

Original Article

Evaluating private security sector market perceptions in Finland

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Abstract The role and significance of private security services have grown in many countries, since traditional tasks of security authorities are being outsourced. The goal of this study is to empirically evaluate the perceptions of the private security market in Finland. As a result, we identified three different future scenarios for the Finnish private security market, including (1) international success via innovations, (2) success via domestic markets, and (3) pessimistic success vision. It appeared that 75 per cent of respondents saw the future of the Finnish private security market as positive, while respondents with managerial job position were more optimistic than workers. Moreover, the importance of a high-quality national-level educational system was emphasised. The market is assumed to be characterised by the dominance of large companies, while the attitude towards multi-service activities is divided by the respondents. Owing to homogeneous service offerings, the industry is expected to face strong price competition. There are also some doubts regarding the private sector's ability to handle new duties transferred from the public sector. Finally, technology will be a new business enabler, yet it will attract new rivals from other industries and challenge traditional actors in the security sector field.

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Introduction

At the moment, many countries are seriously trying to redefine the role of private security services and to discuss its significance as a sociological operator. Traditional tasks of security authorities have been outsourced around the world, and there is still a growing tendency to increase the amount of services, which are provided by private operators (Wakefield, 2003; Crawford *et al.*, 2005; Sarre and Prenzler, 2009). However, the public-to-private transformation has been far from problem-free, and we have witnessed large-scale failures, such as the ability to provide enough private security guards for the London 2012 Olympics (for example, Booth and Hopkins, 2012). Not surprisingly, this outsourcing movement has aroused intensive public debate on whether the sovereignty of a state is weakened when private operators begin to manage the traditional tasks of public authority (for example, Travis and Williams, 2012).



Interestingly, the academic discussion, on the other hand, has been clearly more limited (Manning, 2005). Based on our literature review, we argue that the discussion regarding the private security service market lacks reliable empirical research, which would help in understanding the future characteristics of the industry. Therefore, in this study, evaluating the future perception of the Finnish private security service market is suggested. At the moment, Finland is undergoing an extensive overall reform and legislation update concerning the private security sector (Ministry of the Interior, 2008, 2011). This makes Finland an interesting target market as this legislation process has to take into account the direction of policies on the European Union (EU) level signed by private security actors. Moreover, it is predicted that the recent worldwide change towards private sector policy making is likely to continue. The freedom of movement of goods and services across Europe and the flow of the trade to other countries outside of the Union will increase in the future, and this will also involve security services (for example Van Steden and Sarre, 2007).

In this research, we first define and introduce the private security service market in general and especially from a Finnish perspective. Second, we present our research design, including research objectives, data collection and construction of key variables. Third, we present our empirical results; and finally, we conclude our findings.

Introducing Private Security Services as an Industry

Private security as an iceberg

As a field, private security services are very diverse and develop in different directions. Therefore, it is difficult to fit private security services into different kinds of theoretical or legal definitions (Prenzler, 2005; Hakala, 2008). The field is like an iceberg, in which only a part can be seen above the water (George and Button, 2000). These visible operations form only a very small part of the whole field. Very often, private security services are divided into guarding services, private detectors, maintenance of public order and security checks, in which public authority can be used under special provisions. In addition, protective security is very visible at present, as the field has been increasingly more connected to security technology, where the use has grown strongly.

However, most of the iceberg is invisible under the surface: the field is formed of many other services and products as well, which are not necessarily perceived as part of the field. As examples of these, we can mention different kinds of security expert and training services as well as operators who produce security technology and security systems. Furthermore, producers of private military services have often been considered to be part of the field. Nowadays, these services are increasingly in charge of reforms of the security sectors in many countries, such as Afghanistan and Iraq (for example, Wilson, 2006). These functions can be considered to belong to the part of an iceberg that stays under the water; however, it is a significant portion of that part that is made out of private security services.

According to Matthys (2010), all operators whose services or products make it more difficult to commit crimes can be connected to private security services. Matthys states that operations that prevent crimes must be considered analytically, as private security services



must produce additional value for the protection of the customers against crimes. This can be proactive or subsequent, but it must have a positive effect on the customer's prevention against crimes. In fact, Matthys leaves operators who produce only technology and systems outside private security services, as according to him, operators should also produce services alongside delivery.

Mandel (2002), on the other hand, has suggested two broad criteria that do not delimit different operators of private security services outside. According to the first criterion, the ownership and control of an operator in private security services must be clearly disconnected from the state. According to the second criterion, a service of the private security field must be clearly connected to security operations. Furthermore, in an international view, the services and products of private security services are defined in several different ways in different sectors (for example, Sempere, 2011). For instance, in different field and market inspections, several ways of making divisions have been used, such as distribution by product groups or by technologies (for example, Farrell *et al*, 2008; Ruttenbur, 2008). Moreover, definitions vary in different countries.

In the past decade, the services and products of private security services have been developing into more comprehensive solutions and more versatile technologies. In addition to tasks related to pure security, more and more additional tasks are offered by security companies. In this research context, we label these as multi-service tasks, such as lobby services and property management. In addition, private security services are integrated into the services and products in other fields, thus bringing them additional value. Also, in many other fields, some tasks that are performed actually correspond with the tasks of private security services.

The iceberg in Finland

It is difficult to obtain reliable statistics from the Finnish and international markets regarding private security services. Studies have been conducted and different kinds of market reports have been prepared (for example, Confederation of European Security Services, 2011; Finnsecurity, 2011), but only very limited conclusions can be drawn from these results. For instance, on the basis of the field classification of the Central Statistical Office of Finland, only a very limited picture is gained of the field in Finland. Most of the companies have other business on top of security services, which in turn allow these firms to classify themselves under other industries, like they often do.

In research carried out by the Technical Research Centre of Finland (Kupi *et al*, 2010), Finnish operators of private security services were viewed with the help of diverse source material. In the research, it was stated that altogether 499 companies belonged to the field in 2008. Even in this list, security operations formed only a part of the business in some companies. It is difficult to receive accurate numbers of the overall revenue and number and profile of personnel in private security services, as some of the companies operating in the field do not provide financial information. In addition, there are such companies operating in the field in which the security business is not the core business but is, however, an important part of the business. There are no statistics available in Finland on how large a portion of the turnover of these companies comes from the services or products of the security field.



The widened role of private security services can be seen in the Finnish security programmes and strategies of the society. Among all of them, there is a common view that the field is strongly involved in issues of internal security (Ministry of the Interior, 2009). Private security services are seen as a possibility and a downright necessity, so that we can respond to the mounting security needs. This reflects the politically desired state that prevails in the development of the field. These definitions of policy act as the definers of values and significances related to security as well as the basis for political arguments, when the private security sector's regulation is being developed.

Private security services refer to a strong international field that has a very visible role in many states, such as in maintaining prisons and training security authorities. Furthermore, the number of operators in private security services has grown strongly during the past years (for example, Van Steden and Sarre, 2007). Therefore, it is very surprising how little reliable information is available on the field. There is not even an ongoing discussion on how the statistics and definitions of the field could be improved.

Research Methodology

Research objectives

The aim of this study was to evaluate perceptions of the private security market in Finland. To reach our goals, we presented two main research questions: (1) How is the Finnish market expected to evolve in the near future? and (2) Are there any underlying opinion differences among the Finnish market players? According to Santonen *et al* (2007), decision makers use the futures developments as guiding principle of behaviour and are typically following (1) trends and anti-trends, (2) expected futures scenarios, or (3) emerging weak signals and seeds of change. Radical or disruptive innovations and technologies are innovations that eventually overturn the existing dominant technologies and innovations in the market (Bower and Christensen, 1995; Christensen, 1997). Interestingly, these are more likely derived by observing weak signals, which are unlikely to become reality; but when they are realised, they will have a significant change effect. On the contrary, incremental innovations derived from practice involve small evolutionary improvements that add value to existing offerings. These small-scale innovations are more typically evolving by following expected futures. As human behaviour is always future-oriented, and Finland is undergoing an extensive overall reform and legislation update concerning the private security sector (Ministry of the Interior, 2008, 2011), we argue that it is important to understand how the market players see the future of the Finnish private security market.

Typically, the studies have been comprehensive country studies on private security industry (for example, Minnaar, 2005; Prenzler, 2005; Jones and Newburn, 2006). There is also research focusing on general international comparisons of the expansion of national private security industries (for example, De Waard, 1999; Hakala, 2007; Van Steden and Sarre 2007). So far, the empirical studies evaluating the perceptions of the market players in the private security industry have been rare. Therefore, to fulfil this research gap, in this study, we are not only trying to identify the perceived future trends, but also verify the possible underlying opinion differences among different market players on the basis of their future perceptions. With the help of these emerging future trend classifications and com-



parison of different market groups' opinions, we are trying to identify possible discontinuity points within the Finnish private security service industry.

Construction of key measures and measurement assessment

On the basis of the private security service definitions presented in the section 'Introducing private security services as an industry', and as a result of a series of discussions with Finnish security authorities, practitioners, students, educational sector actors and our research group's long practical experience of the Finnish private security industry, an extensive 141-statement, electronic multi-item questionnaire was constructed. The questionnaire also included the following 10 statements regarding the future market perception, which was the focus of this study: (FUT1) *In my opinion, the private security service industry has a positive future*; (FUT2) *Regarding the private security service industry's development and innovation activities, Finland has become a trendsetter*; (FUT3) *In Finland, private security service education and research has been centralised, which enables cross-sectorial and -organisational collaboration*; (FUT4) *Private security service know-how has become an important export activity for Finland*; (FUT5) *The private security service market, including the number of jobs involved, is not growing as strongly as before*; (FUT6) *Private security service market players have not internationalised themselves*; (FUT7) *International regulations have been harmonised, which enables unified global markets*; (FUT8) *National and international operations do not require a trade licence as stated in the Services Directive*; (FUT9) *Unified standards and certification practices have been developed to private security service industry*; (FUT10) *In the future, private security services are grounded on comprehensive solutions that are utilising technologies*.

The entire 141-item questionnaire, including the above 10 future perception statements (FUT1–FUT10), was pre-tested and finalised in a few interviews with selected security sector specialists to make sure that all our questions and statements were semantically precise and understandable. After a few iterations, the final version of the online survey instrument was published. The defined statements were measured by using a 5-point Likert-scale, that is: 1 (=totally disagree), 2 (=somewhat disagree), 3 (=no opinion), 4 (=somewhat agree) and 5 (=totally agree). In addition to Likert-scale statements, a group of the following open-ended questions was included in the questionnaire: (OPEN 1) *What is your opinion regarding the private security industry future?* (OPEN 2) *Which product and service sectors have the biggest growth and development opportunities in the private security industry?* and (OPEN 3) *How will private and public sector collaboration and task sharing evolve in the future?*

Data collection

In order to recruit respondents to our study, known actors within the Finnish security sector, including educational institutes, security authorities, small and medium-sized companies (later SMEs) and large-scale private organisations, were contacted by email. In all, approximately 2000 emails were sent, which contained general information about the study and a



participation request accessed by clicking the provided link. As a result, during our answering period between March and May 2011, we received a total of 330 anonymous responses (response rate ca. 17 per cent). According to the demographic profile, 87 respondents had less than 2 years of working experience in the private security industry. As answering our research questions required a comprehensive understanding of private security services, these 87 answers were omitted from the final analysis. Thus, the accepted number of respondents in this study was 243.

The modest number of respondents and low response rate was expected owing to the selected online survey method and lack of systematic follow-up messages. Online survey response rate levels and trends have been studied by Baruch and Holtom (2008), and there are also numerous studies (for example, Couper, 2000; Evans and Mathur, 2005) that evaluate the reasons and consequences of non-response, including a heightened probability of statistical biases (Tomaskovic-Devey *et al.*, 1994). Therefore, the respondents' demographic profile presented in Appendix A, Table A1 was carefully compared to available statistic sources of the private security service industry, such as the Confederation of European Security Services' recent report, *Private security services in Europe* (2011), the Strom *et al.* (2010) report from the US market, and the Finnish registered security association's industry report (2011) from Finland, as well as some additional statistics from the Ministry of Education in Finland. Based on this comparison, we were convinced that our data set was adequate and heterogeneous enough to look for answers to our research questions, even if the number of women in the data set was fewer than their average market share would indicate (in our data set, 6 per cent versus the Finnish average 25 per cent).

Results

A descriptive profile and dimensionality of the future perceptions measurements

Before conducting a more in-depth analysis, we wanted to validate that our future perceptions measurement tool was solid, and we did not rush the conclusions on the basis of a poorly defined instrument. The level of internal consistency of our 10 future perceptions measures were evaluated using Cronbach's α test (Cronbach and Meehl, 1955). As a result, the reliability coefficient (0.593) was somewhat below the suggested limiting value of 0.700 (Nunnally, 1978; O'Rourke *et al.*, 2005). Thus, it seemed that our future perceptions measures did not reach the acceptable internal consistency. This indicated that our future perception instrument might not be unidimensional, but it was actually measuring multiple aspects of the future. In order to determine and verify the underlying dimensions, we applied a factorial analysis to all 10 of our individual items (principal component analysis; rotation method: Varimax with Kaiser normalisation). As quoted in Lewis and Byrd (2003), according to Cattell (1978), the adequate level for an exploratory factor analysis is three to six times as many respondents as variables as the experientially indicated desirable lower limit. Therefore, the sample size of our data, 243 respondents, was well above an adequate level for an exploratory factor analysis. The outcome of the factor analysis was four factors, which all had eigenvalues greater than 1.0 (Appendix B, Table B1).



Together, these four factors explained 67 per cent of the covariance among the items. All individual loadings were clearly greater than the suggested 0.45 limiting value (that is, loadings ranging between 0.562 and 0.747). Only one item, FUT9 *unified standards and certification practices have been developed to the private security service industry*, was loaded into two factors (that is, the individual item exceeded the value 0.45 in the case of two factor dimensions). FUT9 item loading to the F1 dimension was 0.608, while to the F2 dimension it was -0.455 . As FUT9 loading to F1 was substantially stronger and an additional Cronbach's α test and correlation analysis indicated a clearer relationship to the F1 dimension, FUT9 loading to the F2 dimension was ignored in the future analysis. Based on the items loaded into each dimension, we named these dimensions as: (F1) *Finland as a trendsetter and exporter in an open market environment*, (F2) *positive market future*, (F3) *comprehensive concept offerings in a slower growth market environment*, and (F4) *domestic-oriented private security markets*.

In order to visualise the result distribution among the four factors (see Figures 1–4), the original 1–5 scale was recoded into the following three classes: (1) *disagree*: including responses from 1 to 2.49, (2) *neutral*: including responses from 2.5 to 3.49, and (3) *agree*: including responses from 3.5 to 5. According to Figure 1, only 10 per cent of respondents believed in Finland's opportunities to become a trendsetter in an open market environment. A majority of the respondents (54 per cent) held neutral opinions. A bit over one-third of the respondents (36 per cent) disagreed with the statement. Interestingly, nearly 70 per cent of the respondents positively perceived the Finnish market future, while 26 per cent disagreed, and only 5 per cent had neutral opinions (Figure 2). Over half of the respondents

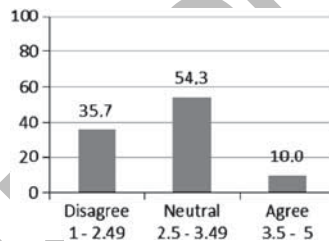


Figure 1: Finland as a trendsetter and exporter in an open market environment (Factor 1).

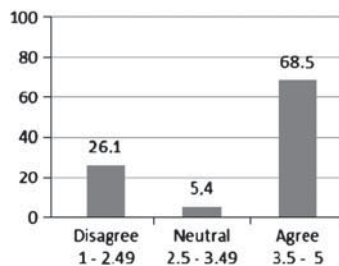


Figure 2: Positive market future (Factor 2).

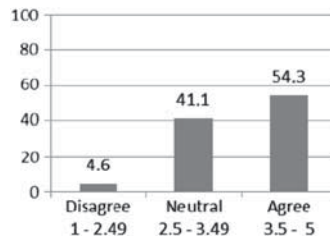


Figure 3: Comprehensive concept offerings in a slower growth market environment (Factor 3).

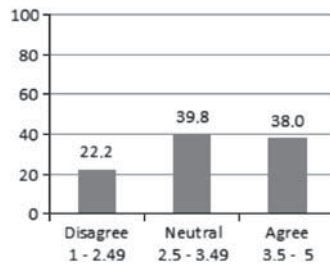


Figure 4: Domestic-oriented private security markets (Factor 4).

(54 per cent) agreed that the market growth will be slower in the future and grounded on comprehensive service offerings, while less than 5 per cent disagreed with the statement (Figure 3). The remaining 41 per cent had neutral opinions. Finally, the perceptions regarding international versus domestic orientation of the future market were most evenly divided (Figure 4). The largest group of the respondents (40 per cent) had neutral opinions, while the second largest group with a 38 per cent share agreed with the statement. The group that disagreed was the smallest with 22 per cent. To summarise the above descriptive profile results, there seemed to be some level of disagreement within our respondent group, which requires a more in-depth analysis.

Market structure effect on the market position

Especially the factor F1, *Finland as a trendsetter and exporter in an open market environment*, aroused our attention, as it was combined on the basis of six individual items, whereas factor F3 included only two items and factors F2 and F4 only one item. A closer evaluation of the wordings of the factor F1 items indicated that the following four items were somewhat related to market structure: FUT3: *In Finland, private security service education and research has been centralised, which enables cross-sectorial and -organisational collaboration*; FUT7: *International regulations have been harmonised, which enables unified*



global markets; FUT8: *National and international operations do not require a trade licence as stated in the Services Directive*; and FUT9: *Unified standards and certification practices have been developed to the private security service industry*. On the contrary, the following two items were more related to Finland's future market position instead of market structure: FUT2: *Regarding private security service industry's development and innovation activities, Finland has become a trendsetter* and FUT4: *Private security service know-how has become an important export activity for Finland*.

This logically divided construct caused us to doubt the dimensionality of the factor F1, even if this factor's Cronbach's α exceeded the limiting value (α was 0.775). Therefore, the additional factor analysis, including only the six items of factor F1: *Finland as a trendsetter and exporter in an open market environment*, was conducted. This analysis verified our assumption, and the result was a blurry two-dimensional construct in which multiple items loaded into both factor dimensions. A correlation analysis revealed that the items describing the market position (that is, FUT2 and FUT4) were strongly related to each other (correlation was 0.585*** at the 0.001 significance level). Also, an additional Cronbach's α test, including only these two items, resulted in a 0.737 α value and factor analysis with items FUT2 and FUT4, a one-dimensional construct with high-loading values (both 0.890). Interestingly, in the case of market structure items (that is, FUT3, FUT7, FUT8 and FUT9), internal correlations between items varied from 0.240** to 0.470**. Also, a Cronbach's α test was barely above a limiting value, resulting in a 0.702 α . This factor analysis with market structure items FUT3, FUT7, FUT8 and FUT9 revealed a one-dimensional construct with substantially high-loading values ranging from 0.682 to 0.783. This verified our doubt regarding the original factor construct dimensionality. In Figure 5, we have visualised our new conceptual factor construct.

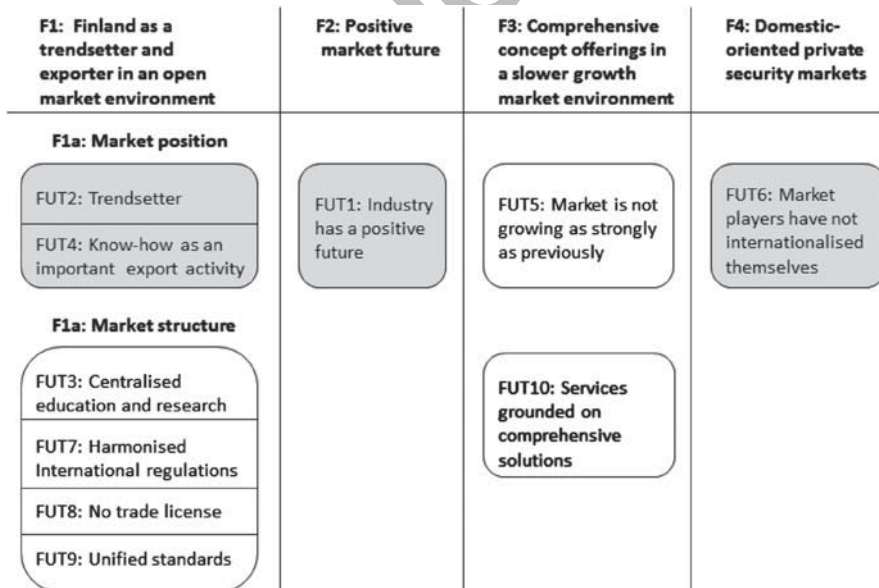


Figure 5: Conceptual factor construct.

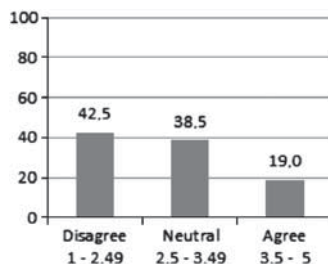


Figure 6: Market position (Factor 1a).

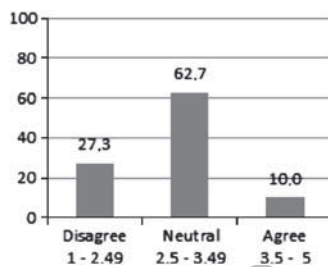


Figure 7: Market structure (Factor 1b).

In order to visualise the result distribution among the two new factors, F1a: *Market position* and F1b: *market structure*, the factor dimensions were recoded into the same three previous classes: (1) *disagree*: including responses from 1 to 2.49, (2) *neutral*: including responses from 2.5 to 3.49 and (3) *agree*: including responses from 3.5 to 5. According to Figure 6, only 19 per cent of respondents believed in Finland's opportunities to become a trendsetter and exporter (factor F1a), whereas 43 per cent disagree with this opinion. About 39 per cent of the respondents had neutral opinions. Interestingly, in the case of market structure factor dimension (Figure 7), a great majority (63 per cent) of the respondents had neutral opinions. There was a stronger tendency to disagree with the market structure statements (27 per cent) than to agree with them (10 per cent).

A linear regression and correlation analysis was conducted in order to evaluate how well the F1b market structure factor dimension would explain the F1a market position dimension (result tables omitted). According to our linear regression findings, the F1b market structure dimension is able to explain about 30 per cent of the F1a market position dimension (28 per cent when using items FUT3, FUT7, FUT8, FUT9 as a single combined F1b market structure factor dimension and 32 per cent when using these items as individual variables). From the educational institutes' point of view, our results were promising. It appeared that our respondents are suggesting that by combining private security service-related education and research activities (FUT3), it would have the strongest impact on the market position. A correlation between the FUT3 item and the combined F1a market position factor dimension



was a 0.529** correlation. The correlation between other market structure items (FUT7, FUT8, FUT9) and the F1a market position factor dimension remained clearly weaker, ranging from 0.301** to 0.362**. In practice, it seems that the respondents assumed that Finland's market success will evidently depend on the forthcoming market structure.

International regulation and standardisation, even at the EU level, is out of the full control of a small country such as Finland. Therefore, it is promising to discover that the Finnish market players trust in the power of education and research instead of believing that international regulation will somehow automatically open the doors for export activities. In practice, individual countries, including Finland, have a lot of room and flexibility to organise private security service-related education and research activities as they wish. However, decision makers such as the Ministry of Education and a ministry in charge of regulations, such as the Ministry of Justice and the Ministry of the Interior, should notice this underlying demand for education and research. Private security service companies will rely on the fact that national educational system will provide a skilful workforce, which is able to generate novel innovations with export potential and have the ability to operate in international market space. It seems that, in the private security service industry, education and research might provide a competitive advantage for some nations. As a more in-depth evaluation of the educational aspects of the private security service industry is out of the focus of this study, an additional analysis is suggested for further studies.

Grouping respondents based on the future perceptions

According to our previous analysis, it seems that the level of internationalisation and the degree of positivism in the future markets are the main sources of disagreement among our respondents. In order to evaluate these opinion differences deeper at a group level, we conducted a two-step cluster analysis. Instead of using previously constructed combined factor dimensions, we utilised our analysis with the items (FUT1) *In my opinion, the private security service industry has a positive future*; (FUT2) *Regarding private security service industry's development and innovation activities, Finland has become a trendsetter*; (FUT4) *Private security service know-how has become an important export activity for Finland*; and (FUT6) *Private security service market players have not internationalised themselves*, which all were semantically related to either market success or internationalisation. In the previously presented Figure 5, we have highlighted the items FUT1, FUT2, FUT4 and FUT6 in grey.

As a result of this cluster analysis, our respondent group could be divided into the following three groups: Group 1: international success via innovations (44 per cent of respondents), Group 2: success via domestic markets (31 per cent of respondents), and Group 3: pessimistic success vision (25 per cent of respondents). Cohesion and separation of this resulted cluster was fair, according to the average silhouette value 0.4. Detailed descriptive statistics of each group are presented in Appendix C, Table C1, and in Figures 8–11, we have visualised the result distribution between groups. In order to evaluate what kind of mean differences there were between the groups, Levene's test and a *t*-test were conducted (see Appendix C, Table C2). Based on these results, the main differences between identified groups 1, 2 and 3 can be summarised as the following.

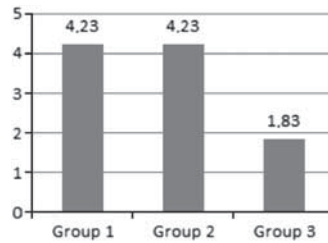


Figure 8: In my opinion, the private security service industry has a positive future (FUT1).

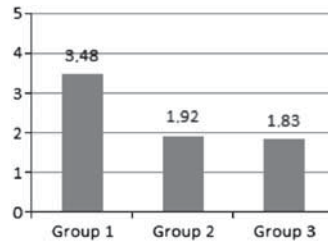


Figure 9: Regarding the private security service industry's development and innovation activities, Finland has become a trendsetter (FUT2).

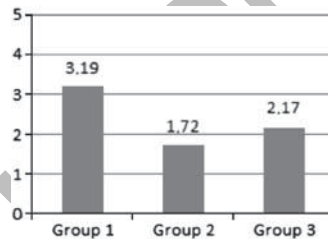


Figure 10: Private security service know-how has become an important export activity for Finland (FUT4).

Group 1 versus Group 2

Group 1: *international success via innovations* and Group 2: *success via domestic markets* are both seeing positive futures in the private security service industry (FUT1) and, therefore, their opinions do not differ on this item. The mean values were 4.23 for both groups. As group names should indicate, the main difference between groups is grounded on the belief of whether a positive future is a result of international or national actions (that is, FUT2, FUT4 and FUT6 items). The mean differences between FUT2: *Regarding private security service industry's development and innovation activities, Finland has become a trendsetter* (Group 1 mean=3.48, Group 2 mean=1.92, mean difference between groups=1.556**) and FUT4: *Private security service know-how has become an important export activity for Finland* (Group 1=3.19, Group 2=1.72, mean difference=1.468**) were

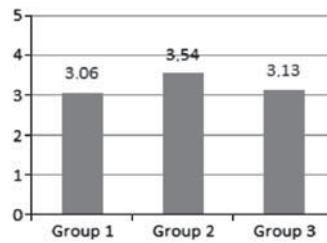


Figure 11: Private security service market players have not internationalised themselves (FUT6).

substantially stronger than in the case of FUT6: *Private security service market players have not internationalised themselves* (Group1=3.06, Group 2=3.54, mean difference= -0.477**). As the wording of the FUT6 item was reversed (that is, a higher mean value would indicate lesser internationalisation), the mean difference between Group 1 and Group 2 had a negative value. When all respondents in Groups 1 and 2 are summed together, about 75 per cent of our respondents sees the future of the private security market as positive. In our opinion, this reflects a strong belief for the future especially at the moment when the global market, especially Europe, is having economics crises.

Group 1 versus Group 3

The main difference between Groups 1 and 3 is their perception regarding the positive market future perception (FUT1) item. The mean difference between Group 1 (mean=4.23) and Group 3 (mean=1.83) was as high as 2.401**. There was also a clear opinion difference on whether Finland is going to be a trendsetter (FUT2) or not (Group 1=3.48, Group 3=1.83, mean difference=1.645**) or an important exporter (FUT4) (Group 1=3.19, Group 3=2.17, mean difference=1.025**). Where Group 1 saw innovations as a tool to generate international success, what Group 3 saw, with a pessimistic success vision, did not support this assumption. A bit surprisingly, both groups seemed to agree on how strongly market actors will internationalise in the future (that is, opinions within item FUT6 did not differ statistically even though there was a minor mean difference). This contradictory result might be partially explained by our cluster structure in which over half of the respondents are not seeing Finland as an important exporter of private security services. Therefore, each group's responses, in the case of the FUT6 item, were reflecting this situation. In practice, FUT6's importance as a separator was clearly the weakest (0.033) when compared to our other items (FUT1 importance=1, FUT2=0.515 and FUT4=0.345). Thus, when an additional two-step cluster analysis was conducted without the weakest item, FUT6, an average silhouette value measuring cohesion and separation of the resulted cluster increased to a good level of 0.5. In this cluster setting, few respondents changed the groups comparing to our original four-item-based cluster groups; but in all, the percentage shares of the groups were nearly the same.

Group 2 versus Group 3

Finally, when Group 2: *success via domestic markets* and Group 3: *pessimistic success vision* differences were measured, naturally the most significant difference was identified within FUT1, a positive future item (Group 2=4.23, Group 3=1.83, mean difference=2.397**)



as in the case between the Group 1 and Group 3 comparison. A bit surprisingly, Group 3 members, who had a pessimistic success vision, are evaluating Finland export possibilities (FUT4) a bit higher than Group 2, the domestic success believers (Group 2 = 1.72, Group 3 = 2.17, mean difference = -0.444^{**}). Also, in the case of item FUT6: *private security service market players have not internationalised themselves*, Group 2 had a more pessimistic perception of the future than Group 3 (Group 2 = 3.54, Group 3 = 3.13, mean difference = -0.409^{**}). It appears that Group 2 strongly sees the private security service market as a national, instead of an international, market. This finding might somewhat explain the tension within the Finnish private security market discussion, as opinions regarding the internationalisation aspect are significantly different.

Finally, additional comparison analysis between items FUT1, FUT2, FUT4 and FUT6 was conducted in order to verify if background variables such as (1) large versus small companies, (2) job title or (3) high versus low education level were affecting the above result. As a result, it appeared that respondents with managerial job position were more optimistic about the future of private security industry (FUT1) comparing respondents with employee position (mean values were 4.01 versus 3.23). Other opinion differences were not statistically significant.

Deepening understanding with the help of open-ended questions

In order to deepen our understanding, respondents' answers for the following voluntary open-ended questions were grouped on the basis of future perceptions grouping results: (Q1) *What is your opinion regarding the private security industry future?* (Q2) *Which product and service sectors have the biggest growth and development opportunities in the private security industry?* and (Q3) *How will private and public sector collaboration and task sharing evolve in the future?* A response rate comparison between Groups 1, 2 and 3 is presented in Table 1.

Interestingly, respondents in Group 3, which shared a pessimistic market success vision, answered the open-ended questions most actively. Especially in the case of question Q1, the difference with the other two groups was obvious (that is, nearly two-thirds in Group 3 answered, whereas in Groups 1 and 2, only about one-third had answered). Respectively, the response difference was also evident in the case of question Q2, even if the difference was not as strong (that is, in Groups 1 and 2, about one-third answered, and in Group 3, about a half answered). The response rates in question Q3 were more even, ranging between 28 per cent and 39 per cent.

Table 1: Open-ended questions response rate comparison between Groups 1, 2 and 3

	Group 1 (%)	Group 2 (%)	Group 3 (%)
Q1: What is your opinion regarding the private security industry future?	31	35	59
Q2: Which product and service sectors have the biggest growth and development opportunities in the private security industry?	34	32	48
Q3 How will private and public sector collaboration and task sharing evolve in the future?	28	31	39



Group 3

Respondents in Group 3, who shared a *pessimistic success vision*, were afraid that large multinational companies will overrun smaller national-level players, as the following direct quotes indicate: *'a few large corporations will dictate'*. Moreover, in multiple comments, security services with a multi-service approach were noted as a threat for the industry. Respondents argued that the actual security-oriented tasks will become less important owing to the heavy load on other non-security tasks (*'poor, large companies will dominate via multi-service offerings, while security issues will become unessential'*). This transition will jeopardise the motivation among security personnel, especially if additional tasks include sanitation and real estate services (*'Profession valuation will fall', 'Skilled workers and those with professional pride move elsewhere'*). It was assumed that the whole industry will turn in to a low-wage, low-education industry, where employees are working part time and there is a great turnover among employees (*'With the present wages, you will only get 18-year-old students', 'Workers do not stay for long'*). Respondents called for new products and services, which have strong relation to security operations, instead of multi-service activities with lesser security focus. Combined guarding and emergency care duties were presented as an example of a favourable trend for new service offerings. Interestingly, some of the respondents had very negative opinions regarding the transition from public to private security operations. In practice, they required that this transfer should not be conducted under any circumstances. They were afraid that private sector companies do not have the potential to perform well.

Group 2

Group 2, which believed in the *success via domestic markets* vision, had clear growth-oriented opinions compared to Group 3. Partially, this growth would be a result of outsourcing public security tasks to private sector companies owing to regulation changes (*'private sector is increasing at the public's expense'*). Even if Group 2's members widely agreed that some of the public sector tasks will be produced by private companies, there were some random doubts that private sector cannot manage the given tasks (*'help is sought from the private sector to the public sector, but due to current trends, it cannot offer it'*). Better cost-effectiveness was offered as a reason by Group 2 members regarding why the transition from public to private will occur anyway (*'production model is cheaper in the private sector'*). Group 2 also shared the opinion with Group 3 regarding the domination of large-scale companies at the expense of SME. Respondents in Group 2 argued that the market will be covered by homogeneous companies, which have identical or nearly identical offerings within the same price range (*'the market players can't be separated from each other in terms of quality and price'*). Thus, the heavy price competition will assure better cost-effectiveness in the private sector compared to the public sector. The strong price competition among the large-scale players is likely to force SMEs out of the market especially in countries such as Finland, where national-level market size is smaller compared to larger European countries.

Group 1

Respondents in Group 1, sharing the *international success via innovations* vision, had identical opinions with Groups 2 and 3 regarding the domination of larger corporations. In this group, the scenario that SME companies will be merged with larger companies was



also suggested. As a result of the strong price competition (*'fierce price battles for contracts'*), it was assumed by the members of Group 1 that the salaries among private security employees will remain low (*'Underpaid industry'*). The most interesting observation occurred regarding multi-service strategy. Contrary to Group 3, respondents in Group 1 saw a multi-service approach as a positive phenomenon, which will bring security companies closer to their customers and offer better support to their businesses, whereas Group 3 members saw it more or less as a threat. Finally, among Group 1, technology was also raised as a service enabler in many comments (*'Remote monitoring and controlling'*, *'Equipment is emphasised more in the future'*). This was not surprising owing to their innovation-driven market perception. As technology will play an increasingly important role in the security sector, new players will likely enter this market. It was noted by one of the Group 2 members that due to open standards and internet protocol (IP)-based solutions, traditional security operators will encounter competition from ICT companies. This will enhance competition and force security sector players to be on alert.

Conclusions

This study was one the first attempts to empirically evaluate the perceptions of the private security market in general and especially in Finland. By using *national versus international* and *positive versus pessimistic success* dimensions, we were able to identify the following three different future scenarios for the Finnish private security market: (1) international success via innovations, (2) success via domestic markets, and (3) pessimistic success vision. It appeared that 75 per cent of our respondents saw the future of the Finnish private security market as positive. Moreover, respondents with managerial job position were more optimistic than workers. This reflects a strong belief for the future especially at the era of a turbulent economic environment. On the other hand, this was partially expected, as on the average market growth of the private security industry in Europe has been over 13 per cent for previous years (Confederation of European Security Services, 2011). The Finnish market players trust in the power of education and research as a door opener for private security export activities. Thus, the importance of a high-quality, national-level educational system, which offers support to export activities in a form of skilful and capable personnel, is emphasised. From the Finnish perspective, this observation was also logical. According to the Global Competitiveness Report 2012–2013 (Schwab, 2012), Finland is not only ranked number one in higher education and training indicators, but also ranked number two in innovation indicator. Finland's strong focus on education and innovation activities over recent decades and the dedication to still increase the education level of the population (Tutkimus- ja innovaationeuvosto, 2010), most likely also influence our respondents' opinions. Well-functioning educational and research systems might provide a competitive advantage for some nations. As educational aspects of the private security industry were out of the scope of this study, further studies focusing on the quality aspect of Finnish and other European private security sector educational systems are suggested. These comparison studies should not include innovation-driven economies such as Finland, but also countries at different stages of development (Schwab, 2012).

The future of the private security industry in Finland is assumed to be characterised by the dominance of large (multi-national) companies at the expense of SMEs. According to



the Confederation of European Security Services (2011), the average combined market share of the top three private security companies in Finland is higher than on the average in Europe (65 per cent versus 55 per cent). Thus this appears to be a genuine threat especially in Finland. *Second*, another significant market characteristic, which also partially divides opinions among market actors, is the attitude towards multi-service activities. These tasks are a combination of security and non-security-related tasks, which for others are jeopardising the profile of the industry, while others see them as a tool to get closer to their customers and increase the business volume. Regarding the percentage share of single versus multi-service private security companies, European countries differ significantly. In countries like France, Spain and Sweden, private security companies are only carrying out private security activities, whereas in countries like Germany and Italy, over 85 per cent of companies are carrying out additional activities next to private security activities (Confederation of European Security Services, 2011).

Third, owing to homogeneous service offerings, the industry is expected to face strong price competition, which will force companies to ensure cost-effectiveness. The side effect for security personnel will be the continuum of low-level salaries as noted by Paasonen and Huumonen (2011). The average monthly starting salary of a private security guard is 1600 euros, whereas private sector employees' median salary in Finland is 2951 euros (Confederation of European Security Services, 2011; Statistics Finland, 2011). As a result of tough price competition, the SMEs might also disappear, as their capability to compete with prices is more limited. Thus, another interesting research topic, in addition to the quality of the educational system, would be the prerequisites of profitable business from an SME's viewpoint at the European level. *Fourth*, the part of expected private security sector market growth will be caused by outsourced public sector duties. In Europe, the average percentage of commercial contracts for the public customers has been about 25 per cent. However, within the market actors, there exist some doubts regarding the private sector's ability to handle these new duties. The examples of the London 2012 Olympics disaster (for example, Booth and Hopkins, 2012) and other similar events are feeding these fears.

Finally, technology as a new business enabler will play a greater role in the future. The European Commission has indicated the desire for the creation and enhancement of true internal markets as the European companies continue to be in a dominant position in most of the security sectors around the world. Favourable internal market conditions are essential to maintaining and expanding the competitive edge of the companies, which has led the European Commission to launch an Action Plan for strengthening the role of the EU's security industry in new international markets. In order to reach this goal, the Commission has proposed, among other things, the standardisation of the certification procedures, improved capitalisation of synergies created between security and defence technologies, reduction of gap from research to market and improved integration of security technologies regarding societal dimensions (European Commission, 2012). However, the increased importance of technology will attract new rivals from other industries and challenge traditional security sector actors.

Our attempt to understand the private security market is limited by national-level data, and thus generalisation on the European and especially on the global level is limited. Further comparison studies between different markets are suggested in order to better understand the genuine nature and characteristics of the private security industry.



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Appendix A

Table A1: Respondents' profile ($N=243$)

Demographic characteristics	<i>Freq.</i>	<i>Valid per cent</i>	Demographic characteristics	<i>Freq</i>	<i>Valid per cent</i>
<i>Gender</i>			<i>Education</i>		
Male	227	93.4	Basic education	10	4.1
Female	16	6.6	Vocation or Upper secondary school	152	62.6
			Lower university degree	54	22.2
			Higher university degree	27	11.1
<i>Job position/title</i>			<i>Age (years)</i>		
Student	4	1.6	< 18	0	0
Employee	115	47.3	18–25	41	16.9
Officer	51	21.0	26–35	102	42.0
Management	37	15.2	36–49	70	28.8
Entrepreneur	25	10.3	> 50	30	12.3
Other	11	4.5			
<i>Working experience in security sector (years)</i>			<i>Number of employees in the company</i>		
2–5	58	23.9	No hired labour	7	2.9
5–10	59	24.3	Less than 10	23	9.5
Over 10	126	51.9	10–49 employees	37	15.2
			50–249 employees	33	13.6
			Over 250 employees	110	45.3
			Missing	33	13.5
<i>Main lines of business</i>			<i>Number of lines of business</i>		
Guarding	152	62.6	1	163	67.1
Stewarding	78	32.1	2	36	14.8
Security checking	26	10.7	3	19	7.8
Security protection	24	9.9	4	12	4.9
Manufacturing/sales	15	6.2	5	6	2.5
Education	50	20.6	6	2	0.8
Professional services	51	21.0	7	2	0.8
			Missing	3	1.2
<i>Security business turnover (%)</i>			<i>Employees working in security business (%)</i>		
Less than 20	76	31.3	Less than 20	86	35.4
20–39	16	6.6	20–39	16	6.6
40–59	6	2.5	40–59	3	1.2
60–79	7	2.9	60–79	7	2.9
80 or more	138	56.8	80 or more	131	53.9
<i>International business turnover (%)</i>					
Less than 20	186	76.5			
20–39	13	5.3			
40–59	12	4.9			
60–79	8	3.3			
80 or more	24	9.9			



Appendix B

Table B1: Future perceptions factor model and descriptive statistics of individual variables (N=243)

Factor	Mean	SD	Factor loading	Items correlation with sub-score	Items correlation with total score	Eigenvalue
(F1) <i>Finland as a trendsetter and exporter in an open-market environment</i>	2.65	0.653	—	—	0.425**	3.140
FUT2: Regarding the private security service industry's development and innovation activities, Finland has become a trendsetter	2.58	1.086	0.747	0.743**	—	—
FUT3: In Finland, private security service education and research have been centralised, which enable cross-sectorial and -organisational collaboration	2.84	0.916	0.732	0.724**	—	—
FUT4: Private security service know-how has become an important export activity for Finland	2.47	1.015	0.722	0.740**	—	—
FUT7: International regulations have been harmonised, which enables unified global markets	2.67	0.899	0.639	0.661**	—	—
FUT8: National and international operations do not require a trade licence as stated in the Services Directive	2.65	0.775	0.562	0.589**	—	—
FUT9: Unified standards and certification practices have been developed for the private security service industry	2.66	0.896	0.608	0.661**	—	—
(F2) <i>Positive market future</i>	3.59	1.187	—	—	0.748**	1.440
FUT1: In my opinion, the private security service industry has a positive future	3.59	1.187	0.697	1.000**	—	—
(F3) <i>Comprehensive concept offerings in a slower growth market environment</i>	3.39	0.674	—	—	0.322**	1.129
FUT5: The private security service market, including the number of jobs involved, is not growing as strongly as before	3.32	0.983	0.645	0.765**	—	—
FUT10: In the future, private security services are grounded on comprehensive solutions that utilise technologies	3.45	0.870	0.705	0.678**	—	—
(F4) <i>Domestic-oriented private security markets</i>	3.22	0.943	—	—	0.479**	1.000
FUT6: Private security service market players have not internationalised themselves	3.22	0.943	0.726	1.000**	—	—

**Correlation is significant at the 0.01 level.



Appendix C

Table C1: Descriptive statistic comparison between Groups 1, 2 and 3 (N=243)

Variable name	Group 1: International success via innovations (N=94, 44% of respondents)		Group 2: Success via domestic markets (N=65, 31% of respondents)		Group 3: Pessimistic success vision (N=54, 25% of respondents)	
	Mean	SD	Mean	SD	Mean	SD
FUT1: In my opinion, the private security service industry has a positive future	4.23	0.663	4.23	0.460	1.83	0.423
FUT2: Regarding the private security service industry's development and innovation activities, Finland has become a trendsetter	3.48	0.714	1.92	0.620	1.83	0.863
FUT4: Private security service know-how has become an important export activity for Finland	3.19	0.793	1.72	0.484	2.17	1.023
FUT6: Private security service market players have not internationalised themselves	3.06	0.853	3.54	1.017	3.13	0.933

Table C2: Mean difference comparison between Groups 1, 2 and 3 (N=243)

Items	Levene's test for equality of variances		t-test for equality of means				
	F	Sig.	t	df	Sig. two-tailed	Mean diff.	SE diff.
<i>Group 1 versus Group 2</i>							
FUT1	8.54	0.004	0.37	157	0.971	0.003	0.095
FUT2	12.74	0.000	14.61	149	0.000	1.556	0.107
FUT4	11.40	0.001	14.46	154	0.000	1.468	0.102
FUT6	7.00	0.009	-3.187	122	0.002	-0.477	0.149
<i>Group 1 versus Group 3</i>							
FUT1	14.59	0.000	26.85	144	0.000	2.401	0.089
FUT2	1.52	0.220	12.49	146	0.000	1.645	0.132
FUT4	7.85	0.006	6.79	146	0.000	1.025	0.151
FUT6	0.20	0.657	-0.437	146	0.663	-0.066	0.151
<i>Group 2 versus Group 3</i>							
FUT1	1.98	0.162	29.34	117	0.000	2.397	0.082
FUT2	12.64	0.001	0.64	94	0.524	0.090	0.140
FUT4	38.43	0.000	-2.93	72	0.005	-0.444	0.152
FUT6	3.22	0.075	2.23	117	0.025	0.409	0.180