

## **Bringing Export Performance Metrics into Annual Reports:**

### **The PERFEX Scorecard\***

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21 February 2005

\* This research was funded by a research grant from the 6th European Framework Program, Specific Support Action-CoCombine. Luis Filipe Lages is grateful to “Nova Égide”, Carmen Lages to “UNIDE/ISCTE” and Cristiana Raquel Lages to “Fundação para a Ciência e a Tecnologia”. The authors also thank the support of UMIST (UK) for data collection, and the constructive comments of Paulo Gomes, Andrew Lancastre, Rui Vieira, JIM reviewers and Daniel C. Bello.

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#### **ABSTRACT**

At a time when exporting activity is becoming a major resource for creating firms' value and national economic wealth, it is surprising that annual company reports rarely distinguish between domestic market performance and the performance of export markets' operations. Even more rarely do annual reports provide information on annual indicators of *specific* export ventures performance. Shareholders might assume that if executives choose not to disclose export information in annual reports their exporting activity is not relevant or not successful. Trying to overcome this state of affairs, the authors develop and test a new measure for assessing the Annual Performance of an Export Venture (the APEV scale). The new measure comprises five dimensions: 1) annual export venture's financial performance; 2) annual export venture's strategic performance; 3) annual export venture's achievement; 4) contribution of the export venture to annual exporting operations; and 5) satisfaction with annual export venture's overall performance. In addition, the APEV scale is used to generate a scorecard of PERFormance in EXporting (the PERFEX scorecard) to be included in annual reports. The PERFEX scorecard allows the assessment of export performance at the corporate level while comparatively evaluating all export ventures of the firm. Both the scale and the scorecard are expected to help disclose export (ventures') performance and are provided as useful instruments for annual planning, management, monitoring, and improvement of exporting programs.

**Keywords:** Export Performance; Export Marketing; APEV; PERFEX; EXPERF; Scorecard

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*“Even though (managers) found it ‘impossible’ to compare performance across ventures, they had to do so because they had to make decisions concerning resource commitment and so on for each venture(...) Managerial judgment of the performance of individual export ventures is extremely important.”*

(Madsen 1998, pp. 84, 91)

*“It is imperative that firms use their annual reports to (...) provide measures of marketing performance. (...) It is this so-called ‘soft-side’ that increasingly differentiates a successful company from one that is not. The natural question, therefore, is how to resolve this dilemma”.*

(Herremans and Ryans 1995, p. 58)

## **INTRODUCTION**

These days organizations have a wide range of metrics at their disposal for assessing annual performance. This process, which was first explored in the 1920s by Alfred Sloan and Donaldson Brown at General Motors, is today a crucial topic not only in the managerial literature (e.g., Cooke 2001; Kerr 2003; Melnyk and Christensen 2000; Neely 1998; Smith 2000) but also across the different fields of management research (e.g., Beamon 1999; Ittner and Larcker 1998; Melnyk, Stewart, and Swink 2004; Neely 1999). When looking specifically at the marketing field, performance metrics is one of the most important contemporary topics. It was the core theme of a 2004 Special Issue of the *Journal of Marketing*, which contained a group of challenging articles (see: Lehmann 2004; Rust et al., 2004). Likewise, the Marketing Science Institute has recently organized a conference on the topic (MSI/LBS 2004) and has once more announced that performance metrics will remain a top tier priority for 2004-2006.

Equally, in the international marketing field, 40 years after Tookey's (1964) pioneering work, research on performance of export ventures is more alive than ever (see for example: Diamantopoulos 2004; Morgan, Kaleka, and Katsikeas 2004; Lages and Lages 2004; Lages, Lages, and Lages 2005). Although the current intensive interest on export

performance metrics is recognized, the conceptual development of this topic is relatively recent (Fraering 1996; Matthyssens and Pauwels 1996; Madsen 1987) and empirical efforts even more so (see: 1998 JIM Special Issue on the topic as a major contribution). Different measures to assess export performance have been used, namely when analyzing its antecedents (see as reviews: Aaby and Slater 1989; Zou and Stan 1998; Leonidou, Katsikeas, and Samiee 2002) and, more recently, its outcomes (see: Lages and Jap 2003; Lages, Lages, and Lages 2003; Lages and Montgomery 2004). The diverse use of export performance measures questions the comparability of existing findings, as researchers wonder if existing results are either a consequence of the variables related to export performance or of its operationalization (Zou, Taylor, and Osland 1998). It would be useful if researchers could build on existing scales to develop future measures that could be universally accepted.

As pointed out in earlier research, although academics might contribute to managers' understanding and application of metrics, the "topic of metrics as discussed by managers differs from the topic of measurement as typically discussed by academics" (Melnik, Stewart, and Swink 2004, p. 210). Practitioners typically work with different time scales and have different outcome expectations than those of academics (Likierman 2004). Only a very limited number of academic research studies are concerned with the development and analysis of metrics to be included in annual reports (see Abdeen 1991 as an example).

At a time when marketing researchers are arguing that for "making marketing matter" it is necessary to link subjective marketing metrics to financial performance (Bolton 2004; Lehmann 2004), one further step could be the inclusion of subjective international marketing metrics in annual financial reports. As suggested by previous research, "the individual or collective action of the readers of annual reports can influence corporate

policies and decisions” (Abdeen 1991, p. 24). Hence, when looking at the international marketing field, we strongly believe that if more subjective export measures were included in annual reports, international marketing executives and export managers would have more impact next to the different stakeholders, namely CEOs and CFOs.

In the pages that follow, we justify the need to bring export (ventures’) performance into annual reports. We then present a brief review of the export performance literature. We extend the EXPERF scale (Zou, Taylor, and Osland 1998) to develop the APEV scale, a new five-dimensional measure for assessing the annual performance of an export venture. While building on the APEV scale, we then present a tool to assess PERFormance in EXporting (i.e. the PERFEX scorecard) at the corporate level. Results are presented and their implications for theory, managerial practice and public policy making are then discussed. We conclude with research limitations and directions for further research.

## **THE FUNDAMENTAL NEED TO BRING EXPORT PERFORMANCE METRICS INTO ANNUAL REPORTS**

Six major reasons justify a fundamental need for the disclosure of export performance metrics in annual reports. The first reason is to thoroughly communicate the firm’s situation in the global arena. At a time when the exporting activity is instrumental in the determination of enterprises’ value and national economic performance, and changes in the international context are constant and demand immediate responses, most stakeholders (e.g., shareholders, investors, executives, and government) seek export information in annual reports to form their views and decisions. These stakeholders expect to have access to export data that allows them to evaluate the (un)success of each export operation. Since these data are used to estimate the potential and the performance of international activities, firms would benefit from answering to those requests. The

credibility and importance of the export operations would be promoted from the shareholders' viewpoint.

Second, to support annual monitoring. There is a need for a supporting tool in export decision making that allows controlling the way resources are annually administered and allocated to the different export ventures. Annual export performance metrics would help export managers to clearly define yearly objectives for particular products in specific markets, which would allow them to better control the cause of each export venture's (un)success. In particular, when addressing exporting problems, export performance metrics can be used as a guide to export managers and firm's employees. Metrics might also be used as a key monitoring tool in a great variety of situations, such as exportation of new product and exploration of a new export market, or when major changes occur, such as a firm's restructuring or downsizing across divisions; export operations' performance has been substandard or has slipped from past higher levels; or international business is turning downward and top managers try to keep tight controls on the exporting activity.

A third reason is to help to establish annual priorities. Despite managers knowing intuitively in which ventures to invest their efforts, it may become very difficult to assign priorities and gauge the resulting annual benefits of each venture, the reason being that there is no established measure to assess annual performance for individual export ventures. Hence, the definition of a clear metric and the attribution of different weights to different performance measures as well as to different ventures might play a major role in defining where the focus should be.

Fourth, it can be a *motivation* tool for export staff members. By relying on comprehensible data publicly presented in annual reports, human resources can be rewarded (e.g. bonus, promotion) when achieving annual exporting goals. Moreover,

when export performance is positive all the firm's stakeholders are more likely to react positively, and hence export managers are in a better position to request more human and financial export support (Lages and Montgomery 2004).

A fifth reason is to support benchmarking and improvement. Both companies and executives have the pressure to develop and apply systems that improve the export activity. Annual disclosure of export ventures' performance might provide both with a benchmark to track the progress of export operations over time. Moreover, this benchmark might be the basis for sharing information between export venture's managers within and across firms as a way to identify which exporting ventures perform better, allowing benchmarking the best practices to the ventures that are performing poorly.

Last but not least, the inclusion of export performance metrics into annual reports would allow matching research with the frame of reference employed by managers. Since export planning is typically done on an annual basis and a significant share of export managers' time is spent in assessing *annual* performance of *individual* export ventures (Lages and Lages 2004), by developing annual export venture's performance appraisals researchers might provide powerful managerial tools. Moreover, researchers cannot ignore the fact that managers' frame of mind relates to annual results. Annual export performance relate directly to managers' personal interests, as a positive/negative performance might have an immediate effect on them (e.g. having a salary bonus *versus* being fired) (Lages and Montgomery 2004).

On the basis of these arguments, a credible disclosure of export performance information is a basic requirement in annual reports.

## **EXPORT PERFORMANCE MEASUREMENT**

“Every firm, every activity, every worker needs metrics.”

(Melnyk, Stewart and Swink 2004, p. 209)

### **The Importance of Using Multiple Export Performance Metrics**

The export marketing literature suggests that a set of multiple items and dimensions to assess annual export venture's performance is required (cf. Diamantopoulos 1998). Several underlying reasons might justify it. First, throughout the history of performance reporting there has been a consistent dilemma. While a single performance measure is not good enough to say that the firm is in shape, it is enough to tell that the firm is ill. As stated by Ambler (2001, p. 17), “there are no measures of corporate health, only of ill health.” Hence, if a group of 14 export performance metrics finds nothing wrong, then the export operations are *probably* doing well. On the other hand, a single indicator is sufficient to indicate exportation sickness. The higher the number of measures, the higher the likelihood of assessing the real situation of the firms.

Another major obstacle to performance measurement is that firms have difficulties in finding the appropriate balance between the short and long term. When some dimensions of export performance measurement increase, others might not follow it (e.g. short-term financial performance versus long-term strategic performance). Hence, both short and long-term measures should be included to assess performance.

Different firms from different sectors tend to emphasize different measures of export performance for internal (e.g., mission, goals, resources, strategies) and external (politico-legal, economic, socio-cultural and technological) reasons. Because companies understand export performance in a variety of ways, results are often not comparable across export ventures within a firm as well as across companies. Altogether these

issues justify the need for a set of multiple items and dimensions to assess annual export venture's performance.

### **The Relevance of Subjective Measures to Assess Export Performance in Annual Reports**

The annual report should account for management's view of performance (Cumby and Conrod 2001). Organizations do not have unlimited resources and do not operate in a risk-free environment where the future can be predicted. Hence, they need to have tools that, while supporting them to take decisions, allow better monitoring the allocation of their resources. The clear limitations of financial metrics in assessing performance demand the inclusion of subjective measures in annual reports. Investment analysts increasingly rely on subjective measures to make major investment decisions. Indeed, a recent survey developed by the Institute of Management Accountants (IMA) revealed that a vast majority of financial professionals indicate that nonfinancial measures should be used more extensively within their companies (see: Frigo 2002).

Similarly, in an international marketing context, there are several factors supporting the use of a subjective approach for exporting firms. First, obtaining accurate data on financial export performance is difficult, because export managers might be unwilling to respond openly and effectively to absolute values (Katsikeas, Piercy, and Ionnidis 1996; Yang, Leone, and Alden 1992). As previously discussed, in many cases company reports and financial statements do not provide specific information on the different export ventures (Madsen 1998).

Second, export performance is a complex construct in the view of the firm. Financial success for one company may constitute failure for another, as performance assessment is often idiosyncratic to the type of firm and its setting (Greve 1998). For example, the existing differences in terms of characteristics of the market, level of

competition and technology intensity might lead to a comparison of financial measures that do not have the same meaning across the various firms (Katsikeas, Piercy, and Ionnidis 1996). Moreover, financial export performance measures do not indicate whether or not a firm has adequately exploited existing export opportunities (Cavusgil 1984). This explains in large part why managers tend to use their own perceptions of performance, rather than objective values, in order to formulate their own decisions (Bourgeois 1980).

Finally, although objective assessments of actual performance may be regarded as more trustworthy, this type of approach may raise different measurement problems. Both stakeholders and managers may have different opinions about which operational measures to use when setting targets, and it thus becomes very difficult to find agreement on which and how to use financial measures to assess export performance (Madsen 1998). Additionally, some measures (e.g. profitability, ROI, cash flow) might raise comparability problems due to different accounting practices across firms.

All these reasons might explain why subjective measures have been proven to be valid in measuring export performance and in determining the way in which performance is associated with managerial decisions (Katsikeas, Leonidou, and Morgan 2000). Therefore, the APEV measure developed in this paper is subjective. Nevertheless, in terms of mode of performance assessment, research is encouraged to combine objective and subjective indicators (Venkatraman and Ramanujam 1986). The PERFEX scorecard attempts to incorporate both types of measures.

In sum, we argue that a possible way to further develop the export marketing field is by building multi-dimensional scales that rely on previous literature.

## DEVELOPMENT OF THE APEV SCALE

It is proposed that it is important to develop multi-dimensional export performance scales that take into consideration the time frame (e.g., performance in a single year or multiple years) as well as the unit of analysis (e.g., performance at the corporate level or at the export venture level). This would help to diminish the confusion in the export marketing literature by improving the quality and scope of export performance measurement. Moreover, the possibility of clarifying and establishing priorities in specific export performance domains is also more likely.

The APEV scale relies on previous literature as well as on managers' perceptions of yearly export venture's performance. As our focus is on a specific export venture in a specific year, responding executives have provided detailed (and subjective) knowledge of its performance.

Although many researchers would agree with Churchill (1979) that developing a valid scale involves refinement and improvement of existing scales, few export performance studies have done so (see Styles 1998 as a notable exception). In the present study we respond to a call by Zou, Taylor, and Osland (1998) and chose to re-examine the EXPERF scale, a widely accepted multi-dimensional export performance scale. Although we use as a basis the measurement domain of export performance to build the new APEV scale, we focus on a specific time-frame -the *annual* performance- and unit of analysis -an *individual* export venture. In this section we start by re-examining the EXPERF scale and then justify each dimension of the APEV scale.

### The EXPERF Scale

According to a recent meta-analysis (Katsikeas, Leonidou, and Morgan 2000), the great majority of studies assessing export performance do so at the corporate level,

and a mere 12% at the export venture level. Despite the notable efforts in recent years to operationalize export performance as a construct using a specific unit of analysis, quite often these efforts are not explicit in the constructs' names. A typical example is the EXPERF scale. Zou, Taylor, and Osland's (1998) study presents a multi-item scale with three dimensions: financial export performance, strategic export performance, and satisfaction with the export venture. Although all the nine items that comprise the EXPERF scale were collected specifically at the export venture level, the scale was named broadly as an "Export Performance" measure, implying that all the questions were made at the corporate level. When analyzing in detail the three dimensions composing the EXPERF scale (see Zou, Taylor, and Osland 1998, p. 48), we find that these authors use the expression "Export Performance" for two of the dimensions and with regard to the third dimension the expression "Export Venture" is used. Since all the data were collected at the export venture level, we suggest that all of the three constructs should have been named accordingly. The dimension "financial export performance" could have been named "export venture's financial performance" and "strategic export performance" as "export venture's strategic performance".

Additionally, we suggest that a more accurate name for the third dimension "satisfaction with the export venture" could have been "export venture's achievement". The argument is that that the established literature typically analyzes export satisfaction by questioning managers about their satisfaction or dissatisfaction with specific indicators (see e.g., Seifert and Ford 1989; Evangelista 1994). Moreover, we believe that the three items comprising this dimension capture a broader concept than satisfaction, as they capture the extent to which the export venture has been satisfactory, successful, and met expectations. This dimension is able to capture the extent to which performance has matched the aspiration level of the firm's manager, which may be used

as a reference point to assess the degree of the export venture's achievement. High achievement is realized if the perception of the export venture's performance is greater than or equal to expected performance, and failure if it is less.

### **The APEV Scale**

The APEV scale is developed as a new measurement scale for assessing the performance of an individual export venture in a year-long period. All of its five constructs were named taking into consideration two issues: (1) the new time frame, i.e. *annual* export venture's performance, and (2) the common unit of analysis, i.e. an *individual* export venture. Simultaneously, the preliminary interviews and export performance literature (see: Katsikeas, Leonidou and Morgan, 2000) influenced us to consider the breadth of export venture's performance domain. This breadth was captured in the APEV operationalization in two ways. First, we rethought the EXPERF dimensions within the new context and renamed them as follows: a) annual export venture's financial performance; b) annual export venture's strategic performance; and c) annual export venture's achievement. Second, we proposed two new dimensions to account for the variance not captured by any of the three initial theoretical dimensions: a) export venture's contribution to annual exporting operations; and b) satisfaction with annual export venture's overall performance. We discuss below each of the five dimensions included in our survey instrument (see: Table 1).

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Insert Table 1 about here

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We start by discussing the two dimensions that are more short-term oriented: annual export venture's financial performance (AFP), and contribution of the export venture to annual exporting operations (ACE).

First, *annual export venture's financial performance* measures the financial results of a specific export venture during a one-year period. Financial performance is the most common means of accessing export performance. The exporting literature provides financial indicators such as profitability (e.g., Bilkey 1982; Cavusgil and Zou 1994; Madsen 1989), sales volume (e.g., Cooper and Kleinschmidt 1985; Madsen 1989; Samiee and Roth 1992) and export growth (e.g., Cavusgil and Zou 1994; Samiee and Roth 1992; Shoham 1996). In this study, exporters were asked to assess their level of agreement with the statement that in year "Y" a specific export venture has "been very profitable", "has generated a high volume of sales" and "has achieved rapid growth".

Our second dimension assesses the *contribution of the export venture to annual exporting operations*. A recent meta-analysis (Katsikeas, Leonidou, and Morgan 2000) indicates that export intensity is the most common measure in the export marketing literature. However, the export marketing literature is typically concerned with the importance of the export operations at the firm level. Traditionally, the export marketing literature examines export intensity in terms of percentage of export sales to total sales *volume* (e.g., Axinn, Noordewier, and Sinkula 1996) and export sales to total sales *value* (e.g., Beamish, Craig, and McLellan 1993), as well as percentage of export profits to total profits (e.g. Axinn, Noordewier, and Sinkula 1996). In this study, since our unit of analysis is an export venture, we analyze export venture's specific contribution to export operations, so that we can accurately evaluate its contribution to overall export performance. To the best of our knowledge, annual export venture's weight to annual exporting operations has never been addressed. Hence, and while building on previous export intensity studies, with this new dimension we propose to assess managers' perception of the export venture's contribution to the total exporting activity in terms of sales volume, sales value, and profitability during a one-year period.

We now discuss the other three dimensions, which are more long-term oriented: annual export venture's strategic performance (AST), annual export venture's achievement (AA), and satisfaction with annual export venture's overall performance (ASP).

First, *annual export venture's strategic performance* measures the strategic results of a specific export venture during a one-year period. Managers consider not only financial objectives, but also strategic objectives of exporting (Cavusgil and Zou 1994). Strategic objectives include competitiveness, market share and strategic position (e.g., Cavusgil and Kirpalani 1993; Cavusgil and Zou 1994; Johnson and Arunthanes 1995), which were included in our survey instrument through questions that referred to the contribution of a specific export venture in year "Y" to global competitiveness, strategic position and global market share.

Second, *annual export venture's achievement* is a subjective measure that reflects an affective evaluation about the export venture. Firms establish a set of exporting objectives that may or may not be fully achieved at the end of the year. If expected goals were achieved, managers would perceive the export venture's performance as satisfactory, successful and their expectations would be fulfilled. Contrarily, if expected goals were not accomplished, from an export manager's perspective, export venture's achievement might be seen as unsatisfactory and unsuccessful. Export achievement is a widely-used means of assessing the performance of an export venture (e.g. Cavusgil and Zou 1994; Katsikeas, Piercy, and Ionnidis 1996; Naidu and Praisad 1994). Annual export venture's achievement assesses performance in terms of satisfaction, positive feelings about success, and the degree to which expectations have been met (Cavusgil and Zou 1994; Christensen, da Rocha, and Gertner 1987; Johnson and Czinkota 1982).

Finally, *satisfaction with annual export venture's overall performance* assesses the effectiveness of the export venture in terms of its market share and overall performance.

Satisfaction is one of the most-studied outcome variables in the marketing literature (see Geyskens, Steenkamp, and Kumar 1999 for a review) and is also well established in the export marketing field (e.g., Shoham 1998; Lages and Lages 2004). Similarly to previous export marketing studies (Seifert and Ford 1989; Evangelista 1994), managers have been asked how satisfied they are with objective measures of export performance, such as market share and overall performance.

## **METHOD**

### **Survey Instrument Development**

Churchill's (1979) traditional approach to scale development was adopted. The APEV scale evolved from a combination of exploratory qualitative in-depth interviews, a review of the export marketing literature, and survey pretest. Based on the literature review and findings from the interviews, the domain of the construct was specified to include two additional categories "contribution of the export venture to annual exporting operations" and "satisfaction with annual export venture's overall performance" relevant to the assessment of annual export venture's performance. With this in mind, a set of items designed to measure each of the two dimensions was developed. These items were generated primarily to capture a broader range of export venture's performance elements that were neither covered nor captured by the three EXPERF dimensions.

While taking into consideration the time frame and unit of analysis used, the combined set of 14 items for the new APEV scale were then assessed by academic judges and managers involved in export operations for content evaluation. Substantive considerations were given to such aspects as the breadth of theoretical content coverage of the item, consistency of the contents tapped by individual items under a single factor, and clarity of the meaning and comprehensibility of the item (Matsuno, Mentzer, and

Rentz 2000). After incorporating the suggestions we proceeded to the final survey. A full listing of the final items and their scale reliabilities can be found in Table 1. The average internal reliability (Cronbach alpha) was .87.

### **Research Setting and Data Collection Procedure**

Our research setting is in the UK. The UK's economic growth depends on the export performance of its firms, since exports correspond to more than one-quarter of the GDP (Reed Business Information 2000). It is particularly worthwhile researching the performance of British firms' export venture, as the UK has a traditional deficit in net goods exports. A sample of 1,564 British enterprises was randomly generated from a database of the British Chamber of Commerce, "British Exports 2000" (Reed Business Information 2000). An incentive was stated in the cover letter: in return for a completed questionnaire, the findings would be available after the completion of the study. Confidentiality was also assured.

A cover letter, questionnaire and postage-paid business reply envelope were sent to the person responsible for exporting in each of the British firms under study. Unfortunately, due to lack of financial resources, it was not possible to send a reminder mailing. The data collection was conducted in 2002. Out of the 1,564 exporters we received 111 replies, which represents a raw response rate of 7%. In order to identify the problems associated with this low raw response rate, we used the procedure of Menon et al.(1999) in which we contacted 100 randomly chosen respondents to determine undeliverable and noncompliance rates, and then assessed final response rates. We estimated that 34% of the mailings were undeliverable because of incorrect address; an additional 40% did not reach the person responsible for the export operations in the firm; and 4% of the respondents reported a corporate policy of not responding to academic surveys. In line with Menon et al.'s (1999) procedure, the total

of 111 usable returned questionnaires represents a 32% effective response rate, which is quite satisfactory, given that average top management survey response rates are in the range of 15%-20% (Menon, Bharadwaj, and Howell 1996).

### **Assessment of Non-Response Bias and Data Profile**

Non-response bias was tested by assessing the differences between the early and late respondents with regard to the means of all the variables for both samples (Armstrong and Overton 1977). Early respondents were defined as the first 75% of the returned questionnaires, and the last 25% were considered to be late respondents. These proportions approximate the actual way in which questionnaires were returned. No significant differences among the early and late respondents were found, suggesting that response bias was not a significant problem in the study.

The survey was primarily directed to individuals who were responsible for exporting operations and activities. The job title of these individuals included president, marketing director, managing director, and exporting director. Respondents were asked to indicate their degree of experience in exporting on a scale where 1=none and 5=substantial. The mean response was 3.8 (sd=.93, range 1 to 5). This indicates that although the title of the respondents' positions may be wide-ranging, the individuals appear to have considerable knowledge in the specific exporting activities of the firm and are experienced with exporting in general. The entire size range of firms is represented in the sample. British exporting industry is primarily composed of SMEs. Of the exporting firms represented in the sample, 6% of the companies have more than 500 employees and the average annual export sales of these firms ranged from USD \$470,000 - \$1.6 M.

## DATA ANALYSIS

As noted by Churchill (1979), in order to increase reliability and decrease measurement error it is more advisable to use multi-item scales than single-item scales. Churchill's (1979) approach to scale development has been expanded by Gerbing and Anderson (1988) with the use of Confirmatory Factor Analysis (CFA). We used CFA to assess the measurement properties of the existing scales, using full-information maximum likelihood (FIML) estimation procedures in LISREL 8.3 (Jöreskog and Sörbom 1993). In this model, each item is restricted to load on its pre-specified factor, with the five factors allowed to correlate freely. The chi-square for this model is not significant ( $\chi^2=86.78$ , 67df,  $p=.052$ ). Since the chi-square statistic is sensitive to sample size, we also assess additional fit indices: the Comparative Fit Index (CFI), the Incremental Fit Index (IFI), the Tucker-Lewis Fit Index (TLI), Goodness of Fit Index (GFI) and Standardized Root Mean Square Residual (SRMR). The CFI, IFI, TLI, GFI and SRMR of this model are .99, .99, .98 .90 and .051, respectively.

Since fit indices can be improved by allowing more terms to be freely estimated, we also assess the Root Mean Square Error of Approximation (RMSEA), which assesses fit and incorporates a penalty for lack of parsimony. An RMSEA of .05 or less indicates a close fit to the population, while .08 to .10 indicates a satisfactory fit, with any score over .10 indicating an unacceptable fit. The RMSEA of this measurement model is .052. Hence, the fit indices reveal that the final structural model is fairly good in the sense of reproducing the population covariance structure, and that there is an acceptable discrepancy between the observed and predicted covariance matrices.<sup>1</sup>

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<sup>1</sup> The fit for the measurement model with the three adapted EXPERF dimensions (i.e. AFP, AST and ASP), although acceptable, is slightly worse: CFI=.94; IFI=.95; TLI=.92; GFI=.90, SRMR=.080; RMSEA= .113. We acknowledge an anonymous reviewer for this insight.

As can be seen in Table 1, convergent validity is evidenced by the large and significant standardized loadings of each item on its intended construct (average loading size was .85). Table 1 also shows that all constructs present the desirable levels of composite reliability (Bagozzi 1980). Discriminant validity among the constructs is assessed using the Fornell and Larcker (1981) test. The index of variance extracted was above the recommended level of .50 for all of the five constructs.

### **THE PERFEX SCORECARD**

“In this economic environment when corporate budgets are being squeezed, Chief Marketing Officers are kept up at night by worry, trying to justify their expenditures and their existence. They believe that what they are doing has value, and they have to figure out how to demonstrate that value to skeptical CEOs and CFOs.”

Reibstein (2004)

Modern corporate executives need an increasing quantity and quality of information in annual reports about non-financial measures that allow them to manage corporate affairs and convey a powerful message to CEOs and CFOs. Among the widely diverse approaches and measures, the balanced scorecard developed by Kaplan and Norton (1992, 1996, 2001) has been extremely popular. Indeed, their scorecard framework has been inspiring in the development of other balanced scorecards that firms are using to outperform competitors (Frigo, 2002). Many Fortune 500 companies have found balanced scorecards “to be an innovative performance-improvement strategy that gets results.” (Abernathy 1997, p. 58).

In an exporting context the underlying idea supporting the development of a balanced scorecard to be included in annual reports is to provide a tool that compares annual performance across export ventures using a set of metrics. The company’s export plan should be translated into a set of specific requirements (i.e. the metrics in the scorecard) that can be regularly reviewed. To balance the metrics it is recommended that the scorecard include both objective and subjective metrics reflecting the overall business

strategy (Kaplan and Norton 1996). However, earlier research (Katsikeas, Leonidou, and Morgan 2000; Madsen, 1998) indicates that in most cases export managers do not have objective metrics on particular export ventures (e.g. export ventures' ROI, export ventures' profit). Due to this lack of objective values, managers find it "impossible" to compare performance across ventures. Nevertheless, they are obliged to do so in order to make major decisions such as allocating scarce resources (Madsen 1998, p. 84).

Hence, we propose a tool that combines subjective and, whenever possible, objective metrics to assess company's overall export performance when comparing different export ventures. Figure 1 presents an attempt to build the PERFEX scorecard. With this tool managers might always rely upon subjective perceptions using as a basis the APEV scale, and use objective/financial measures if they are available.

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Insert Figure 1 about here  
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### **How to build the PERFEX scorecard**

The first step is to identify the number of export ventures within a firm to be included in the PERFEX scorecard. For each one of the export ventures it is required to identify whenever possible existing objective metrics and to assess the 14 items presented in the APEV scale on a 5 point scale (see Table 1). Then it is required to assess the average score for each one of the five APEV dimensions and multiply them by their weights. The sum of the five weighted dimensions will be the final  $APEV_{Score}$ . Weightings should differ across export ventures.

All the weightings should be done and agreed on by a specific group of stakeholders, so that there is a general acceptance of the weight of each dimension and venture, previously to its implementation and future assessment. We also recommend that a

review of the weights for each of the APEV dimensions should consider the percentage assigned to short- versus long-term metrics. In the APEV scale, some metrics are more short-term (AFP and ACE) and other metrics are more long-term (AST, AA and ASP). We recommend that 50% of the weights should be assigned to the two short-term metrics and the other 50% to the three longer-term metrics. A disproportionate weighting may not be in the best interest of the organization as, in principle, the short and long terms are equally important to the firm.

The  $EV_{\text{WeightedScore}}$  is the product of the multiplication of the final  $APEV_{\text{Score}}$  by each export venture weight to overall export performance. Each  $EV_{\text{WeightedScore}}$  must take into consideration the firm's mission and objectives and the different insights from the firm's stakeholders. A final  $PERFEX_{\text{Score}}$  results from the sum of all  $EV_{\text{WeightedScores}}$ .

It is important to be aware that managers are often judged not only by the performance but also by the priorities they place on the export ventures. Hence, we propose that each current year (Y) weighted score be compared with the one from the previous year (Y-1), as problems are typically flagged by the size of the gap between current year's metrics and the base score from the previous year. This annual feedback will allow executives to make corrections and will help them assign goals and priorities for the following year. In order to define each export venture goal and degree of priority, firms might also consider existing objective metrics, international objectives, stakeholders requirements, and industry benchmarks. Another possibility is to set sub-goal intervals to the PERFEX scorecard (e.g. on a monthly or quarterly basis). The major advantage of doing so is that monthly or quarterly feedback would enable management to review export venture's performance trends and to make corrections more frequently as a response to the changing environment (see: Abernathy 1997). In this way periodic

scheduled reviews with the PERFEX scorecard might be extremely relevant in monitoring and improving export strategy.

The PERFEX scorecard developed here is expected to ensure that attention is paid by export managers and by the different stakeholders to both short and long-term metrics, to subjective and existing objective metrics, to each export venture, and to overall export performance. The future inclusion of PERFEX scorecards in annual reports would make them more transparent and would improve the reliability of investment decisions on specific export ventures.

### **MANAGERIAL IMPLICATIONS**

In today's global world, export performance has become a key strategic issue in justifying the viability of a firm. The viability of a firm increasingly depends on how well it is capable of responding to foreign demands. In order to make export success concrete to everyone, executives are expected to make international intentions tangible by translating a set of goals into a set of performance measures that might be annually assessed (Melnyk, Stewart, and Swink 2004). In this paper we suggest two tools to assess export performance: The APEV scale (at the export venture level) and the PERFEX scorecard (at the export venture and firm levels).

CEOs and CFOs are particularly interested in indicators that allow assessing the performance of the export operations. There is also a need for managers to assess annual export performance venture by venture (i.e. a single product or product line exported to a single foreign market) because this may assist them in clarifying the actual processes underlying performance assessments and in defining specific planning directions. Indeed, as noted by Madsen (1998, p. 91), "further international development of the firm is highly dependent on sound judgments of export performance" as this allows a better "allocation of resources to the right export ventures".

The APEV measure can be used to make meaningful comparisons among export ventures within a firm. For example, by tracking a set of export venture's performance indicators, executives will be in a better position to identify which ventures require more resources and support in order to achieve long-term development, and which ones have a stronger impact on current export performance. The APEV scale might be helpful in monitoring vital export events and monitoring progress in venture's development on a longitudinal basis. This tool provides the organization with a benchmark to track the progress of each export operation over time and to develop exchange of ideas between export ventures' managers within and across firms.

Indeed, the PERFEX scorecard might be a very useful tool to managers, CEOs, CFOs, and other firm's stakeholders. The appropriate diffusion and development of the PERFEX scorecard would provide major benefits at the managerial level. First, managers might use the PERFEX scorecard as an export improvement system which presents targets for performance improvement, promotes changes in the organization on a continual basis and provides guidelines to reduce costs. Second, the implementation of this tool is expected to make export managers more publicly accountable, by helping to justify decisions on export ventures to the different stakeholders. Third, firms may use the scorecard as a learning tool which is used to communicate and inform stakeholders (cf. Kaplan and Norton 1996). In this way, the PERFEX scorecard can be used to promote the participation of all employees in the firm's decisions by informing them on critical issues that drive export performance. Finally, this tool can be used to establish and develop the relevance of the export operations within a firm, namely by increasing stakeholders' trust in the export operations and raising the profile of the exporting activity at the board level.

## **PUBLIC POLICY IMPLICATIONS**

In addition to the implications at the firm level, research interest in the export performance topic is also a natural consequence of its macro importance (Katsikeas, Leonidou, and Morgan 2000). At the macro level, there is a need for a sound evaluation of both annual *export ventures'* performance and *firm's* export performance. The export performance of national firms is associated with the extent to which governments accumulate annual foreign exchange reserves, improve national productivity, and create new jobs (Czinkota 1994). Naturally, at the public policy level, both the APEV scale and the PERFEX scorecard can be used to make meaningful comparisons across export ventures within an exporting country in a specific year and over time. Moreover, Lages and Montgomery (2001) argue that in order to be effective, export assistance should be provided and monitored at the export venture level rather than at the firm level. These tools allow public policy makers to make comparisons across different export ventures within a firm.

Furthermore, both firms and governments should have a common definition and operationalization of export venture's performance. With the incorporation of the APEV and PERFEX tools in annual reports, this first step towards a shared meaning could be provided. If one considers that public policy makers often provide export assistance to export ventures and exporting firms that perform well (Lages and Montgomery 2001), one clearly might benefit from the existence of both tools. This would allow better allocation of limited resources to specific ventures and better monitoring of the effectiveness of such export assistance. In this way, valuable resources would be saved to be used for generating reserves or allocating to other activities. In sum, the use of both tools could help public policy makers to better assist in making export assistance

decisions that would help to pursue the goals of organizations as well as their respective countries.

### **RESEARCH LIMITATIONS**

Regarding the implementation of the PERFEX scorecard presented in this paper, although there are many benefits to be gained in any prioritizing process, there are also limitations. It is argued that personal assessments used by managers to evaluate priorities are subject to individual biases and influences from the internal and external environment. Hence, “if the inputs into the prioritization process are flawed, then the outcome is unlikely to provide any value” (Reisinger, Cravens, and Tell 2003, p. 436).

Another possible limitation associated with the implementation of the PERFEX scorecard is the possible lack of a balanced approach. Although many firms have realized the importance of combining short and long-term dimensions, objective and subjective measures, some have failed to understand them in the perspective of balanced frameworks. Such an inequality might lead to an unclear picture of the organization (see: Gunasekaran, Patel, and Tirtiroglu, 2001). In the exporting context, obtaining the right balance becomes an even greater challenge because in most cases there are no financial measures to be applied at the export venture level. Nevertheless, even if financial measures are lacking, it is important to acknowledge that management research has empirically demonstrated that subjective performance measures are typically associated with financial performance (e.g., Anderson, Fornell, and Lehmann 1994; Banker, Datar, and Kaplan 1989; Said, HassabElnaby, and Wier 2003). Similar findings are also reported in the export marketing field (Lages, Lages, and Lages 2005). At the methodological level, a possible limitation is that our research instrument (i.e. the questionnaire) may have created common method variance. This could be particularly threatening if the respondents were aware of the conceptual framework of interest.

However, they were not told the specific purpose of the study, and all of the construct items were separated and mixed. Furthermore, we guaranteed confidentiality to all survey participants, which also helps to reduce the possibility of bias in performance reports for self-presentation reasons (Singh 2000). Additionally, if common method bias exists, then a CFA containing all constructs should produce a single method factor (Podsakoff and Organ 1986). The goodness-of-fit indices (CFI=.68, IFI=.68, TLI=.62, GFI=.55, SRMR=.18, RMSEA=.258) indicate a poor fit, which suggests that biasing from common method variance is unlikely.

Finally, the fact that the research context involved a relatively small sample with exporters from a single country may also limit to some degree the generalizability of the results. Our effort to develop the APEV scale should be considered as part of a larger effort in trying to build on the extant literature and help researchers to capture annual export ventures' performance and overall export performance in future studies.

### **DIRECTIONS FOR FUTURE RESEARCH**

Some decades ago the importance of the export activity was significantly less, and companies had little interest in applying available measurement techniques to assess export performance. Nowadays, with the increasing importance of the export operations for both firms and governments, the significance of developing adequate export performance measures becomes critical. Unfortunately, the great majority of annual performance measures do not work for exporting organizations. Additionally, the measures previously developed in the export marketing field are difficult to incorporate in company's annual reports. There is therefore a great need for future research to develop specialized measures to help export managers to assess and achieve their international objectives. A major question for future research is how to build on the

APEV scale and the PERFEX scorecard in order to help organizations measure their export ventures as well as overall export performance.

Future work should help organizations to develop meaningful export performance measures that will enable them to meet their own annual goals, yearly objectives, and determine how their export ventures are doing. Nevertheless, in order to be truly effective it is crucial that both tools are seen from a dynamic perspective. When applying both tools, managerial and shareholders' feedback should always be taken into account. This feedback will certainly be useful from a learning perspective as well as for a future review and development of these frameworks.

Second, this scale is also expected to help managers considering *annual performance* as a reference point when planning future actions and allocating resources to specific export ventures. Recent empirical results indicate that the high/low annual performance of the main export ventures has an immediate impact on strategic exporting decisions (Lages and Jap 2003) as well as on the degree of exports' management commitment (Lages and Montgomery 2004). It is essential that international marketing researchers make an effort to better understand this reactive behavior to past performance, both at the firm and export department levels. Most international marketing research tends to ignore the reactive behavior of export managers, despite the fact that it may play an equal, if not greater, role than proactive behavior in the determination of current export strategy. Hence, future studies are encouraged to use export venture's annual performance as an independent variable.

Finally, from a scale development and refinement perspective, the replication of this study across various industries, and particularly across different countries, is suggested. Future research should be particularly concerned with exploring the annual export venture's context frequently used by managers and public policy makers to assess

performance (Madsen 1998; Lages and Lages 2004). Researchers should be concerned with the use of a clearly defined conceptual domain (namely time frame and unit of analysis) so that we can have export performance metrics as precise and complete as possible. Future studies are encouraged to develop a scale to assess export performance by using other time frames and units of analysis. Despite the complexity of the task, the refinement of the PERFEX scorecard to assess export performance at the corporate level is strongly encouraged, as this is another controversial area requiring a valid and reliable tool (Katsikeas, Leonidou, and Morgan 2000).

In sum, we encourage future researchers to bring theory into practice by developing and building on earlier management/performance metrics that can be directly used in annual reports. Certainly, in this way researchers will be able to contribute to managerial practice.

## **CONCLUSION**

Research has not kept pace with new managerial demands (Melnyk, Stewart, and Swink 2004). As recently highlighted by Likierman (2004) at a conference on performance measurement, it is essential to translate scholastic theories into practice. Despite recent major developments in export performance assessment (e.g. Styles 1998; Zou, Taylor and Osland 1998; Lages and Lages 2004), the existing models still present limitations in meeting the needs of their users. In particular, the existing exporting literature has proved itself unable to provide a solution to meet the demands for an increased accountability of annual exporting operations. No study so far has tried to develop a sound evaluation of annual export venture's performance that could be included in annual reports.

Nevertheless, the increased costs and returns related to the exporting activity might contribute to change the tone direction at the research and organizational levels. In

recent years, an increasing number of firms have realized the potentials of the exporting activity. However, they often lack the (academic) methodological knowledge to develop effective export performance metrics that demonstrate the viability of their export (ventures') strategies. Without these measures a clear direction for improvement and achievement of export goals is extremely difficult. Executives in charge of exporting operations should now consider collecting and disclosing non-financial information in annual reports. Such disclosure would increase the credibility of the export information, transparency in the elaboration of export decisions, demonstrate the firm's commitment to the exporting activity, and widen the audience of the export message. A disclosure of export performance metrics in annual reports would help to strengthen shareholders' trust in the export operations as well as in the organization (Abdeed, 1991). Export performance metrics are essential to provide information to various internal and external stakeholders and decision makers. Without export metrics companies might be regarded as being short of transparency. Hence, there is a need for more and better information on export ventures performance.

This leads us to propose that an appropriate step for organizations that wish to monitor, plan, and improve exporting programs, would be to incorporate the PERFEX Scorecard in their annual reports. Similarly, the APEV scale might be used as a tool for managing specific export ventures while allowing for export operations' accountability.

## **EXECUTIVE SUMMARY**

While building on managerial insights and on the export marketing literature, we believe to have contributed to both export practice and theory development by creating two tools- the APEV scale and the PERFEX scorecard. In the new five-dimensional APEV scale, we have attempted to include a broad domain of export venture-related activities in order to capture a large set of factors of export performance as explained by practice and theory. Instead of treating the annual export venture's performance as a unidimensional construct, we present various measurement units for each of its five dimensions: 1) annual export venture's financial performance; 2) annual export venture's strategic performance; 3) annual export venture's achievement; 4) contribution of the export venture to annual exporting operations; 5) satisfaction with annual export venture's overall performance. Despite the innumerable difficulties associated with export performance conceptualization, operationalization and measurement, this scale may be instrumental in evaluating export activities and assessing annual exporting ventures' performance, which will stimulate the development of future decisions at the strategic and tactical levels.

With the PERFEX scorecard presented herein, we also expect to provide managers with a major tool for annual export planning, as firm's export success is the result of an aggregation of annual individual export ventures' performance. Annual evaluations of export venture's performance will allow managers to communicate relevant information to the different stakeholders, improve upon weaknesses or reinforce priorities, while focusing on annual exporting objectives. Hence, through the PERFEX scorecard we expect to offer a basis for capturing a key concern of export managers by providing a unified measure for capturing annual performance of individual export ventures within a theoretical framework.

Although a widespread inclusion of export ventures' performance measures in annual reports might take years, we expect that with the development of the APEV measure and the PERFEX scorecard to have contributed to the provision of a basis for this trend. The incorporation of these tools in annual reports should result in a better linkage between resource allocation decisions and the export outcomes an organization wishes to achieve. Simultaneously, export managers become more accountable *vis-à-vis* the different stakeholders; and investors, shareholders and public policy makers possess tools to continually assess the performance of export operations.

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TABLE 1: CFA RESULTS

- In order to define the Exporting Venture which will be the focus of this questionnaire, please select:**

a) an exported product or group of exported products \_\_\_\_\_  
*(please indicate just one product or group of products)*

b) an importer in a foreign market for the export mentioned above (e.g. Firm A / Finland) \_\_\_\_\_  
*(please indicate just one firm in one country)*

IMPORTANT: You have just defined the Exporting Venture of your company (which this questionnaire is about).
- When considering the selected Exporting Venture in “Year Y”, what is your opinion concerning the following:**

Dimensions and Items of :		The APEV scale		
		$\alpha/\rho_{vc(n)}/\rho$	Stand. Item-Load.	T-value
<b>AFP</b>	<b>Annual Export Venture's Financial Performance</b> <i>1=strongly disagree; 5=strongly agree</i> In Year Y:	.79/.57/.80		
AFP1	• This export venture has been very profitable.	.62	7.04	
AFP2	• This export venture has generated a high volume of sales.	.86	10.85	
AFP3	• This export venture has achieved rapid growth.	.77	9.31	
<b>ACE</b>	<b>Contribution of the Export Venture to Annual Exporting Operations</b> <i>0-9%; 10-29%; 30-59%; 60-84%; 85-100%</i> In Year Y, what was the contribution of the export venture to:	.97/.92/.97		
ACE1	• Export sales volume.	.97	13.94	
ACE2	• Export sales value.	.96	13.56	
ACE3	• Export profit.	.95	13.38	
<b>AST</b>	<b>Annual Export Venture's Strategic Performance</b> <i>1=strongly disagree; 5=strongly agree</i> In Year Y:	.90/.75/.90		
AST1	• This export venture has improved our global competitiveness.	.87	11.13	
AST2	• This export venture has strengthened our strategic position.	.89	11.58	
AST3	• This export venture has significantly increased our global market share.	.83	10.38	
<b>AA</b>	<b>Annual Export Venture's Achievement</b> <i>1=strongly disagree; 5=strongly agree</i> In Year Y:	.91/.77/.91		
AA1	• The performance of this export venture has been very satisfactory.	.92	12.38	
AA2	• This export venture has been very successful.	.90	11.89	
AA3	• This export venture has fully met our expectations.	.81	10.11	
<b>ASP</b>	<b>Satisfaction with annual export venture's overall performance</b> <i>1=not satisfied at all; 5=extremely satisfied</i> In Year Y, how satisfied are you with the results of the export venture when considering:	.77/.63/.77		
ASP1	• Market share in the selected importing market of the export venture.	.81	9.40	
ASP2	• Overall export performance.	.77	8.86	

Notes: Year Y= 2000

$\alpha$  = Internal reliability (Cronbach 1951);  $\rho_{vc(n)}$  = Variance extracted (Fornell and Larcker 1981);  $\rho_c$  Composite reliability (Bagozzi 1980)

**FIGURE 1:  
THE PERFEX SCORECARD**

EXPORT VENTURE DESCRIPTION			YEAR Y					EXPORT VENTURE PERFORMANCE	YEAR Y-1	YEAR Y+1	
			SHORT-TERM DIMENSIONS		LONG-TERM DIMENSIONS						
Product/market	Objective metric(s) <sup>#</sup>	AFP <sub>Score</sub> : 3 item average X weight (%)	ACE <sub>Score</sub> : 3 item average X weight (%)	AST <sub>Score</sub> : 3 item average X weight (%)	AA <sub>Score</sub> : 3 item average X weight (%)	ASP <sub>Score</sub> : 2 item average X weight (%)	APEV <sub>Score</sub> X EVweight to overall exp.perf. (%)	= EV <sub>WeightedScore</sub>	Base(s) ##	Goal(s) ##	Priority ##
EV1	___/___	___/___	___ X ___	___ X ___	___ X ___	___ X ___	___ X ___	= ___	___	___	___
EV2	___/___	___/___	___ X ___	___ X ___	___ X ___	___ X ___	___ X ___	= ___	___	___	___
EV3	___/___	___/___	___ X ___	___ X ___	___ X ___	___ X ___	___ X ___	= ___	___	___	___
EV4	___/___	___/___	___ X ___	___ X ___	___ X ___	___ X ___	___ X ___	= ___	___	___	___
EVn	...	...	...	...	...	...	...	...	...	...	...
								Sum= PERFEX <sub>Score</sub>			

Notes:

$$\text{PERFEX}_{\text{Score}} = \text{EV1}_{\text{WeightedScore}} + \text{EV2}_{\text{WeightedScore}} + \text{EV3}_{\text{WeightedScore}} + \text{EV4}_{\text{WeightedScore}} + \text{EVn}_{\text{WeightedScore}}$$

$$\text{APEV}_{\text{Score}} = \text{AFP}_{\text{Score}} + \text{ACE}_{\text{Score}} + \text{AST}_{\text{Score}} + \text{AA}_{\text{Score}} + \text{ASP}_{\text{Score}}$$

Legends:

EV=Export Venture; APEV= Annual Performance of the Export Venture;

AFP= Annual Export Venture's Financial Performance; ACE= Contribution of the Export Venture to Annual Exporting Operations;

AST= Annual Export Venture's Strategic Performance; AA= Annual Export Venture's Achievement; ASP= Satisfaction with Annual Export Venture's Overall Performance.

<sup>#</sup> Whenever there is available information on export venture's objective performance metrics (e.g. sales volume, profits, ROI, market share), it should be included in this column.

<sup>##</sup> These fields should take into consideration the EV<sub>WeightedScore</sub> and (if possible) existing objective metric(s).