Annotated Summary of:

Bello, Daniel C., and Nicholas C. Williamson (1985), "The American Export Trading Company: Designing a New International Marketing Institution." *Journal of Marketing* 49(4): 60–69.

Chapter 6: Multivariate Analysis of Variance
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In this article, the authors have used a combination of MANOVA and ANOVA to determine which services should be offered by export management companies. MANOVA allows the researcher to examine the equality of several groups across a number of independent variables in one step. This avoids compounding the Type II error that is associated with obtaining the same information through the use of multiple t tests or ANOVAs. MANOVA also allows for the examination of interactions among the variables in order to assess any effect that might be present when multiple service strategies are proposed. Based on importance ratings from a sample of export firm presidents or owners, four export services were identified: promotion, technical export, market contact, and consolidation services. These ratings were examined to determine their effects on product (differentiated or undifferentiated), exporter role (commercial agent or merchant distributor), and supplier sales volume (over or under $1 million). By examining the differences and direction of the mean service importance ratings across the variations in product, exporter role, and supplier sales volume, export management companies should obtain a list of variables for use in developing an appropriate marketing mix. MANOVA, for multivariate comparison, and ANOVA, for univariate comparison, are used to provide information detailing where these differences exist and the probability that these differences could have been obtained by chance. With MANOVA's ability to allow for the examination of interactions, the researchers were provided with information about the possible effects of supplying multiple services.

The dependent variables (four export services scales) are analyzed in a 2x2x2 (product type by exporter role by supplier sales volume) MANOVA design. The authors take into account sampling requirements and ensure that the dependent measures are significantly correlated. The MANOVA results indicate a significant overall main effect for product, exporter role, and supplier sales volume factors with no significant two- or three-way interactions. The authors follow up the MANOVA results with three separate univariate ANOVA tests. The ANOVA results indicate significant individual differences in export services across product, exporter role, and supplier sales volume. Through the use of multivariate analysis of variance (MANOVA), the researchers are able to examine the difference in importance perception of various export services based upon the characteristics of the export intermediary. The authors conclude that the product type, exporter role, and supplier sales volume directly impact importance perception of services provided by the exporter.