualitative researchers argue that the aim of qualitative research is to explore and understand a phenomenon in depth and in context (Farquhar 2012: 68), which means qualitative research is a different research technique than quantitative research and it may not be appropriate to evaluate qualitative research by using the same standards for evaluating quantitative research. Nonetheless, qualitative research can satisfy these standards at some level. For instance, qualitative research can achieve "*analytic generalisation*" (Yin 2014) that refers to "*generalisation to theory*" (Eriksson & Kovalainen 2016: 138), offer replication across cases by using multiple cases study (Saunders et al. 2016), and potentially be transparent by using audio- and/or video-recording (Saunders et al. 2016).

The aim of this study is to understand a business phenomenon in a specific context, which is how co-opetition may impact on the challenges of internationalisation. Considering the differences in the characteristics of quantitative and qualitative research, it seems to be more appropriate to adopt qualitative research for this research work.

3.2.2 Research strategy

There are different strategies available for conducting a research work including, "*experiment, survey, archival and documentary research, case study, ethnography, action research, grounded theory, and narrative inquiry*" (Saunders et al. 2016: 209). Among those different strategies, case study that aims at analysing in-depth context of a few targets (Cooper & Schindler 2006) is likely to be the most common research strategy for qualitative research (Saunders et al. 2016: 177).

A case study is defined by Yin (2009: 18) as "*an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident*" (Farquhar 2012: 5). The term 'case' may be many different types of subjects, such as a person, an organisation, a group of people/organisations, a situation, a process or an event (Saunders et al. 2016: 184). A case study normally incorporates with a limited amount of cases so that the in depth understanding and interpretation on a full picture of a target phenomenon in a specific context can be achieved. The research problems that a case study usually deals with are in the forms of 'how', 'who' and 'why' due to its emphasis on detail (Cooper & Schindler 2006: 217; Farquhar 2012: 6).

The form of case study strategy is various; single- and multi-cases study are the often used two forms (Saunders et al. 2016). A single case study refers to a study about how a(n) single person, organisation, situation, process or event works (Cooper & Schindler 2006; Eriksson & Kovalainen 2016). The chosen case is usually characterised as extreme or unique (Saunders et al. 2016). Following the similar logic as the single case study, a multi-cases study involves a cross-study on multiple cases. The emphasis of the multi-cases study is discovering the similar results and common patterns from each case in a given context through the interrelation-comparison between cases (Cooper & Schindler 2006; Eriksson & Kovalainen 2016; Saunders et al. 2016).

Based on above discussions, the multi-cases study is chosen to be the research strategy for this study so that the common patterns about the benefits of co-opetition may be discovered in the specific context of internationalisation. As Eisenhardt (1989) suggests, a limited number of cases – four to ten cases – is effective for a multi-cases study to collect materials and draw conclusions (Eriksson & Kovalainen 2016), there will be four organisations included as the cases of this study as demonstrated in table 6. The four case companies are from three countries, i.e. UK, Germany and Finland, that play important role in automotive industry of EU (Vošta & Kocourek 2017). Meanwhile, the four case organisations are key players and leaders in terms of production volume and/or engineering technology in their own business sectors, and engaged in co-opetitive relations with Chinese parties for a significant period of time. Therefore, they can be, in certain aspects, the patterns of the European automotive SMEs for this study.

Table 6. Information about the four case companies.

	Location	*Establishment*	*Time of Entering China*	*Time of Co-opetition in China*
Company A	UK	1907	1990s	Late 2000s
Company B	Germany	1864	1980s	Late 2000s
Company C	Germany	1991	2000s	Late 2000s
Company D	Finland	1982	1990s	Mid 2000s

The first company, referred to as Company A, was founded in 1907 in UK. The main product is municipal vehicles and production volume is approximately 1000 units per year. It is the market dominator in UK and also a technology leader in Europe. The main markets are UK and Europe; but global presence is also important by covering Africa, Asia and South America. Both own network and third-parties' channels for international activities are developed. In 1990s, the products were introduced into Chinese market by local agent and the deeper co-operative relationship was established with a Chinese local competitor in 2011. The Chinese party manufactures similar types of products at a lower level of quality. The co-opetitive relationship is established in the form of Joint-Venture for manufacturing municipal vehicles in the production facility of the Chinese party by using the most sophisticated technology from Company A. Then the products are sold by Joint-Venture with the support from the distribution network of the Chinese party.

The second organisation, referred to as Company B was founded in 1864 in Germany. It concentrates on manufacturing rescue vehicles with probably the best expertise in its industry in the whole world. It has now a production delivery of 1200 units per year. The market presence in over 150 countries brings export activity as the core turnover contributor of the sales volume. The export operation in China can be traced back to the end of 1980s with a local dealer in China. The start of co-opetitive relationship was in the late 2000s with a local Chinese competitor that had a subsidiary company manufacturing similar competitive products. The co-opetitive relation is designed to turn the subsidiary company into a Joint-Venture through share-transferring. Company B provides engineering solutions to the Joint-Venture and supervises the production taking place in the Joint-Venture. The sales and services are the responsibilities of the Joint-Venture based on its existing network.

The third firm, referred to as Company C was established in 1991 in Germany. It nowadays specialises in manufacturing various types of emergency vehicles used by different governmental departments and municipalities. Now the production volume is approx. 1000 vehicles per year and made the company to be the largest emergency vehicle manufacturer in Europe. It has long tradition in international operation with own network in Europe; by using governmental projects and other types of channels, its products have reached customers in other continents. In the middle of 2000s, it started export to China and a local office in China was established soon. The co-opetitive relationship in China with a Chinese competitor began at the end of 2000s. The Chinese competitor is one of the largest players in emergency vehicle sector in China. The co-opetitive relationship starts from CKD assembly and sales in China, and aims towards a deeper collaboration at strategic level.

The fourth company, referred to as Company D was established in 1982 in Finland. The product line covers several types of special vehicles with a focus on emergency vehicle. At present, around 400 vehicles are delivered per year. Along with the leading position in traditional Scandinavian market, it has developed effective international network in Europe and Asia. It started sales activity in China with a local distributor in 2004. Few years later, co-opetitive relationships were established in China. The first co-opetitive relationship is actually with the local distributor that also represents competitive products from other competitors. The other co-opetitive relationship is built with one of the major Chinese competitors that also manufacturing emergency vehicle. The collaboration with the Chinese competitor is in the form of Joint-Venture for manufacturing emergency vehicles that based on the technology-transfer from Company D.

3.3 Research method

After the clarification of research philosophy and research strategy, the next important step of a research work is research method. Research method refers to the specific way that is used in a business study for understanding a phenomenon (Eriksson & Kovalainen 2016) and often includes the method of data collection and method of data analysis (Eriksson & Kovalainen 2016; Saunders et al. 2016). As this study is a qualitative research study, the data that is collected and analysed can be defined as qualitative data. This means the data is basically not numerical and measurable data in nature, but in the forms of words or verbal (Eriksson & Kovalainen 2016).

Moreover, data can also be separated as primary and secondary data. The primary data refer to new data that are initially collected by a researcher for a specific research project (Farquhar 2012). Secondary data, on the other hand, are the data originally collected for other purposes than the specific research project (Saunders et al. 2016). In this work, primary data is collected due to the aim of the research work is to explore new knowledge for the research phenomenon (Farquhar 2012).

3.3.1 Data collection

Data collection is a process of detail works with the essence to answer research questions of a study (Cooper & Schindler 2006). Although various methods of data collection are available for qualitative research, such as interview, observation, diaries, etc., the most frequently applied method for primary data collection in business qualitative research is arguably the interview (Bryman & Bell 2015; Eriksson & Kovalainen 2016).

An interview, in general, refers to a purposeful conversation between an interviewer and one or more interviewee(s) with a number of questions and answers (Eriksson & Kovalainen 2016). In a case study of business research, interviewees are invited from business organisations for sharing their knowledge and experiences that are expected to be related to the purposeful questions asked by interviewers (Cooper & Schindler 2006; Saunders et al. 2016). Interviewers, typically, expect to use interviews for collecting valid and reliable primary data that are positively related to research question(s) (Saunders et al. 2016) because the rhythm and direction may be controlled by the interviewers via direct and real-time contact with interviewees (Bradley 2010). Additionally, research interest(s) and question(s) may also be refined depending on the performance and outcomes of interviews (Saunders et al. 2016).

An interview can be conducted as structured, semi-structured or unstructured interview. A structured interview is usually guided by a list of predetermined questions similar to a typical questionnaire but with little flexibility. The conversation is organised in the order of ask-and-answer. Interviewers follow the questions rather than responding to the emergence from interviewees. The structured interview is expected to be efficient in gathering the data about the facts with reduced uncertainty arising from different interviewees (Eriksson & Kovalainen 2016). In the contrast, an unstructured interview is often conducted without specific questions and may be individually customised to each interviewee (Cooper & Schindler 2006). Interviewees are offered with opportunities to freely share their knowledge, opinions and experiences on the research topic. But interviewers are required to keep in mind about the research interest and not being distracted by the non-directive conversation from interviewees (Saunders et al. 2016). A semi-structured interview is positioned in the middle between structured and unstructured interviews. Interviewers normally have a list of questions as an interview guide that reflects research topics. Comparing to the questions in structured interviews, the questions of semi-structured interviews are more general for potential contextual adaption (Farquhar 2012) and may be not asked in order. Additional questions are also possible to be asked by interviewers by following the responds of interviewees. The openness of conversation is closer to unstructured interview but within the scope of research topics (Bryman & Bell 2015).

Of the above mentioned three interview types, structured interviews are typically utilised for collecting quantifiable data that create their popularity in quantitative research (Saunders et al. 2016). Meanwhile, the majority of qualitative research relies on the utilisation of either semi-structured interviews or unstructured interviews (Cooper & Schindler 2006). In fact, semi-structured interview is probably the most important and used method of organising a qualitative research interview mainly due to the balance between flexibility and order (Gillham 2005). This factor entails the method of data collection in this research work to be the semi-structured interview.

The traditional way of conducting a semi-structured interview is face-to-face, which is assumed to provide the highest quality and response, but normally engaged with high cost and time-consuming (Bradley 2010). Therefore, it has been evolved along with the development of modern technologies. Computer-based online interview is one the outcomes with a number of benefits including, overcoming the barriers in time and geographical differences, saving in the cost and time by avoiding travelling, improving the comfort by conducting interviews in comfortable locations, allowing easier storage of data by using computers, and arguably increasing the quality of interviews based on these advantages (Cooper & Schindler 2006; Bradley 2010). Thus, the semi-structured interviews of this study are conducted via Skype and the interviews are sound-recorded in a laptop. The locations of interviewees are selected either in offices or at homes depending on where interviewees feel the most comfort. Considering the suggestion from Cooper and Schindler (2006) that the timing of an interview should be kept between 20 minutes and 2 hours in order to have the optimum and balanced result, the interview time of this research is controlled between 1 to 1.5 hours so that rich amount of data can be collected and the energy of both interviewer and interviewees can also be maintained. The following table 7 presents the information about the interview label, date and participants of the four case organisations.

Table 7. List of interviews.

	Interview 1			**Interview 2**		
	Label	Interviewee	Date	Label	Interviewee	Date
Company A	A-1	Managing Director of International Equipment	Jan. 04, 2019	A-2	CEO	Feb. 28, 2019
Company B	B-1	Sales Director	Jan. 20, 2019	B-2	Head of Business Development	March 5, 2019
Company C	C-1	CEO	Jan. 20, 2019	-	-	-
Company D	D-1	CEO	Feb. 14, 2019	-	-	-

As table 7 shows, there are six interviews taken in two months. Two interviewees are selected from both Company A and Company B; one interviewee is interviewed from both Company C and Company D. Such difference in interviewee selection is based on their involvement in co-opetitive relationships with the Chinese parties. More specifically, Interviewee A-1 and A-2 both are key responsible persons in the co-opetitive relations in the Company A; the same condition applies to Interviewee B-1 and B-2 from Company B. Interviewee C-1 and D-1 are the leaders representing Company C and Company D in their own co-opetitive relationships.

3.3.2 Data analysis

In general, data analysis refers to "*the identification of meaningful patterns in data*" (Bradley 2010: 300). In a business research study, huge amount of data is collected as raw material, which needs to be firstly reduced into the amount that can be managed. Then different techniques may be utilised to form the orders of data and abstract the useful patterns for the study (Cooper & Schindler 2006). Hence, data analysis is a necessary and critical step that needs to be conducted in a research study for both quantitative and qualitative research; though differences exist in the data analysis between quantitative and qualitative research. A major difference in the analysis between quantitative and qualitative data is the starting point. Quantitative researchers typically start the analysis after the collection of data. But qualitative data analysis often begins during the data collection (Bradley 2010; Farquhar 2012).

This research work is defined to be a qualitative research; the case study strategy and semi-structured interview method are used for data collection. In this case, the data analysis is recommended to start with short notes and memos while the conduction of interviews. The short notes and memos may include keywords about whether the replies from interviewees are related and useful to research questions, what are still missing and what can be further discussed according to research topics (Bradley 2010; Farquhar 2012). When the data collection is completed, the notes and memos will then be analysed together with sound- or video-record as soon as possible so that the details of interviews can still be recalled by the interviewer (Bradley 2010).

After the data collection and pre-analysis, the main step of data analysis is followed. There are different methods can be used for analysing data, such as thematic analysis, narrative analysis, content analysis, discourse analysis, and so forth (Eriksson & Kovalainen 2016). Due to the characteristic of qualitative data that are normally in form of texts and difficult to be analysed by traditional statistical analysing tools, the most often used method for qualitative data analysis is then the qualitative content analysis (Bryman & Bell 2015). The method of qualitative content analysis concerns the analysis on the content and meaning of the collected qualitative data. A key objective of qualitative content analysis method is to develop the understanding of a research phenomenon applied in its specific context (Eriksson & Kovalainen 2016). This is realised through two important steps: first, categorisation – a description with an overall view of the research phenomenon; second, interpretation – a description about the understood meaning of data within specific contextual scope (Eriksson & Kovalainen 2016).

Qualitative research data commonly exist in forms of transcript of interview, case document, voice- and video-recordings, and many others (Eriksson & Kovalainen 2016). A semi-structured interview, in particular, with over one-hour conversation, can easily produce a long transcript with over ten-pages textual materials (Farquhar 2012; Bryman & Bell 2015). Such material has to be down sized and organised into orders that can be further managed. Categorisation is the step to fulfil this demand (Bradley 2010). The step of categorisation is principally a systematic process of data coding. The purpose of categorisation is to produce a general picture that overall describes the research phenomenon from the content of data (Eriksson & Kovalainen 2016). During the process, data is categorised into subjects based on the correlations with research topics and questions (Bradley 2010).

Following the completion of categorisation, data is about to be interpreted. The step of interpretation focuses on the understanding and explanation of the research phenomenon in its specific context based on the categorised data. In this way, an analysis on whether relationship exists between concept and phenomenon is firstly operated. The relationship may be positive, neutral or negative (Eriksson & Kovalainen 2016), which entails the further interpretation and explanation about such existence based on the common patterns and themes discovered from the data (Farquhar 2012). The key issue here is to link the interpretation and explanation with the specific context (Eriksson & Kovalainen 2016).

Put it simply, the process of data analysis is conducted through early analysis while the data collection, data categorisation with the reduction to manageable size and orders by subjects, data interpretation and conclusion on research findings with common patterns (Bradley 2010). The qualitative data analysis can be used in deductive or inductive or even a mix of deductive and inductive approaches depending on the research aims between theory testing and generation (Farquhar 2012).

This piece of work also adopts qualitative content analysis method for the data analysis. All six semi-structured interviews are sound recorded. Short notes and memos are written during and after each interview. Useful data is extracted based on the correlation with research topics and questions for further analysis. Concepts and empirical findings are compared within the specific context which lead to an extension of conceptual framework as the contribution of the research work. The next issue is to examine whether the result of this study is trustworthy.

3.4 Trustworthiness of the study

There is a number of measurement tools can be used for evaluating the quality and trustworthiness of a study from different researchers: Cooper and Schindler (2006: 318) suggest three criteria – validity, reliability and practicality; Bryman and Bell (2015: 48) discuss the reliability, replication and validity; Eriksson and Kovalainen (2016: 303-305) pay attention to the reliability, validity and generalisability; Saunders et al. (2016: 398) present the reliability, forms of bias, cultural differences, generalisability and validity. Despite the various forms of measurement tools, validity and reliability are seen to be two key concepts adopted for evaluating the trustworthiness of a research work (Bradley 2010; Farquhar 2012). In general, a study is deemed to be valid when it measures what the researcher intends to measure; and it is considered to be reliable when the same result can be achieved by repeating the same study (Bradley 2010). In this study, validity and reliability are discussed for presenting the trustworthiness of the work.

The way of evaluating the validity of a research study is different in different research literatures (Cooper & Schindler 2006). But a key issue can be considered to assure the validity of a study, which is whether the study measures what the researcher would like to measure (Saunders et al. 2016). This is related to if the researcher successfully acquires the knowledge and experiences from the participants of the study (Saunders et al. 2016) and generates such knowledge and experiences into the conclusion of the study (Bryman & Bell 2015). In this case, all interviewees are in the position of sharing their knowledge and experiences about the challenges of internationalisation and co-opetition, which are the key streams of the research work. At the same time, a conclusion is successfully drawn based on the collected knowledge and experiences from interviewees. As Saunders et al. (2016) suggest, semi-structured interviews may offer a high degree of validity for a study when trust is built with participants via clarified question and varied responds. It is then arguably to express that the validity of this research work can be achieved.

Moreover, reliability is about how accurate and consistent a study is (Gillham 2005; Saunders et al. 2016). A study is considered to be reliable if alternative researchers repeat the same study with the same context would reach the similar research findings and results (Bryman & Bell 2015; Eriksson & Kovalainen 2016; Saunders et al. 2016). In this sense, this piece of study is not able to be proved being reliable because the repetition of interviews in the same time and context is not possible. Some researchers argue that the intention of a semi-structured interview is not for repetition, but to reflect the real-time reality during the time of data collection. The reality may differ in another time. Thus, it is likely to be unrealistic about asking for the repeatability of a study adopts semi-structured interviews (Saunders et al. 2016). Even though, limited errors may be considered to improve the reliability of this study (Farquhar 2012). For instance, recorded data is studied several times for reducing the error in missing important information. Interviewees are senior executives and without any personal conflict with the researcher, which would avoid the participants' error, such as purposeful dishonest response. The interviewer offers comfortable locations to interviewees and leaves enough time for interview preparation and conduction that further minimise the interviewer error (Saunders et al. 2012). In other words, the reliability of this study may be questioned; however, it is not convinced to completely deny the fact that the reliability is achieved at certain level by this work.

In short, this study invited six executive managers from four case organisations being the interviewees. They all are the key decision-makers and practitioners in own co-opetitive relations. The schedules and locations of semi-structured interviews were at the best comfort conditions for both interviewer and interviewees so that the interviews were taking place with minimum errors from the interviewer and interviewees. Meanwhile, sound-record and memo notes were used for recording the interview data, which was also repeatedly studied for generating data transcript in order to reduce errors in missing key information. As Farquhar (2012) suggests that the reliability of a study can be improved with limited errors, this study can be considered as reliable. Furthermore, the data collected from interviewees matches the purpose of this study in relation to the experiences and knowledge in the impact of co-opetition on the challenges of internationalisation on the Chinese market. Based on the interview data, research questions are properly answered and a conclusion is successfully drawn. According to Saunders et al. (2016), the validity of a study may be assured if the study measures what the researcher intents to measure. This study fulfils the research purpose and answers the research questions so that it is then arguably to say the validity of this research work is assured. The trustworthiness of the study can be expected based on the assured reliability and validity.

The research methodology clearly presents the research philosophy, research technique, research strategy, data collection and analysis, and trustworthiness. Each element is correlated in between and collectively supports this research work. The next step is to present the empirical findings of this study.

4 EMPIRICAL FINDINGS

In this section, the key findings of empirical research are presented and analysed based on the interviews with six executives from four case companies. All four organisations in this study are engaged in various types of challenges during their internationalisation into the Chinese market. At the same time, they are involved in co-opetitive relationships with local Chinese competitors and aware of the benefits that the co-opetitive relationships offer on the challenges they face in China. In detail, there are two levels, i.e. macro-level and micro-level, of benefits that the co-opetitive relationships provide on the challenges the four organisations experience in China. The macro-level benefits mainly refer to industrial context, including threats from competitors, restraints of industrial regulations, and immaturity in market-readiness; the micro-level benefits involve with financial resources, labour resources and production capacities. The details are presented below and followed by a summarising table at the end.

4.1 Co-opetitive relations respond to the macro challenges in industrial context

From the empirical study, challenges are identified in several aspects related to the industrial context at macro-level. The first is fast growing local competitors and their increasing effects in not only Chinese market but also international markets. Benefited from the development of Chinese economy, support of Government, and openness of Chinese market, the Chinese local competitors in automotive industry are growing faster than competitors in any other emerging countries in terms of both amount and quality. They are born and live in a strong competitive environment where they are forced to compete with rivals at regional and national levels, as well as international level. Such competitive context helps the local competitors growing fast and stronger, technically and commercially. Interviewee D-1 says:

> "*In the local Chinese market, they compete with each other. So they can improve their quality, because they must compete with each other. Someone needs to be better than others, have to improve the quality. How they can sell the product in Europe, it takes time. But internationally, in Asia, in Middle East, they can do.*"

The second challenge is related to local industrial regulations. This may be understood from two aspects: local homologation and manufacturing license.

Vehicles, unlike other products, must be locally homologated where the vehicles are driven so that they can be legally registered and officially covered by after-sales services. This rule, in principal, applies in all countries unless a homologation certificate from one country is recognised and accepted by another county. For example, countries in EU are following common European norms, it is not an issue for homologation. Unfortunately, European norms and certificates are not always accepted in other regions, such as China. The Chinese norms in vehicles can be quite different than European norms in terms of electrics, mechanics and safety. Thus, vehicles from Europe will need to be homologated in China. The key issue of local homologation is about the satisfaction to local technical norms. The homologation process is then a process of testing whether local technical norms can be met by the sample vehicles. The homologation process in China normally lasts over one year and costs tens of thousands of Euros. For SMEs, it means a big investment and lost in sales opportunity for one year on the Chinese market, as Interviewee C-1 describes:

> "*You need to homologate, to make the testing procedures. You need to change something also. So only due to the normative, you lose, at least, one year of the innovation cycle. I mean, our industry is not so much driven by innovation, but nevertheless, if you have a new product, and you have it on the market in Europe, you need, at least, an additional year for the Chinese homologation and testing procedure.*"

Another issue is manufacturing license. The automotive industry is one of the industries in China that follows the system of industrial access permit, which is well-known as manufacturing license. Any automotive manufacturer that intends to establish a legal entity for whole vehicle manufacturing in China must acquire the manufacturing license. There is no exception for both Chinese firms and foreign firms in China in this regard. All the international automotive manufacturers have been following this regulation in the Chinese market if they are producing the whole vehicle in China. Interviewee D-1 tells this issue in brief:

> "*The local regulation on the license maybe the biggest challenge because we want volume from the market, so we have to produce there.*"

The third challenge is about market-readiness in China. Many European automotive products are highly engineered and sophisticated. They are designed and developed for best optimising the performance and quality of people's lives and works. However, like many other products, European automotive products with the highest standard and best quality do not necessarily come up with the best sales on the Chinese market. The Chinese market may not be ready for the advanced products due to various recognised issues by interviewees: the price is too high comparing to local product, the engineering solution is too advanced against the local working condition, or the marketing is not efficient enough in stimulating the demand of customers.

Interviewee A-1 firstly mentions that:

> "*We made fantastic product, but didn't sell anything. So there was another problem. The problem, in this case, was the market. They couldn't transfer the concept that the market wasn't ready for more expensive, more sophisticated and better quality product. And the marketing plan was not very successful.*"

Interviewee D-1 further focuses on the marketing issue:

> "*My personal thinking is that Finnish product, in principle, is the best quality in the world. But why they do not sell. Because they can not market it. Why they can not market it? It is our culture says that we are not really salesman and we are not marketing people.*"

Therefore, how the above discussed macro challenges can be resolved becomes a serious challenge for many European SMEs in the automotive industry. For this situation, co-opetitive relations can actually deliver firewall-effect, industrial expertise and network-advantage in response to the macro challenges.

4.1.1 Firewall-effect against competitors

Establishing co-opetitive relationships with competitors turns the competitors into partners at certain levels. The direct competition is reduced and under control between the participants of the co-opetitive relationships due to the co-opetitive agreements and relatively deeper understanding between each other. This helps European organisations concentrate on the competition against other local competitors; furthermore, they have their co-opetitive alliance, as a stronger team, together compete with other rivals.

Cooperating with competitors provides opportunity for European organisations in understanding their local competitors from a deeper level. Not only the competitors in their co-opetitive relationships, but also other competitors on the market can be better analysed. When a co-opetitive relation is formed, both parties in the relationship need to be open for mutually agreed areas. In practice, the local Chinese parties open themselves more than the European parties in terms of engineering development and market analysis. Both parties usually admit the engineering gap between them and it is not necessary for the European party to fully open their engineering toolkit. Meanwhile, the cooperative area is focused on the Chinese market. The Chinese parties, as local players, naturally need to share their data on the Chinese market, including product portfolio and competitor analysis on the market. Additionally, it is often agreed by both parties in the co-opetitive relationships about the business operations in other markets outside China.

Interviewee A-1 describes his experience how co-opetitive relations generate value from the perspectives of competition and market:

> "*You can always learn from competitors. They could open the market for us. I associate with competitor because I assume in Chinese market we are not competitor, but we may compete in other market. I see partnership more in the cooperation and*

competition relationship. It creates more opportunities on the market. So we also leave the door open for other global markets. And when the relationship goes stronger, you make more difficulties for your local competitors."

Interview A-2 further explains how they deal with this issue:

"*It is not always the right decision on a cooperation with competitor. It depends whether you might be creating a new competitor and coming back to your own market. For us, we had an agreement that if anything was sold outside China, it would be sold through our distribution. So, we judged with our partner that even we were extraordinarily successful in China, that the chances of our partner being coming back with the product into Europe were quite small. So we judged that risk was low.*"

Therefore, the European organisations can have better knowledge about their competitors in China, as well as the potential international moves that local competitors may take. It will be easier to set up appropriate firewalls for self-protection against the competition in China and other markets.

4.1.2 Industrial expertise for local regulations

There are many industrial regulations in China differing than in Europe or any other regions. Some of the regulations may be complied by European organisations with sufficient amount of resources and time engaged. For example, it is feasible to complete the Chinese homologation by European organisations themselves. However, with the support from local competitors, who are familiar with the style, process, and requirements for such task, it is more predictable for the procedure, the amount of engaged resources and the timeline. Interviewee A-2 expresses his opinion as:

"*That's central. For local homologation, every country is different from homologation perspective. You can't, with our technical product, you can't sell it anywhere unless you have a local partner that is familiar with the local requirements.*"

Meanwhile, few regulations restrain the possibilities for the local operations of European organisations in China without local supports. The most serious one that unanimously confirmed by all four case organisations is the automotive manufacturing license.

Interviewee A-2 says:

> "*On our sector, you need relevant license. So it is the only way to access the market through the cooperation with competitor.*"

Interviewee B-2 says:

> "*It is the key for our cooperation with this competitor that they have a subsidiary with the needed industrial license for automotive manufacturing.*"

Interviewee C-1 says:

> "*The cooperation is based on the fact that they have a local company with the manufacturing license for the product.*"

Interviewee D-1 says:

> "*Because of license, we need a local competitor as partner for local manufacturing.*"

Thus, cooperating with competitors who are already granted with the manufacturing licenses is arguably the only option for local operations in China unless small quantity of export units is satisfactory. The forms of the cooperation can be either on whole vehicle manufacturing through Joint-Ventures with competitors or as subcontractors to the competitors.

4.1.3 Network-advantage of co-opetition in marketing

Without a doubt, the local network that Chinese competitors own, both vertically and horizontally, is a key advantage in influencing the market and marketing of the products. The Chinese market, generally, may not be ready for certain automotive products. But it is always possible to discover and open a small segment of the whole market through strong local networks that are provided by the Chinese competitors. In vertical networks, good connections with downstream customers that the Chinese competitors have would gain opportunities from customers in testing the products from Europe and even small amount of purchasing. This often is a breakthrough of further sales on new markets. At the same time, direct feedbacks can be collected from customers and utilised for engineering development that may create unique selling point on the Chinese market. Interviewee A-2 shows this perspective on cooperating with the Chinese competitor:

> "*To develop the network on your own starting up in China is almost impossible. So you have to plug into an established network. Especially in China, you can't just entre a sector and expect to sell. You have to become known, you have to have credibility. I think the credibility of the local partner is absolutely crucial.*"

Interviewee B-2 focuses on how co-opetitive relation opens the Chinese market:

> "*The market in total isn't ready. But there are segments, there are cities, they are ready. I think to develop the technology for the market, you have to start small. So I think having a competitor as partner, that really understands your market, they are going to identify those segments, and direct you in the right place. I think it is really important.*"

Moreover, if co-opetitive competitors are key players in the industry, it is also possible for them to influence the industrial standards on the products. Usually, the rise of level in industrial standards will directly benefit the organisations that own advanced technology. For the automotive industry, rising the industrial standards is one of the best assumptions to create demands on the advanced European automotive products and easily obtain competitive advantage, at least in short-term, against local competitors. This tactic is effectively used by Case Organisation D for certain models of their products. They successfully persuade the rise of level in the Chinese standard of the product closer to the European standard through the network of the co-opetitive party. This creates uniqueness of their products when competing with other competitors and brings several sales orders, though such advantage only lasts for a short time.

In addition, the immaturity of market for certain products may due to insufficient marketing as the Interviewee D-1 explains about the negative culture influence on their marketing attitudes and skills. Local competitors have natural advantage in understanding the appropriate marketing to local customers. At the same time, their existing distribution channels and marketing forces are valuable weapons in terms of marketing new products. The larger and stronger distribution networks and marketing forces are, the wider and faster marketing coverage and market acceptance will be. This is a key factor that Interviewee A-1 takes into consideration when evaluating the competitors for potential cooperation:

> "*For us, there was difficulty in local network. Some of the approaches we had were relying on our partner's network for distributors and selling the product. That is why we thought our partner is a nice solution.*"

The similar perspective is also shared by Interviewee D-1:

> "*Sure, local network is in the very beginning we started to find our opportunities. We can utilise the local dealers they have for marketing and selling the product.*"

Hence, co-opetitive relations can produce positive supports in China on solving the challenges in industrial context at macro-level through the firewall-effect, industrial expertise and network-advantage that the local cooperated competitors may engage with. Moreover, co-opetitive relations have the potential in dealing with challenges at micro-level in relation to finance, labour, production volume and capacity.

4.2 Financial support through co-opetitive relations

The challenge in financial resources is identified by all interviewees with different forms at different stages of their internationalisation activities in China. The forms of financial challenge may be related to the short of own fund, insufficient payment, or difficulty in acquiring external funding. The stages, in general, refer to the export of Completely Build Unit (CBU) and local manufacturing. To be specific, during the stage of export, the financial challenge can arise from either internal or external.

When exporting CBU to China, a common financial challenge is 'sales-related financing'. This refers to the fund that covers the cost from the confirmation of order tile the delivery of product. As soon as customer confirms the order of product, financial expenditure starts from parts ordering from suppliers, engineering adjustment, in-house production scheduling, assembly and finishing, to logistics and delivery. In the majority cases, financial expenditure during this process is covered by own fund and down payment from customers. The proportion of down payment is varied case by case; nonetheless, down payment is not sufficient enough to cover the full financial expenditure. The challenge emerges when the amount of down payment is small or the overall amount of orders is big, which leads to great demand and pressure on own fund or fund from external sources. In some extreme cases when down payment is not applied, the financial challenge puts the business in its edge, as Interviewee C-1 describes:

> "*It's a challenge to have sufficient money, to have the financial resources for it… We were always doing it with Letters of Credit. But we needed pre-financing based on Letters of Credits by European banks. Because in our business, I can't remember of the business where we have the down payment. The cash flow of our business was always negative in terms of one project. Only at delivery, then you have the complete sum. In between, you always have to pre-finance… because our business has a business cycle that one project life was between six months and twelve months. So you have to pre-finance, in average, about nine months of the project. So finance is a challenge.*"

Similar opinion on the challenge in sales-related financing is expressed by Interviewee D-1:

> "*There are very big challenges, mainly in our business concerning the money. The financial and economical issues. To make sure the money comes, and how to finance our own operations, especially if the sales suddenly grow.*"

Comparing to the challenge in CBU exporting, local manufacturing involves even greater financial challenge. When the product, other than complete vehicle, is locally assembled in China, it is arguably impossible to acquire external fund from local banks or investors for pre-financing unless a company is treated as a local Chinese company or has trusted guarantee from its home country. This situation may be reasoned from two fold: the bank side and enterprise side.

First, the financial infrastructure in many emerging countries are not yet well developed, including information exchange, crediting and guarantee system, education and quality of bank officers, as well as both hardware and software connections with foreign banks. As a result, there is limited financial transaction experience at international scale available from banks in emerging markets and the loans to foreign enterprises are restricted. Meanwhile, limited local offices and financial services from international banks can be found in emerging markets; and, unfortunately, serving SMEs is not the priority for those international banks.

On the other side, foreign SMEs are labelled with limited public effect in terms of employment engagement, taxation contribution, size of asset and high-tech innovation. Moreover, comparing to the large MNCs in automotive industry, investors are not familiar with the brand, business model, market trend and financial risk of SMEs. Consequently, the difficulty in acquiring external fund requires large amount of own fund to be engaged in order to fulfil the commercial agreements with customers. Interviewee A-1 explains such situation in detail:

> "*The problem is related to the fact that when you go into an emerging market, it's always difficult to get financing because, at local level, the structure is not so developed. Imagine you are a European company, and you want to open a subsidiary in another European country, it is simple. Because the same bank may operate in both countries and provide you the credit line to finance your activity in the new European country. But, if you are going to, for example, Malaysia, first of all, you need to explain the project to a local investor because this local investor doesn't know you. So it takes longer time. One possibility would be that your country provides a warranty to these people. In this case, you'll need to have a government agency that provides a guarantee so that when you go to talk with a local bank, there is some body that can guarantee the fact that if something goes wrong, we'll pay. So financing is obviously becoming*

> *complex. It is the same problem for our Chinese factory. There are a lot of Chinese banks, foreign banks are in China, still it is not easy. It is very difficult that the local banks will support your business.*"

When a co-opetitive relationship is established, several supports can be realised for solving the financial challenges. There are mainly three types of supports are identified from the empirical findings, including sales-related financing, external funding and strategic investment.

4.2.1 Sales-related financing from co-opetitive relations

The sales-related financing challenge happens due to the characteristics of automotive industry, especially for public tenders. It is not easy to persuade firms from other industries understanding such factor. Nonetheless, when engaging in co-opetitive relationships with Chinese competitors, in forms of either distribution or local assembly, it is possible to request certain amount of pre-financing from the cooperated competitors for related costs of the sold units in advance. This is based on three realistic points:

First of all, competitors are from the same industry and understand the payment system of this industry. They are normally prepared for this situation with various financial solutions, such as governmental subsidies and particular financial reservation. So they are capable of offering pre-financing to their European counterparts. This is one of the key reasons Case Organisation A chooses its competitor as partner, as Interviewee A-1 states:

> "*... one important idea we choose them is because the strong government support, and the capability of financing the orders.*"

Secondly, those types of products, in most cases, are sold to governmental department or public institutions in China, which is a bit different than in Europe. Competitors notice the low risk and uncertainty in receiving payment from those customers with governmental background. Therefore, pre-financing will be paid back when the products are delivered.

Thirdly, due to the formed co-opetitive relationships, certain trust between two parties is established. Moreover, European enterprises, especially western European enterprises, have positive reputation in terms of fulfilling commitment and contract. This makes the Chinese party willing to provide pre-financing for showing their interest in maintaining the established co-opetitive relationships.

The above two factors are reflected by Interviewee D-1 as:

> "*Our customers are serious. Our product is sold to officers and used by them for performing public duties. They know the payment will be there when the product is delivered… our culture is to be honest. We trust our partner, and we believe they are in the same way with us. It is same how we keep our brand, the value of our brand.*"

Hence, cooperating with competitors that are familiar with the payment system is highly valuable for European SMEs to cover their scarce sales-related financing.

4.2.2 External funding possibilities from co-opetitive relations

The external funding can be collected from different channels, including governmental subsidies, bank loans, and private funds. Cooperation with competitors would satisfy qualification requirements, create opportunities, enlarge the amount of fund and shorten the time of applications.

In general, government subsidises organisations for the purposes of encouraging local employment and technological innovation. In China, local government also subsidises organisations for the purpose of increasing their competitiveness against organisations from other regions in addition to the above-mentioned purposes. Naturally, the organisations that can be qualified for such subsidies need to be local or the partners of local ones. Furthermore, subsidies are different from industry to industry in terms of qualifications and procedures. Local organisations know the best opportunities in acquiring specific subsidies in their own industries. Barriers often exist in acquiring subsidies by cross-industrial organisations. In other words, cooperating with competitors is arguably the best option for being qualified for governmental subsidies with higher chance and shorter time. Interviewee A-1 expresses their experience in cooperating with local competitors for subsidies as

> "*The local government subsidise local manufacturers. It is very difficult for foreign small companies to get local subsidise from local government without a local partner. So when we decided to enter the Chinese market, the first thing that we need to do was to find a right partner. We were looking for different alternative ones until we arrive to the current one, which helps us to have strong government support in subsidising the project.*"

Another benefit of co-opetitive relations on financial support is related to bank loans. As discussed before, it is seen to be almost impossible for acquiring loans from local banks in emerging markets due to the undeveloped banking infrastructure and scarce international banking transaction experiences of local banks. In China, the difficulty is, similar to the governmental subsidies, more related to local identification. Local competitors can utilise their local identification for being guarantors for the local entities of foreign organisations or their joint-owned local organisations in terms of acquiring bank loans. In this case, the local entities are acting as local players on behalf of the foreign organisations. Furthermore, local competitors are able to build trust with local banks and other investors by deeply explaining the business and profitable model of this particular industry, which is difficult for organisations coming from other industries. This is the way Case Organisation A deals with local business in China as the two interviewees explain:

> "*So for the typical loan problem when you are going to China, the relationship will make you seen as a local player. You will have a chance for getting support from local banks and investors when your partner can explain your business in an easy understood but professional way.*" Interviewee A-1 says.

> "*Because of our partner in China, we were able to get funding. If we have a different partnership, we would have to need more equity or loans from our side to fund the*

business because we don't think we will get the local bank funding." Interviewee A-2 says.

By cooperating with competitors in China, it opens an access to two important types of external funding, i.e. government subsidies and bank loans, which is not possible to be achieved by European SMEs alone.

4.2.3 Strategic investment from co-opetitive relations

The above discussed financial supports from co-opetitive relations for sales-related financing and external funding are both at operational level. A further financial support at strategic level is also identified. Case Organisation C is under a negotiation that inviting its Chinese co-opetitive counterpart for a strategic investment in the shareholding of its headquarter in Germany. This strategic move is expected to further bind the two competitors together. For Case Organisation C, two key benefits can be expected from this deeper co-opetitive relationship: the first benefit is related to financial aspect. The cash flow will be improved for the operation of the organisation at least in short-term. For long-term, it opens a financing channel in China, which can be used not only for local operation in China but also for international operations in other markets. Secondly, and more importantly, it creates a firewall against the potential hard competition from the Chinese co-opetitive counterpart in China, and international markets as well. Any competitive actions taken by the Chinese co-opetitive counterpart on Case Organisation C, will have an impact on itself due to this shareholding firewall. Interviewee C-1 believes this is a solution that his organisation can strengthen the co-opetitive relationship by reducing potential conflicts between the two parties and maximise possible benefits for itself from this co-opetitive relationship:

"*The idea of letting the Chinese side also participate in our company means every decision which was made by them for the Chinese joint venture also have to regard the interest of the German company, where in such a situation, they are also a shareholder. So if they were, if they would have decided something being the dominate party in China, on the Chinese interest, against, let's say, the German joint venture partner* *interest, they would have to consider that they are also shareholder on the German side. So this is the idea of getting a balance of interests. Not between the two mother companies of the joint venture getting any interest conflict.*"

Based on above factors, financial supports can be expected from co-opetitive relationships not only on the operation level, but also on the strategic level that can bring additional benefits than financial interest.

4.3 Co-opetition solves the challenges related to labour and psychic distance

Lack of appropriate and qualified labour is also a common challenge when doing international business in China. In general, people who speak the Chinese language, understand the Chinese culture, accept high education and desire to stay in Europe are limited in many European countries. The stayed ones are normally willing to be employed by well-known large MNCs that are able to provide better financial offers and career development. SMEs are also less attractive because of their complex and vague boundaries on positions and functions. Employees are usually required to deal with multi-functional tasks in SMEs; where the tasks are more specific and clear in large enterprises. Interviewee C-1 clearly describes such situation:

"*Naturally, you don't have a lot of Chinese speaking people with high education in Germany or in Europe, left for the company like us, small and middle sized. That is one hardness in labour.*"

At more professional level, it is noticed that experienced technical employees, like designers, engineers and technicians, are also difficult to be found in the Chinese counterpart companies if they are not from the same industry. Those types of labour are crucial for automotive industry. Mechanical and electrical norms, regulations and applications in Europe can be very different than in China. It is necessary to have proper understanding and transformation from European standard into Chinese standard so that the local requirement can be satisfied, and the operation and service can be properly fulfilled. The best and most efficient way of performing such task is relying on local counterpart having technicians with experiences and basic knowledge about reading and understanding European technical documentations, or achieve such level with limited guidance and training. However, it is often difficult to have qualified technicians from another industry for fulfilling the task as the Interviewee A-1 says:

> "*...number one – people; it starts with being able to read our documentations, drawings, material, norms, standards, which is different than Chinese... then, sometimes you need to re-engineer for local purposes because local material is different than European material.*" He further emphasises that this difficulty can exist in any stages: CBU export and/or local assembly, "*...you always need for local, even if it's only assembly of CKD sets, you always need supervisory staff.*"

If local qualified technicians are not available from the Chinese counterpart, the Interviewee B-1 suggests two options for consideration, but both are expensive in different forms,

> "*One alternative is you send expatriate from Germany to China, very expensive; or you train Chinese people in Germany, or in your European plants, which is very time consuming.*"

Sending expatriate is often the solution for real emergency cases; otherwise, it is seen to be the last solution due to its extremely high cost. The cost is arising not only from relevant resource engagement on the specific Chinese project, but also from the negative effect on other parallel projects because of the transfer of responsible experts to the Chinese project. Another option may be educating the engineers of the Chinese counterpart in European factories. This will provide the Chinese engineers with the first hand and deep training about the concept and logic of products and solutions in accordance with European regulations. Such outcomes and knowledge can be further digested and transformed into engineering solutions that comply with the Chinese regulations. This option is more suitable for long-term projects and partnerships so that the cost may be allocated or shared on a long-time base. Nonetheless, it requires training expert, which SMEs usually do not reserve, by transferring engineers from other projects; and time-consuming on both trainers and trainees. Therefore, the short in qualified labour challenges SMEs not only on its own, but also consuming other limited resources of SMEs.

As a potential solution, co-opetitive relations may solve this labour challenge in two areas: (1) available human resource with high education and international mind-set and capability. (2) available professionals with competitive working skills and flexible attitude.

4.3.1 Labour access and psychic distance reduction by co-opetition

There is a sufficient, but still fast growing, amount of people with high education, international experiences and professional knowledge in different industries available in China since the "*open-door*" policy forty years ago in 1978. This is, fundamentally, due to the increasing quality and coverage of high level educational system in China. Meanwhile, international and professional collaboration and communication with MNCs in various industries in China for over forty years creates not only close connections between Chinese and foreign enterprises, but also opportunities in improving the quality and knowledge of local labour. Furthermore, the return of Chinese students and professionals who are educated and worked in Europe enlarges the amount of human resource at international level. Interviewee C-1 complains the scarce of people who can speak the Chinese language and understand the Chinese culture in Germany. But the situation is different in China. It is not difficult to find people who speak English or other European languages and with international experiences in China. Automotive industry, as one of the key industries in Chinese economy, hires a large group of people who are doing international collaboration with European partners. Therefore, the expectation on people who are familiar with both Chinese and European languages and cultures can be fulfilled in China through co-opetitive relations. This is clearly expressed by Interview C-1:

> "*I mean the availability of high quality labour for VW or BMW, who may have over 10,000 staffs in China in their Joint-Ventures with local competitors, is a huge benefit for them. You can not expect same thing would happen here, especially for our size.*"

In addition, psychic distance may be reduced by hiring local Chinese with international mind-set. They are helpful in the communication and collaboration between the European and Chinese actors. This would provide a better condition for European SMEs in understanding and adjusting into the Chinese civil and business culture. Interviewee A-2 has his opinion for this factor as

> "*From a general point of view, the language and culture is quite a big barrier for a lot of people. Clearly that was a benefit our partner would be able to bring. They have access to labour, the people we were able to bring on board were good quality people. That is important that the partner, whether they were genuine competitor or potential competitor, they have to be able to bring that. An outsider of China would find that really really difficult.*"

4.3.2 Availability of professionals from co-opetitive relations

A factor that is mentioned by interviewees is that more and more skilled labour from other regions, for instance eastern Europe, are getting attractive for western European employers. As a result, increasing amount of labour from eastern Europe are hired in western Europe; at the same time, many labour-intense businesses are even transferred from western Europe to eastern Europe or other emerging continents. The reasons are often related to the lower cost, fairly good quality, and better working attitude of the labour from these areas. This is also what co-opetitive relations in China is able to offer. The labour from co-opetitive relations are with necessary professional knowledge and skills as the European labour in many areas, the overall cost is still arguably lower than many western European countries, and the positive and flexible working attitude is far beyond the labour in Europe. In other words, through co-opetitive relations, European companies are able to achieve similar level of outcomes with lower cost and less time than conducting the same tasks by their own labour. Interviewee D-1 addresses this issue by comparing the Finnish labour and the Chinese labour:

> "*For standard labour, like construction and assembly, there is already strong competition from eastern Europe. So, at this moment, there is still work for Finns almost for every category for at least high level works and leaders. But long-run, it is*

> *big challenge. We can not keep these works in Finland or for Finnish workers in Finland. It is not only because of the salary, but also the flexibility of works. They do not want to be flexible. If you compare our Finnish engineer to other engineers in China, Finnish engineers are keen on working for 7.5 hours a day and five days a week. Others can work 10 hours, and five to six days a week if over-time working is needed. This difference in flexibility is killing the competitiveness of Finnish companies. On the other hand, this is an advantage we can take from the Chinese side. We may utilise the human resources from local partner when our engineers are not able to do the work. So for small companies, this is maybe the future in Finland.*"

Therefore, co-opetitive relations in China open a new labour pool for European SMEs with labour at different quality, from different industries, and equipped with flexible working attitude for solving the labour and psychic distance challenges in their internationalisation process.

4.4 Co-opetition supports the production volume and capacity

It is practically identified that engineering is a key competence of automotive business. However, it becomes a realistic challenge during the internationalisation. In fact, the challenge is usually not about the engineering capability, but related to the production volume and capacity.

A central issue of engineering is to adjust existing technical solutions and product configurations satisfying local requirements and demands. Generally, the bigger gap in solutions and configurations between the existing European style and foreign local style, the more proportion of engineering capacity needs to be allocated. The overall engineering capacity of SMEs is considerably limited and the majority focus is always on traditional markets where the stable profitability is guaranteed and the risk is controllable. In most of the cases, the Chinese market, comparing to the traditional markets, is considered with less predictability and stability, but higher requirement on adjustment and customisation. The Interviewee B-1 points out that

> "*we are confident on the engineering capability. It is more issue of capacity. In Germany right now, the engineering is always the bottleneck on that. If the market doesn't give you sufficient volume and margins, like the market in China, and you don't spend the amount of your scarce engineering capacity for that.*"

Such reality creates a potential conflict in balancing the limited engineering capacity between the development of existing projects and the development for the Chinese project. It is always a consideration and judgement about whether it is worth to have engineering adjustment particularly for the Chinese project, which is usually unpredictable in long-term. The Interviewee A-1 has deep experience in this issue:

> "*So to me, the most important difficulty is the adaptation of existing product to the local needs. Because sometimes such large changes on product, at the end, may become as something else. So you may loose the economic of scale, you loose the design, because you're starting collaborating elements which are not designed for the product. The problem is the evolve in the product to adapt to the local market without loosing the spirit of the product and the engineering that was behind. So it's a matter of finding a difficult balance in the adaptation of the product.*"

Furthermore, another perspective related to the production capacity is also identified. In some cases, it is possible to win unordinary projects with volumes over the production capacity. In such situations, potential solutions may be abandoning such projects, delaying the delivery of other projects, or temporarily enlarging production capacity. Each of the three solutions can cause negative effect on financial attribution and enterprise reputation. Abandoning the huge projects obviously gives up financial gains and may prevent future opportunities from the same customers. Delaying the delivery of other projects would trigger the breach of contract with consequences of indemnification and reputation damage. Temporarily enlarging production capacity will require further investment and resources engagement. Interviewee D-1 shares his experience for this case:

> "*Once we suddenly had a big project, we had to hire a lot of people only for that project. And then lay off many of them. It is bad situation, and not our style. But we have to do it to keep the project.*"

Thus, when the increase of overall engineering and production capacity in short-term is not realistic or with negative effect for SMEs, the challenge in balancing the proportion of limited engineering and production capacity for Chinese projects seems to continuously exist unless the stability and profitability of Chinese projects become the major contribution among all businesses for SMEs. However, co-opetition has been approved to be helpful to such challenge in automotive industry through the economies of scale and synergy-effect in production volume and capacity.

4.4.1 Synergy-effect in engineering development

It may be not worth engaging engineering capacity in Chinese projects with small volume when doing it alone. But, the synergy-effect can be achieved by transferring engineering solutions to the Chinese co-opetitive partners as long as this transfer is not threatening own business. The Chinese competitors can utilise such engineering solutions in their existing products or further development. Due to the large potential of the Chinese market and the similar local demands of Chinese customers, the engineering solutions can be used for much wider ranges and a longer time. In this case, it is mutually beneficial for both European organisations and their Chinese co-opetitive partners. For European organisations, it is worth developing engineering solutions that would bring sufficient financial return; and for the Chinese co-opetitive partners, they can gain practical engineering solutions at reasonable cost. Such synergy-effect creates a win-win situation for both parties in the co-opetitive relation. Interviewee D-1 confirms the benefit of co-opetitive relations for this case:

> "*When considering the cooperation with Chinese competitor, we expect to get dividends on technology sales, like engineering work, designing, that kind of technology that we have but they don't have. The financial return on engineering transfer to China is probably the biggest reason.*"

Another possibility for this area is to subcontract part of the non-core engineering work into the Chinese competitors. The engineering capability of Chinese organisations in automotive is fast growing. More and more European automotive companies establish their engineering facilities in China for various purposes, including solution development, engineering testing, as well as material research and procurement. For SMEs, it is probably too costly to establish own engineering facilities in China. Therefore, utilising the existing engineering forces in competitors becomes a practical alternative, as Interview D-1 further describes:

> "*We also try to find local facility, local hands, and local materials for our technology from the Chinese side. We start with existing product, technology, then joint-venture in long-term, for subcontracting work in China for our global market.*"

4.4.2 Synergy-effect in production capacity

Co-opetitive relations can also be found beneficial in providing synergy-effect in the production capacity of small and medium sized automotive manufacturers from mainly two perspectives: (1) creating economies of scale; (2) balancing production demand and capacity.

Firstly, the production capacity is usually larger than regular demand so that it allows flexibility in the change of demand. This means, in most of the time, actual production is below the production capacity; certain amount of spare capacity is not contributing the value it should contribute. In other words, the smaller the spare capacity is engaged, the bigger value the production is producing. In practice, economies of scale is one of the common tools that organisations are often utilising for minimising their spare capacity.

Unlike large MNCs that can always do better in economies of scale between multi-located facilities through global presence, SMEs are often struggling in this issue and looking for synergy-effect by cooperating with other organisations. In co-opetitive relationships, at least for automotive industry, participants are in the same industries with similar products and more or less shared components. This makes the share of production possible and therefore economies of scale can be expected. Two or more similar products can be manufactured in the same workshop by the same machinery with different labels; or, at least, some of the components can be produced in this way. By following this, production capacity can be more efficiently utilised so that the cost per unit is lowered; and it allows further development in new models for covering more segments of customers. Interviewee A-1 has positive opinion in the synergy-effect in production capacity by the economies of scale from co-opetitive relations:

> "*I think it is logic. It makes a lot of sense to have alliance with competitors to share volume to get synergies. You can share the plant, where in the same plant there are two different models being built. Same machine that one comes out with no badge, another comes out with badge and more differences. In the automotive business it is simple because you need the largest scale of economic to launch your model. And you need to have different models to cover all the segments of your portfolio.*"

Then, sudden ups and downs in demand may happen in this business by winning or losing a big project. As Interviewee D-1 explains, a sudden large project forces them temporarily employing people due to the unsatisfactory production capacity. But for them, it is not realistic to continuously keep such enlarged production capacity. Therefore, the temporarily employed workers are cut off as soon as the project is completed. By doing so, the large project with good financial return is achieved. However, several negative effects are also noticed, such as high investment and negative public image in temporary hiring and laying off labour, and the disturbance in productions schedule of other projects. If a co-opetitive relationship exists at that time, they can utilise the facility of their competitor as a complementary capacity for part of the production demand without hiring and then laying off people. Additionally, the co-opetitive relation may offer a subcontracting opportunity for part of the production process if any engineering secretes or intellectual property right is concerned. Interviewee A-1 explains:

> "*In a co-opetitive situation, then you can outsource the majority of the component locally and using the foreign technology.*"

As a summary, table 8 illustrates how co-opetition can positively impact on the internationalisation challenges of European SMEs in China.

Table 8. Summary about how co-opetition solves internationalisation challenges in China.

	Internationalisation Challenges in China	Solutions from Co-opetition
Industrial Context	*Increased amount of local competitors with fast improving competitiveness and potential threats even on international markets.*	Deeper understanding in local competitors; Protection on other markets against Chinese competitors.
	Restraints from local industrial regulations.	Prediction on homologation; Existing manufacturing license.
	Immaturity in market-readiness.	Breakthrough of sales; Influence on industrial standards; Complementary on marketing competence.
Financial Challenges	*Limited sales-related financing.*	Prepared and reserved financing for sales-related issues.
	Difficulties in raising external funding.	Government subsidies; Access to local bank loans; Strategic investment.
Labour Challenges	*Short in labour with general Chinese language and culture knowledge, and professional skills.*	Access to the large available highly educated human resource at both general level and professional level. Psychic distance can be reduced.
	Inflexible working attitude in existing labour.	Professional labour with competitive skills and flexible attitude.
Production Challenges	*Insufficient production volume for engineering development.*	Transferring engineering solutions for financial return and product model enlargement; Subcontract opportunity for engineering works.
	Weak adaptability in the change of production capacity.	Support in achieving economies of scale; Balancing the changed production demand and capacity.

As table 8 demonstrates, four aspects are identified about the positive influence from co-opetition to the challenges of internationalisation for European SMEs in China:

Firstly, co-opetitive relations help SMEs overcoming the challenges in industrial context by building up firewalls against competitors, offering industrial expertise for complying local regulations, and creating network-advantages in sales and marketing.

Secondly, co-opetitive relations open accesses for SMEs to financial resources concerning sales-related financing, external funding and strategic investment.

Thirdly, co-opetitive relations provide labour resources, at both general level and professional level, that SMEs require for reducing psychic distance, solving engineering scarcity, and improving working attitude.

Lastly, co-opetitive relations support SMEs with synergy-effect in engineering development and production capacity for resolving the challenges related to the insufficient production volume and capacity.

5 DISCUSSION

This research work starts on reviewing existing literature on internationalisation, which is arguably scattered. There is a number of approaches focusing on studying internationalisation from own perspectives (Amal & Rocha Freitag Filho 2010), such as resource-based view (e.g. Barney 1991), capability approach (e.g. Prahalad & Hamel 1990; Teece et al. 1997), and Uppsala model (e.g. Johanson & Wiedersheim-Paul 1975; Johanson & Vahlne 1977, 1990). However, a coherent theoretical framework is scarce. This study, based on existing literature, structures a theoretical framework across approaches on the challenges of internationalisation for SMEs, particularly, on the Chinese market. The framework consists of four categories of challenges at macro-level and micro-level, i.e. challenges at macro-level on psychic distance and industrial context, challenges at micro-level on resources and capabilities.

Meanwhile, co-opetition, a relationship that involves simultaneously cooperative and competitive interactions with other organisations at any level for a focal firm, is suggested to be an effective strategy offsetting the level of challenges in the internationalisation of organisations (Kennedy & Keeney 2009; Amal & Rocha Freitag Filho 2010; Bengtsson & Kock 2014). Positive impact of co-opetition is found on the operations and performances that firms can achieve in international markets over other types of relations (Kock et al. 2010; Ritala et al. 2014). An emphasis on summarising the possible benefits that co-opetition may provide for organisations is achieved by this work. Five streams of benefits from co-opetitive relations are classified in terms of the improvement of competitiveness, development of technology innovation, market exploration, international operation, and access of business resources.

To be different than the majority of studies on co-opetition that focuses on large firms (Bengtsson & Johansson 2014; Tidström 2014), this work focuses on investigating and analysing the impact of co-opetition on the challenges of internationalisation for SMEs on the Chinese market. The research data was collected from six interviewees that representing four case organisations in three European countries.

The results indicate, first, that positive impact of co-opetition on the challenges of internationalisation for SMEs can be recognised in relation to industrial context, financial and labour resources, which is in line with earlier theoretical framework. In terms of psychic distance, practical data identifies the positive influence from co-opetitive relations specifically on the supply of labour with general local familiarities. However, R&D support from co-opetition is not well recognised by this research work. It is advised to maintain core R&D activities in-house rather than sharing in co-opetitive networks. Another theoretical issue of capabilities – IT – is not in consideration by business organisations according to the research data. Finally, challenges on production volume and capacity are defined as extensions to the theoretical framework. In practice, co-opetition is able to positively influence in those challenges through synergy-effects on engineering development and production capacity.

5.1 Theoretical implication

The main contribution of this study is to demonstrate that SMEs can offset the challenges when operating on the Chinese market by forming co-opetitive relations. In terms of the internationalisation process of the Uppsala Model (Johanson & Wiedersheim-Paul 1975), this study, on the one hand, reflects the existence of psychic distance as a challenge for European SMEs when presenting on the Chinese market; on the other hand, the psychic distance can be overcome by employing proper people through the help of co-opetitive partners in China. It is not necessary to strictly follow the linear approach from nearby markets to far areas, as the Uppsala Model suggests, for developing the knowledge in solving psychic distance.

Secondly, Kock et al. (2010) identifies the positive impact of co-opetition on international operations in relation to explore international opportunities and increase competitiveness on the international market arising from the access to distribution network, the cost reduction of network development, the adaptability of product range, the sharing of customer inquires, and the increase in international knowledge. This study further extends this topic in, at least, two perspectives. First, it takes in the consideration of manufacturing activities, which complements the focus of sales activities in the study of Kock et al. (2010). Second, this work brings in the resource-based view (Barney 1991) for a cross study and details the positive impact of co-opetitive relations on offsetting the resource-related challenges in finance, labour and knowledge.

Lastly, this study aligns with some of findings from Ritala et al. (2014) about the benefits of co-opetition on market exploration, resource efficiency and competitive positioning improvement. This study, on a more detailed level, indicates that through the network of co-opetitive parties, market breakthrough can be achieved on a new market. Transferring engineering solutions and sharing production capacities with co-opetitive parties can better increase the resource efficiency. More importantly, competitive positioning can be improved by firewall-effect against co-opetitive parties and other competitors.

5.2 Managerial implication

The outcomes of theoretical framework and empirical findings that this work produce may offer several managerial implications to business organisations and executive managers that are interested in taking strategic moves into the Chinese market. First, this study provides a general picture to SMEs about what challenges they probably will face during the internationalisation on the Chinese market. Particularly, European manufacturing SMEs may gain knowledge about the practical challenges that the four case companies experienced, and plan in advance for the probable challenges according to their own conditions.

Next, for organisations that are inexperienced in cooperating with competitors on international operations, this study provides them with a bundle of information about the potential benefits they may receive from co-opetitive relationships. This may assist SMEs in strengthening competitiveness and solving existing business difficulties, strategically and/or operationally. Furthermore, the new cooperative alternative will likely extend current partnership networks and explore additional business opportunities for SMEs.

Then, SMEs that are already in co-opetitive relations may review their current co-opetitive conditions and find interests from this piece of work about more benefits they could potentially acquire from their existing co-opetitive relations on the Chinese market. In this case, better business performance can then be expected.

5.3 Research limitations and suggestions for future research

Even though theoretical and managerial implications can be expected from this work, research limitations can also be detected. From the macro-level perspective, this work is focused on European automotive industry, which means some of the industrial context may not be applied on other manufacturing industries. Meanwhile, only four case organisations from three European countries are selected in this study. This may restrain a greater coverage on other organisations and countries in relation to automotive industry.

From the micro-level perspective, only one or two interviewees are participated from each case organisation. Although the interviewees are at managerial positions, the small number of interviewees may not represent the overall perspectives from different business professions. In addition, the Chinese co-opetitive partners are not interviewed by this study. This may limit, in certain aspect, the full view about co-opetitive relationships.

Future study may dive deeper into automotive business with more interviewees at different professions and larger amount of case companies for achieving better generalisation. A wider selection on other manufacturing industries can also be conducted for cross-industrial analysis.

Moreover, it is also suggested for future study to consider about investigating on the Chinese co-opetitive partners in addition to the European participants. The experiences of the Chinese participants may offer different perspectives that are valuable in better developing the strategy of internationalisation and co-opetition for European SMEs.

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APPENDICES

APPENDIX 1. The Questionnaire of Interview

Name:

Position:

Description of tasks in the company:

1. Internationalisation experience

1.1 Could you briefly introduce your company and business please

1.2 General introduction about the history of internationalisation of your company, including

1.2.1 what was the initial reasons / start time / starting market & all involved markets

1.2.2 what are the internationalisation mode used for entering foreign market

1.2.3 what is the process / steps you take in the international activities

1.2.4 general challenges you have faced in internal activities

1.3 The experience in the Chinese market

1.3.1 what was the initial reasons / start time

1.3.2 what kind of mode used for entering the Chinese market

1.3.3 what is the process / steps you take in entering the Chinese market

1.3.4 what are the challenges faced on the Chinese market on each process / step

2. Co-opetition experience

2.1 As your information, is it common to cooperate with competitor or compete with partner for European automotive companies, especially for SMEs and their international activities?

2.1.1 If yes, what are the normal areas for such co-opetitive relationship?

2.2 Could you please describe the experience of your company in co-opetition for international operation

2.3 The experience your company has in co-opetition especially on the Chinese market

2.3.1 What kind of co-opetition have you involved in

2.3.2 Initiation for the start of co-opetition

2.3.3 Is co-opetition planned or just naturally emerged?

2.3.4 Main areas for co-opetition

2.3.5 What type of co-opetition have you involved in & why is that

2.3.6 What are the benefits you find from co-opetition especially related to the operations on the Chinese market