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## Corporate Venture Management in SMEs : evidence from the German IT consulting industry

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## APPENDICES

The list of Appendices consists of sixteen parts as given below.

- Appendix A1: First Series of Interviews for the Case Study Research
- Appendix A2: Second Series of Interviews for the Case Study Research
- Appendix B: List of Interviews to Evaluate the Measures
- Appendix C: List of Corporations
- Appendix D1: Invitation E-Mail
- Appendix D2: Cover Letter
- Appendix E1: Questionnaire – German Version
- Appendix E2: Questionnaire – English Version
- Appendix F: Correlation Matrix of the Four Autonomy Scales
- Appendix G: Syntax Used to Run the Parallel Analysis
- Appendix H: Principal Component Analysis with three Variables
- Appendix I: ANOVA for Testing Non-Response Bias
- Appendix J1: ANOVA for Testing Source Bias on Corporate Venture Success
- Appendix J2: ANOVA for Testing Source Bias on Strategic Autonomy
- Appendix J3: ANOVA for Testing Source Bias on Job Autonomy
- Appendix K: Residual Plots of the Variables Used in the Regression Analysis
- Appendix L: Syntax Used to run the Heteroscedasticity Analysis

**APPENDIX A1: FIRST SERIES OF INTERVIEWS FOR THE CASE STUDY RESEARCH**

The table below shows the first series of interviews that was conducted for the research outlined in Chapter 3. Interviews were conducted with six corporate managers in six companies in three industries (Information Technology, Automotive Supplier and Photovoltaic Industry). The date of the interviews are given in the last column.

| <b>Company</b> | <b>Interviewee</b> | <b>Industry</b>        | <b>Date</b> |
|----------------|--------------------|------------------------|-------------|
| Company 1      | Corporate Manager  | Information Technology | 27.05.2011  |
| Company 2      | Corporate Manager  | Automotive Supplier    | 06.09.2011  |
| Company 3      | Corporate Manager  | Information Technology | 24.05.2011  |
| Company 4      | Corporate Manager  | Photovoltaic Industry  | 31.05.2011  |
| Company 5      | Corporate Manager  | Information Technology | 30.05.2011  |
| Company 6      | Corporate Manager  | Information Technology | 18.07.2011  |

**APPENDIX A2: SECOND SERIES OF INTERVIEWS FOR THE CASE STUDY RESEARCH**

The table below shows the second series of interviews that was conducted for the research outlined in Chapter 3. Interviews were conducted with three corporate managers and four venture managers in 5 companies. The companies 2, 3 4 and 5 are the same than in the first series of interviews. Company 7 was interviewed for the first time.

| <b>Company</b> | <b>Interviewee</b> | <b>Industry</b>        | <b>Date</b> |
|----------------|--------------------|------------------------|-------------|
| Company 2      | Corporate Manager  | Automotive Supplier    | 14.03.2012  |
| Company 3      | Venture Manager    | Information Technology | 07.09.2011  |
| Company 4      | Venture Manager    | Photovoltaic           | 14.09.2011  |
| Company 4      | Venture Manager    | Photovoltaic           | 02.11.2011  |
| Company 5      | Corporate Manager  | Information Technology | 06.09.2011  |
| Company 5      | Venture Manager    | Information Technology | 30.04.2012  |
| Company 7      | Corporate Manager  | Information Technology | 16.05.2012  |

## APPENDIX B: LIST OF INTERVIEWS TO EVALUATE THE MEASURES

The table below shows the managers that were interviewed to evaluate the measurement scales as described in Chapter 4. The interviews are conducted with corporate managers and venture managers in six companies. The companies 4, 5 and 7 were already part of the interviews conducted for the Chapter 3 (see Appendices A1 and A2). The companies 8, 9 and 10 were interviewed for the first time. In company 7, interviews were conducted with two corporate managers (corporate manager 1 and corporate manager 2) and two venture managers (venture manager 1 and venture manager 2). The companies are part of four industries (Information Technology, Media Industry, Consulting Industry and Photovoltaic Industry). The date of the interviews are given in the last column.

| <b>Company</b> | <b>Evaluation Study</b> | <b>Industry</b>        | <b>Date</b> |
|----------------|-------------------------|------------------------|-------------|
| Company 7      | Venture Manager 1       | Information Technology | 16.05.2012  |
| Company 5      | Venture Manager         | Information Technology | 22.05.2012  |
| Company 8      | Corporate Manager       | Media Industry         | 29.05.2012  |
| Company 8      | Venture Manager         | Media Industry         | 29.05.2012  |
| Company 9      | Corporate Manager       | Information Technology | 30.05.2012  |
| Company 10     | Corporate Manager       | Consulting Industry    | 30.05.2012  |
| Company 7      | Corporate Manager 1     | Information Technology | 31.05.2012  |
| Company 7      | Corporate Manager 2     | Information Technology | 31.05.2012  |
| Company 7      | Venture Manager 1       | Information Technology | 01.06.2012  |
| Company 7      | Venture Manager 2       | Information Technology | 01.06.2012  |
| Company 4      | Venture Manager         | Photovoltaic Industry  | 26.06.2012  |
| Company 5      | Corporate Manager       | Information Technology | 26.06.2012  |

## APPENDIX C: LIST OF CORPORATIONS

The following table lists the names of the companies that are part of the data set used for data analysis performed in the Chapters 5 and 6. The data refers to the survey answers given by the venture managers. In six cases (marked in italics), two answers were received from the same company. In all six cases, the survey was answered by different respondents. This is evaluated (a) by the entered access codes and (b) the email address that the respondents entered at the end of the questionnaire to receive the results of the study. The access code (individually created for each participant and thus linked to a specific name) in combination with the entered email address enabled us to clearly identify the participants.

|     |                                                                            |     |                                                                               |
|-----|----------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------|
| 1.  | 4C Group AG                                                                | 22. | <i>Devoteam Danet GmbH</i>                                                    |
| 2.  | 7P ERP Consulting<br>GmbH                                                  | 23. | <i>Devoteam Danet GmbH</i>                                                    |
| 3.  | Abilis GmbH                                                                | 24. | d-fine GmbH                                                                   |
| 4.  | ABIT GmbH                                                                  | 25. | ECG Erdgas-Consult<br>GmbH                                                    |
| 5.  | <i>Albat + Wirsam<br/>Software GmbH</i>                                    | 26. | EFK<br>Entwicklungsgesellschaft<br>für<br>Kommunikationssysteme<br>mbH        |
| 6.  | <i>Albat + Wirsam<br/>Software GmbH</i>                                    | 27. | Empalis Consulting GmbH                                                       |
| 7.  | ALPHA Business<br>Solutions AG                                             | 28. | EXCON Externe<br>Controlling Services<br>GmbH                                 |
| 8.  | ams.Solution AG                                                            | 29. | FAS AG                                                                        |
| 9.  | Artundweise GmbH                                                           | 30. | Fun Communications<br>GmbH                                                    |
| 10. | ASCAD GmbH                                                                 | 31. | GFOS Gesellschaft für<br>Organisationsberatung und<br>Softwareentwicklung mbH |
| 11. | Avantgarde Business<br>Solutions GmbH                                      | 32. | goetzpartners Management<br>Consultants GmbH                                  |
| 12. | b+m Informatik AG                                                          | 33. | Hönigsberg & Düvel<br>Datentechnik GmbH                                       |
| 13. | Bauserve GmbH                                                              | 34. | Habel GmbH & Co. KG                                                           |
| 14. | BINSERV Gesellschaft<br>für interaktive<br>Konzepte und neue<br>Medien mbH | 35. | HGV Hanseatische<br>Gesellschaft für<br>Verlagsservice mbH                    |
| 15. | Binserv GmbH                                                               | 36. | IKOR Management- und<br>Systemberatung GmbH                                   |
| 16. | CAS Software AG                                                            | 37. | Incadea GmbH                                                                  |
| 17. | CGI Deutschland Ltd.<br>& Co. KG                                           | 38. | Interbrand Zintzmeyer &<br>Lux GmbH                                           |
| 18. | COC AG                                                                     | 39. | iTEC Services GmbH                                                            |
| 19. | Consileon Business<br>Consultancy GmbH                                     |     |                                                                               |
| 20. | CTI Consulting AG                                                          |     |                                                                               |
| 21. | DAKOSY<br>Datenkommunikationss<br>ystem AG                                 |     |                                                                               |

**CONTINUING THE LIST OF CORPORATIONS**

- |                                                                     |                                                            |
|---------------------------------------------------------------------|------------------------------------------------------------|
| 40. iteratec GmbH                                                   | 62. prevero AG                                             |
| 41. ITZ<br>Informationstechnologie<br>GmbH                          | 63. PRION GmbH                                             |
| 42. iXOS Software AG                                                | 64. PROFI Engineering Systems<br>AG                        |
| 43. J&M Management<br>Consulting GmbH                               | 65. realtime AG                                            |
| 44. Janz IT AG                                                      | 66. Renostar GmbH                                          |
| 45. KCS.net Deutschland<br>GmbH                                     | 67. Sachsen DV Betriebs- und<br>Servicegesellschaft mbH    |
| 46. <i>Kerkhoff Consulting<br/>GmbH</i>                             | 68. Sage bäurer GmbH                                       |
| 47. <i>Kloepfel Consulting<br/>GmbH</i>                             | 69. SanData Solutions GmbH                                 |
| 48. Koch Media GmbH                                                 | 70. Schema Consulting GmbH                                 |
| 49. Korn Ferry International<br>GmbH                                | 71. <i>Schleupen AG</i>                                    |
| 50. <i>KWP team HR GmbH</i>                                         | 72. <i>Schleupen AG</i>                                    |
| 51. <i>KWP team HR GmbH</i>                                         | 73. SEAL Systems AG                                        |
| 52. matrix technology AG                                            | 74. secunet Security Networks<br>AG                        |
| 53. Miebach Consulting<br>GmbH                                      | 75. SimPlan AG                                             |
| 54. Moser GmbH & Co. KG                                             | 76. Star Cooperation GmbH                                  |
| 55. Namics (Deutschland)<br>GmbH                                    | 77. Tagueri AG                                             |
| 56. ODAV AG Gesellschaft<br>für Informatik und<br>Telekommunikation | 78. Telecomputer Gesellschaft<br>für Datenverarbeitung mbH |
| 57. OPITZ CONSULTING<br>München GmbH                                | 79. arxes-tolina GmbH                                      |
| 58. ORBIS AG                                                        | 80. TriFinance GmbH                                        |
| 59. PanDacom Networking<br>AG                                       | 81. TTS Training GmbH                                      |
| 60. parameta Projektberatung<br>GmbH & Co. KG                       | 82. TXS GmbH                                               |
| 61. pit-cup GmbH                                                    | 83. UBH Software &<br>Engineering GmbH                     |
|                                                                     | 84. <i>VEDA GmbH</i>                                       |
|                                                                     | 85. <i>VEDA GmbH</i>                                       |
|                                                                     | 86. Weiss IT Solutions GmbH                                |
|                                                                     | 87. WERBAS AG                                              |

## APPENDIX D1: INVITATION E-MAIL

Appendix D1 provides the invitation email that was send to the participants of the study. The invitation introduces the study, highlights the benefits for participants, defines corporate ventures, provides the link that directs to the questionnaire and provides the code to access it.

Sehr geehrter Damen und Herren,

der Aufbau neuer Geschäftsfelder ist für mittelständische, deutsche IT- und Beratungsdienstleister im globalen Wettbewerb existentiell. Wie diese Fähigkeit verbessert werden kann – das untersuchen die Hochschule Konstanz und die Universität Leiden. Auftraggeber ist das Bundesministerium für Bildung und Forschung (BMBF).

- Wir laden Sie ein sich an unserer Untersuchung zu beteiligen. Als Gegenleistung bieten wir Ihnen:
- Die Studienergebnisse, die das optimale Maß an Autonomie für den Geschäftsaufbau zeigen
- Eine individuelle Analyse der Situation Ihres Unternehmens
- Ein Benchmark mit dem „Best in Class“ deutscher IT- und Beratungsdienstleiter
- Ermäßigte Teilnehmergebühren für einen internationalen Expertenworkshop in Den Haag

Eine Einladung zu einem exklusiven Roundtable in München mit Geschäftsführern namhafter deutscher Unternehmen des Mittelstandes

Aktuelle Untersuchungen zeigen, dass neue Geschäftsfelder im Mittelstand erfolgreich durch teilautonome Teams aufgebaut werden können. Diese Teams werden zu Beginn oftmals provisorisch besetzt, mit der Aufgabe eine Geschäftsidee zu prüfen und weiterzuentwickeln. Im Laufe des Projekts etablierten sich daraus oftmals Business Units mit zusätzlichem Wachstumspotential. Je nachdem in welcher Phase sich die Geschäftsentwicklung befindet, benötigen diese Teams unterschiedlich stark ausgeprägte Autonomie.

In dieser Studie untersuchen wir, welche Art von Autonomie in welchem Maß optimal für die Geschäftsentwicklung in den einzelnen Reifephasen ist.

**Hierzu bitten wir Sie um Ihr Expertenwissen und 15-20 Minuten Ihrer Zeit.**

Kopieren Sie diesen Sicherheitscode **BAFsUfV** und beginnen Sie unter folgendem Link mit der Umfrage:  
[https://qtrial.qualtrics.com/SE/?SID=SV\\_3eXPjl6dvbw1Zhr](https://qtrial.qualtrics.com/SE/?SID=SV_3eXPjl6dvbw1Zhr)

Ihre Angaben werden selbstverständlich vertraulich behandelt und anonymisiert. Für Rückfragen stehen wir Ihnen jederzeit gerne zur Verfügung. Sie erreichen uns per e-mail unter jeromegard@htwg-konstanz.de oder telefonisch unter +49 7531 206 412.

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## APPENDIX D2: COVER LETTER

Appendix D2 shows the start page of the survey. It defines the focus of the study, defines corporate ventures and the challenge to manage them successfully and highlights the benefits for participants.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                              |                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>HOCHSCHULE<br/>KONSTANZ<br/>TECHNIK, WIRTSCHAFT<br/>UND GESTALTUNG</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  <b>Universiteit Leiden</b> |  <b>Bundesministerium<br/>für Bildung<br/>und Forschung</b> |
| <p>Liebe/r Teilnehmer/in,</p> <p>die Hochschule Konstanz (HWTG) führt gemeinsam mit der Universität Leiden (Niederlande) eine vom Bundesministerium für Bildung und Forschung (BMBF) unterstützte Studie durch. Untersucht werden soll die Frage, wie mittelständische Unternehmen der IT-Branche (in Deutschland) durch den Aufbau neuer Geschäftsfelder nachhaltig Wachstum erzeugen.</p> <p>Es hat sich gezeigt, dass ein erfolgreicher Weg für den Mittelstand darin besteht, neue Geschäftsfelder durch teilautonome Unternehmerteams aufzubauen. Diese Teams haben beispielsweise die Aufgabe neue Kunden zu akquirieren, erste Projekte durchzuführen, Marketingkonzepte und Vertriebsstrategien zu entwickeln. Aus den anfangs oftmals provisorisch zusammengestellten Teams entwickeln sich nicht selten eigenständige Business Units mit zusätzlichem Wachstumspotential.</p> <p>Die Herausforderung besteht für das Management nun darin,</p> <ul style="list-style-type: none"> <li>a) diese Teams mit ausreichend Handlungs- und Entscheidungsautonomie auszustatten ohne die Kontrolle über die Stoßrichtung und Aktivitäten des Teams zu verlieren und</li> <li>b) bestimmte Expertise (z.B. Vertrieb, Kundenservice oder Marketing, Controlling) im Team selbst auszubilden und andere (z.B. R&amp;D) gezielt durch die Regelorganisation bereitzustellen</li> </ul> <p>Es ist unbestritten, dass diese Aspekte der Autonomie eine Determinante für den Erfolg für den Aufbau neuer Geschäftsfelder sind. Offen ist hingegen die Frage, wie viel Autonomie in welcher Phase der Geschäftsfeldentwicklung (von der Idee bis zur etablierten Business Unit) optimal für den Erfolg einer Geschäftsentwicklung ist.</p> <p>Es ist das Ziel dieser Studie eine Antwort auf diese Frage zu finden. Wir bitten Sie daher sich rund 20 Minuten Zeit zur Beantwortung der nachfolgenden Fragen zu nehmen.</p> <p>Als Gegenleistung erhalten Sie</p> <ol style="list-style-type: none"> <li>1. Die Ergebnisse dieser Studie, die zeigen wie viel Autonomie in den einzelnen Reifephasen einer Geschäftsfeldentwicklung optimal für den Erfolg ist</li> <li>2. Ein Benchmark der/s Teams Ihres Unternehmens mit dem „Best in Class“ der IT-Branche in Deutschland</li> <li>3. Eine Gegenüberstellung der Autonomie der teilnehmenden Teams Ihres Unternehmens</li> <li>4. Um 150 Euro reduzierte Teilnehmergebühren für die international renommierte IEEE ITMC &amp; ICE Konferenz 2013 in Den Haag (Niederlande)</li> </ol> <p>Wir bedanken uns recht herzlich für Ihre Teilnahme und die Unterstützung der mit dieser Studie verbunden Doktorarbeit von M.Eng Dipl.-Ing. Jérôme Gard.</p> <p>Prof. Dr. Guido Baltes und<br/>University of Applied Sciences<br/>Konstanz</p> <p>Prof. Dr. Bernhard Katzy<br/>Graduate School of Science<br/>University Leiden (Niederlande)</p> |                                                                                                              |                                                                                                                                              |

## APPENDIX E1: QUESTIONNAIRE – GERMAN VERSION

Appendix E1 shows the questionnaire used to collect data. The survey was conducted in German. The questionnaire is therefore provided in its original language. An English version is reported in Appendix E2. The questionnaire consists of two parts. E1.1 is the screener which gathers general information on the participant. E1.2 gathers information on corporate venture management.

### E1.1 – Screener (8 Fragen)

| <b>Screener – Frage 1</b>                                 |                                                                                          |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------|
| Bitte geben Sie Ihre aktuelle Position im Unternehmen an: |                                                                                          |
| <input type="radio"/>                                     | Aufsichtsrat                                                                             |
| <input type="radio"/>                                     | Vorstand                                                                                 |
| <input type="radio"/>                                     | Geschäftsführer                                                                          |
| <input type="radio"/>                                     | Leiter der Abteilung Business Development                                                |
| <input type="radio"/>                                     | Abteilungs- oder Divisionsleiter                                                         |
| <input type="radio"/>                                     | Teamleiter/Projektleiter                                                                 |
| <input type="radio"/>                                     | Mitarbeiter                                                                              |
| <input type="radio"/>                                     | Sie haben eine andere Position. Bitte geben Sie diese nachfolgend an:<br><br>[Empty box] |

| <b>Screener – Frage 2</b>                                                          |                     |
|------------------------------------------------------------------------------------|---------------------|
| Wie lange sind Sie in Ihrer jetzigen Position in diesem Unternehmen bereits tätig? |                     |
| <input type="radio"/>                                                              | weniger als 1 Jahr  |
| <input type="radio"/>                                                              | zwischen 1-2 Jahren |
| <input type="radio"/>                                                              | zwischen 2-3 Jahren |
| <input type="radio"/>                                                              | zwischen 3-5 Jahren |
| <input type="radio"/>                                                              | Länger als 5 Jahre  |

| <b>Screener – Frage 3</b>                                                                                                                                         |                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Gibt es in Ihrem Unternehmen Teams, die aktuell ein neues Geschäftsfeld aufbauen oder Teams, die in den letzten 3 Jahren ein neues Geschäftsfeld aufgebaut haben? |                                                                                                    |
| <input type="radio"/>                                                                                                                                             | Ja, es gibt ein oder mehrere Teams, die aktuell ein neues Geschäftsfeld aufbauen                   |
| <input type="radio"/>                                                                                                                                             | Ja, wir haben ein oder mehrere Teams die in den letzten 3 Jahren ein Geschäftsfeld aufgebaut haben |
| <input type="radio"/>                                                                                                                                             | Nein, solche Teams gibt es in meinem Unternehmen aktuell nicht                                     |

**Screener – Frage 4**

Haben Sie in der Vergangenheit Erfahrungen mit dem Aufbau eines neuen Geschäftsfelds durch Teams gemacht?

- |                       |                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------|
| <input type="radio"/> | Ja, ich habe den Aufbau eines neuen Geschäftsfelds in der Vergangenheit mitbegleitet |
| <input type="radio"/> | Nein, ich habe keine Erfahrung mit dem Aufbau eines neuen Geschäftsfelds durch Teams |

**Screener – Frage 5**

Wie groß ist die Anzahl der Teams, die in Ihrem Unternehmen derzeit ein neues Geschäftsfeld aufbauen?

Anzahl der Teams:

- |                       |     |
|-----------------------|-----|
| <input type="radio"/> | 1   |
| <input type="radio"/> | 2   |
| <input type="radio"/> | 3   |
| <input type="radio"/> | 4   |
| <input type="radio"/> | 5   |
| <input type="radio"/> | 6   |
| <input type="radio"/> | 7   |
| <input type="radio"/> | 8   |
| <input type="radio"/> | 9   |
| <input type="radio"/> | 10  |
| <input type="radio"/> | >10 |

**Screener – Frage 6**

Wie groß ist die Anzahl der Teams, die in Ihrem Unternehmen in den letzten 3 Jahren ein neues Geschäftsfeld aufgebaut haben?

Anzahl der Teams:

- |                       |     |
|-----------------------|-----|
| <input type="radio"/> | 1   |
| <input type="radio"/> | 2   |
| <input type="radio"/> | 3   |
| <input type="radio"/> | 4   |
| <input type="radio"/> | 5   |
| <input type="radio"/> | 6   |
| <input type="radio"/> | 7   |
| <input type="radio"/> | 8   |
| <input type="radio"/> | 9   |
| <input type="radio"/> | 10  |
| <input type="radio"/> | >10 |

**Screener – Frage 7**

Wie groß ist die Anzahl der Teams, die in den letzten 5 Jahren den Aufbau eines neuen Geschäftsfelds abgebrochen haben?

Anzahl der Teams:

|                       |     |
|-----------------------|-----|
| <input type="radio"/> | 1   |
| <input type="radio"/> | 2   |
| <input type="radio"/> | 3   |
| <input type="radio"/> | 4   |
| <input type="radio"/> | 5   |
| <input type="radio"/> | 6   |
| <input type="radio"/> | 7   |
| <input type="radio"/> | 8   |
| <input type="radio"/> | 9   |
| <input type="radio"/> | 10  |
| <input type="radio"/> | >10 |

**Screener – Frage 8**

Welche der nachfolgenden Aussagen trifft eher auf Sie zu?

|                       |                                                                                                                                                      |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="radio"/> | Ich bin aktuell Leiter eines Teams, das die Aufgabe hat ein neues Geschäftsfeld aufzubauen                                                           |
| <input type="radio"/> | Ich bin aktuell Leiter eines Teams bzw. einer Business Unit das/die in den letzten 3 Jahren bereits ein Geschäftsfeld aufgebaut hat                  |
| <input type="radio"/> | Ich bin aktuell der Vorgesetzte des Leiters eines Teams das aktuell ein neues Geschäftsfeld aufbaut                                                  |
|                       | Ich bin der Vorgesetzte des Leiters eines Teams das in den letzten 3 Jahren bereits ein neues Geschäftsfeld aufgebaut hat                            |
| <input type="radio"/> | Ich bin aktuell Mitarbeiter in einem Team das aktuell ein neues Geschäftsfeld aufbaut oder in den letzten 3 Jahren aufgebaut hat                     |
| <input type="radio"/> | Mit dem Aufbau eines Geschäftsfelds durch ein Team habe ich aktuell nichts zu tun. Allerdings habe ich dazu in der Vergangenheit Erfahrungen gemacht |
| <input type="radio"/> | Mit dem Aufbau eines Geschäftsfelds durch ein Team habe ich noch nie Erfahrungen gemacht                                                             |

### E1.2 – Venture Manager (16 Fragen)

| <b>Venture Manager – Frage 1</b>                                                                                                        |                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bitte geben Sie an, in welcher Beziehung Ihr Team (verantwortlich für den Aufbau des neuen Geschäftsfelds) mit Ihrem Unternehmen steht. |                                                                                                                                                           |
| <input type="radio"/>                                                                                                                   | Das neue Geschäftsfeld wird im Unternehmen aufgebaut                                                                                                      |
| <input type="radio"/>                                                                                                                   | Das neue Geschäftsfeld wird außerhalb des Unternehmens aufgebaut und ist im Grunde eine eigene Organisation                                               |
| <input type="radio"/>                                                                                                                   | Das neue Geschäftsfeld wird in Kooperation mit einem oder mehreren anderen Unternehmen aufgebaut                                                          |
| <input type="radio"/>                                                                                                                   | Das Geschäftsfeld wurde ursprünglich von einem anderen Unternehmen aufgebaut und später von uns übernommen                                                |
| <input type="radio"/>                                                                                                                   | Gibt es eine andere Art der Beziehung? Bitte nachfolgend kurz beschreiben:<br><br><div style="border: 1px solid black; height: 40px; width: 100%;"></div> |

| <b>Venture Manager – Frage 2 (# der Mitarbeiter des Corporate Ventures)</b> |                                                                          |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Aus welcher Anzahl an Vollzeitmitarbeitern besteht Ihr Team aktuell?        |                                                                          |
| Anzahl der Mitarbeiter:                                                     | <div style="border: 1px solid black; height: 20px; width: 100px;"></div> |

| <b>Venture Manager – Frage 3 (Umsatz des Corporate Venture)</b>                             |                  |
|---------------------------------------------------------------------------------------------|------------------|
| In welchem Bereich lag der Umsatz (in €) Ihres Teams im letzten abgelaufenen Geschäftsjahr? |                  |
| Umsatzbereich im letzten abgelaufenen Geschäftsjahr:                                        |                  |
| <input type="radio"/>                                                                       | 0-50 T-€         |
| <input type="radio"/>                                                                       | 50-100 T-€       |
| <input type="radio"/>                                                                       | 100-500 T-€      |
| <input type="radio"/>                                                                       | 500-1000 T-€     |
| <input type="radio"/>                                                                       | 1 Mio.-3 Mio. €  |
| <input type="radio"/>                                                                       | 3 Mio.-10 Mio. € |
| <input type="radio"/>                                                                       | über 10 Mio. €   |

| <b>Venture Manager – Frage 4 (# der Mitarbeiter des Unternehmens)</b>                               |                                                                          |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Wie hoch ist die Anzahl der Vollzeitmitarbeiter, die aktuell in Ihrem Unternehmen beschäftigt sind? |                                                                          |
| Anzahl der Mitarbeiter:                                                                             | <div style="border: 1px solid black; height: 20px; width: 100px;"></div> |

|                                                                                                    |                     |
|----------------------------------------------------------------------------------------------------|---------------------|
| <b>Venture Manager – Frage 5 (Umsatz des Unternehmens)</b>                                         |                     |
| In welchem Bereich lag der Umsatz (in €) Ihres Unternehmens im letzten abgelaufenen Geschäftsjahr? |                     |
| Umsatzbereich des Unternehmens im letzten abgelaufenen Geschäftsjahr                               |                     |
| <input type="radio"/>                                                                              | < 2 Mio. €          |
| <input type="radio"/>                                                                              | 2 Mio. – 10 Mio. €  |
| <input type="radio"/>                                                                              | 10 Mio. – 50 Mio. € |
| <input type="radio"/>                                                                              | > 50 Mio. €         |

|                                                                                |                                                           |
|--------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>Venture Manager – Frage 6 (Reifegrad)</b>                                   |                                                           |
| Bitte geben Sie an, bis zu welcher Reifephase Ihr Team bis heute gekommen ist. |                                                           |
| <input type="radio"/>                                                          | Erste Reifephase: Es wurden erste Investitionen getätigt  |
| <input type="radio"/>                                                          | Zweite Reifephase: Es wurden erste Umsätze erwirtschaftet |
| <input type="radio"/>                                                          | Dritte Reifephase: Das Geschäftsfeld wurde profitabel     |

| <b>Venture Manager – Frage 7 (Reifegrad)</b>                                                   |                      |                      |
|------------------------------------------------------------------------------------------------|----------------------|----------------------|
| Bitte geben Sie ungefähr an, wann Ihr Team die nachfolgenden Reifephasen erreicht hat.         |                      |                      |
|                                                                                                | Jahr                 | Quartal              |
| Erste Reifephase (A):<br>Die Entscheidung wurde getroffen<br>das neue Geschäftsfeld aufzubauen | <input type="text"/> | <input type="text"/> |
| Erste Reifephase (B):<br>Es wurden erste Investitionen<br>getätigt                             | <input type="text"/> | <input type="text"/> |
| Zweite Reifephase:<br>Es wurden erste Umsätze<br>erwirtschaftet                                | <input type="text"/> | <input type="text"/> |
| Dritte Reifephase:<br>Das Geschäftsfeld wurde<br>profitabel                                    | <input type="text"/> | <input type="text"/> |

|                                                                                                                                                        |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>Venture Manager – Frage 8 (Erfahrung)</b>                                                                                                           |                    |
| Wie viele Jahre Erfahrung hat Ihr Team in Summe bis heute (Sie eingeschlossen, Ihre Vorgesetzten ausgeschlossen) mit dem Aufbau neuer Geschäftsfelder? |                    |
| <input type="radio"/>                                                                                                                                  | weniger als 1 Jahr |
| <input type="radio"/>                                                                                                                                  | 1-2 Jahre          |
| <input type="radio"/>                                                                                                                                  | 2-3 Jahre          |
| <input type="radio"/>                                                                                                                                  | 3-4 Jahre          |
| <input type="radio"/>                                                                                                                                  | 4-5 Jahre          |
| <input type="radio"/>                                                                                                                                  | 5-6 Jahre          |
| <input type="radio"/>                                                                                                                                  | 6-7 Jahre          |
| <input type="radio"/>                                                                                                                                  | 7-8 Jahre          |
| <input type="radio"/>                                                                                                                                  | 8-9 Jahre          |
| <input type="radio"/>                                                                                                                                  | 9-10 Jahre         |
| <input type="radio"/>                                                                                                                                  | 10-15 Jahre        |
| <input type="radio"/>                                                                                                                                  | 15-20 Jahre        |
| <input type="radio"/>                                                                                                                                  | Mehr als 20 Jahre  |





| <b>Venture Manager – Frage 12 (Wichtigkeit der Funktionsbereiche)</b>                 |                                                   |   |   |   |   |   |                               |
|---------------------------------------------------------------------------------------|---------------------------------------------------|---|---|---|---|---|-------------------------------|
|                                                                                       | Sehr<br>geringen<br>Einfluss<br>auf den<br>Erfolg |   |   |   |   |   | Kritisch<br>für<br>den Erfolg |
|                                                                                       | 1                                                 | 2 | 3 | 4 | 5 | 6 |                               |
| Marketing (z.B. Vermarktung neuer Produkte und Dienstleistungen)                      | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| HR (z.B. Qualifizierung, Recruiting neuer Mitarbeiter)                                | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| Sales (z.B. Vertriebsaktivitäten)                                                     | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| Kundenservice (z.B. Support und Service)                                              | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| Controlling (z.B. Projekt-Controlling, Erfolgsrechnung)                               | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| Juristische Belange (z.B. Geschäftsbeziehungen, Patente)                              | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| Projektmanagement (z.B. Definition von Meilensteinen und Key Performance Indikatoren) | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |
| Forschung und Entwicklung (z.B. Entwicklungs- und Programmierungsaktivitäten)         | ○                                                 | ○ | ○ | ○ | ○ | ○ |                               |



| <b>Venture Manager – Frage 14 (Functionale Autonomie)</b>                             |                                             |   |   |                                        |   |   |
|---------------------------------------------------------------------------------------|---------------------------------------------|---|---|----------------------------------------|---|---|
|                                                                                       | Expertise wird primär extern bereitgestellt |   |   | Expertise ist primär im Team vorhanden |   |   |
|                                                                                       | 1                                           | 2 | 3 | 4                                      | 5 | 6 |
| Marketing (z.B. Vermarktung neuer Produkte und Dienstleistungen)                      | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| HR (z.B. Qualifizierung, Recruiting neuer Mitarbeiter)                                | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| Sales (z.B. Vertriebsaktivitäten)                                                     | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| Kundenservice (z.B. Support und Service)                                              | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| Controlling (z.B. Projekt-Controlling, Erfolgsrechnung)                               | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| Juristische Belange (z.B. Geschäftsbeziehungen, Patente)                              | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| Projektmanagement (z.B. Definition von Meilensteinen und Key Performance Indikatoren) | ○                                           | ○ | ○ | ○                                      | ○ | ○ |
| Forschung und Entwicklung (z.B. Entwicklungs- und Programmierungsaktivitäten)         | ○                                           | ○ | ○ | ○                                      | ○ | ○ |

| <b>Venture Manager – Frage 15 (Priorität exploitativer Ziele)</b>                                                                                                                                                                                               |                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| In welcher Reihenfolge priorisieren Ihre Vorgesetzten die nachfolgenden Aspekte in der aktuellen Reifephase Ihrer Geschäftsentwicklung. Ordnen Sie die nachfolgenden Aspekte der Priorität nach, nutzen Sie dazu die Drag & Drop Funktion (klicken und ziehen). |                                                                                                |
| (1=unwichtig für meine Vorgesetzten, 6=wichtig für meine Vorgesetzten).                                                                                                                                                                                         |                                                                                                |
| 1                                                                                                                                                                                                                                                               | Mein Team soll neue Marktsegmente identifizieren                                               |
| 2                                                                                                                                                                                                                                                               | Mein Team soll innovative Produkte und Dienstleistungen finden und nutzbar machen              |
| 3                                                                                                                                                                                                                                                               | Mein Team soll neue Ideen entwickeln, indem wir außerhalb gängiger Lösungsansätze denken       |
| 4                                                                                                                                                                                                                                                               | Mein Team soll die bestehende Kundenbasis tiefer durchdringen                                  |
| 5                                                                                                                                                                                                                                                               | Mein Team soll Routinen für Abläufe und Tätigkeiten entwickeln, damit wir effizienter arbeiten |
| 6                                                                                                                                                                                                                                                               | Mein Team soll die Qualität verbessern und die Kosten reduzieren                               |



## **APPENDIX E2: QUESTIONNAIRE – ENGLISH VERSION**

Appendix E2 provides the English version of the questionnaire used to collect data. The survey was originally conducted in German. The German version is reported in Appendix E1. The questionnaire consists of two parts. E1.1 is the screener which gathers general information on the participant. E1.2 gathers information on corporate venture management.

### **E2.1 – Screener (8 Questions)**

| <b>Screener – Question 1</b>                          |                                                                                 |
|-------------------------------------------------------|---------------------------------------------------------------------------------|
| Please indicate your current position in the company: |                                                                                 |
| <input type="radio"/>                                 | Board of Directors                                                              |
| <input type="radio"/>                                 | Executive Board                                                                 |
| <input type="radio"/>                                 | Chief Executive                                                                 |
| <input type="radio"/>                                 | Head of the Business Development Department                                     |
| <input type="radio"/>                                 | Head of another Department                                                      |
| <input type="radio"/>                                 | Project Manager/ Team Leader                                                    |
| <input type="radio"/>                                 | Employee                                                                        |
| <input type="radio"/>                                 | You are in another position? Please describe below:<br><br><input type="text"/> |

| <b>Screener – Question 2</b>                             |                     |
|----------------------------------------------------------|---------------------|
| How long are you in the current position in the company? |                     |
| <input type="radio"/>                                    | Less than 1 year    |
| <input type="radio"/>                                    | Between 1-2 years   |
| <input type="radio"/>                                    | Between 2-3 years   |
| <input type="radio"/>                                    | Between 3-4 years   |
| <input type="radio"/>                                    | Longer than 5 years |

| <b>Screener – Question 3</b>                                                                                |                                                                                  |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Is there a teams in your company that currently develops a new business, or did so during the past 3 years? |                                                                                  |
| <input type="radio"/>                                                                                       | Yes, there are one or more teams that are currently developing a new business    |
| <input type="radio"/>                                                                                       | Yes, we had one or more teams that developed a new business in the past 3 years. |
| <input type="radio"/>                                                                                       | No, there are no such teams in our company                                       |

**Screener – Question 4**

Have you made experience in the past with teams that development a new business?

- |                       |                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------|
| <input type="radio"/> | Yes, I have accompanied teams that developed a new businesses in the past.            |
| <input type="radio"/> | No, I don't have any experience with the development of a new business through teams. |

**Screener – Question 5**

What is the number of teams that are currently developing a new business in your company?

Number of Teams:

- |                       |     |
|-----------------------|-----|
| <input type="radio"/> | 1   |
| <input type="radio"/> | 2   |
| <input type="radio"/> | 3   |
| <input type="radio"/> | 4   |
| <input type="radio"/> | 5   |
| <input type="radio"/> | 6   |
| <input type="radio"/> | 7   |
| <input type="radio"/> | 8   |
| <input type="radio"/> | 9   |
| <input type="radio"/> | 10  |
| <input type="radio"/> | >10 |

**Screener – Question 6**

What is the number of teams that developed a new business in your company in the past 3 years?

Number of Teams:

- |                       |     |
|-----------------------|-----|
| <input type="radio"/> | 1   |
| <input type="radio"/> | 2   |
| <input type="radio"/> | 3   |
| <input type="radio"/> | 4   |
| <input type="radio"/> | 5   |
| <input type="radio"/> | 6   |
| <input type="radio"/> | 7   |
| <input type="radio"/> | 8   |
| <input type="radio"/> | 9   |
| <input type="radio"/> | 10  |
| <input type="radio"/> | >10 |

**Screener – Question 7**

What is the number of teams that terminated the development of a new business in the past 5 years?

Number of Teams:

|                       |     |
|-----------------------|-----|
| <input type="radio"/> | 1   |
| <input type="radio"/> | 2   |
| <input type="radio"/> | 3   |
| <input type="radio"/> | 4   |
| <input type="radio"/> | 5   |
| <input type="radio"/> | 6   |
| <input type="radio"/> | 7   |
| <input type="radio"/> | 8   |
| <input type="radio"/> | 9   |
| <input type="radio"/> | 10  |
| <input type="radio"/> | >10 |

**Screener – Question 8**

Which of the following statements applies to you personally?

|                       |                                                                                                                         |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------|
| <input type="radio"/> | I am currently the leader of a team that has the task to develops a new business                                        |
| <input type="radio"/> | I am currently the leader of a team that already has developed a new business in the past 3 years                       |
| <input type="radio"/> | I am currently the supervisor of the leader of a team that currently develops a new business                            |
|                       | I am the supervisor of the leader of a team that already developed a new business in the past 3 years                   |
| <input type="radio"/> | I am currently member of a team that currently develops a new business or that already did so in the past 3 years       |
| <input type="radio"/> | I have currently no relation with a team that develops a new business. However, I have made some experience in the past |
| <input type="radio"/> | I have never made any experience with a team that develops a new business                                               |

## E2.2 –Venture Managers (16 Questions)

| <b>Venture Manager – Question 1</b>                                             |                                                                                                                           |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| What relation does your team (developing a new business) have with the company? |                                                                                                                           |
| <input type="radio"/>                                                           | The new business is developed within the company                                                                          |
| <input type="radio"/>                                                           | The new business is developed outside the company and is basically an own organization                                    |
| <input type="radio"/>                                                           | The new business is developed in cooperation with one or more other companies                                             |
| <input type="radio"/>                                                           | The new business was initially developed by another company and was later acquired by our company                         |
| <input type="radio"/>                                                           | Does the team have another relation with the company? Please describe the relationship below:<br><br><input type="text"/> |

| <b>Venture Manager – Question 2 (# of Employees in the Corporate Venture)</b>       |                      |
|-------------------------------------------------------------------------------------|----------------------|
| What is the total number of the full time equivalent employees (FTEs) of your team? |                      |
| Number of Employees:                                                                | <input type="text"/> |

| <b>Venture Manager – Question 3 (Turnover of the Corporate Venture)</b>                                 |                |
|---------------------------------------------------------------------------------------------------------|----------------|
| Which of the following ranges applies to the turnover (€) that your team has made in the previous year? |                |
| Turnover in the previous year:                                                                          |                |
| <input type="radio"/>                                                                                   | 0-50 K-€       |
| <input type="radio"/>                                                                                   | 50-100 K-€     |
| <input type="radio"/>                                                                                   | 100-500 K-€    |
| <input type="radio"/>                                                                                   | 500-1000 K-€   |
| <input type="radio"/>                                                                                   | 1-3 Mio. €     |
| <input type="radio"/>                                                                                   | 3-10 Mio. €    |
| <input type="radio"/>                                                                                   | über 10 Mio. € |

| <b>Venture Manager – Question 4 (# of Employees in the Corporation)</b>                |                      |
|----------------------------------------------------------------------------------------|----------------------|
| What is the total number of the full time equivalent employees (FTEs) in your company? |                      |
| Number of Employees:                                                                   | <input type="text"/> |

| <b>Venture Manager – Question 5 (Turnover of the Corporation)</b>                                          |                     |
|------------------------------------------------------------------------------------------------------------|---------------------|
| Which of the following ranges applies to the turnover (€) that your company has made in the previous year? |                     |
| Turnover in the previous year:                                                                             |                     |
| <input type="radio"/>                                                                                      | < 2 Mio. €          |
| <input type="radio"/>                                                                                      | 2 Mio. – 10 Mio. €  |
| <input type="radio"/>                                                                                      | 10 Mio. – 50 Mio. € |
| <input type="radio"/>                                                                                      | > 50 Mio. €         |

| <b>Venture Manager – Question 6 (Maturity Stage)</b>             |                                                        |
|------------------------------------------------------------------|--------------------------------------------------------|
| Please indicate the maturity stage that your team reaches today. |                                                        |
| <input type="radio"/>                                            | First Stage: Investments in the new business were made |
| <input type="radio"/>                                            | Second Stage: First turnover was achieved              |
| <input type="radio"/>                                            | Third Stage: The new business reached break-even       |

| <b>Venture Manager – Question 7 (Maturity Stage)</b>                 |                      |                      |
|----------------------------------------------------------------------|----------------------|----------------------|
| Please indicate when your team has reached the following stages.     |                      |                      |
|                                                                      | Year                 | Quarter              |
| First Stage (A):<br>The decision was made to develop a new business  | <input type="text"/> | <input type="text"/> |
| Second Stage (B):<br>First investments in the new business were made | <input type="text"/> | <input type="text"/> |
| Second Stage:<br>First turnover was achieved                         | <input type="text"/> | <input type="text"/> |
| Third Stage:<br>Break-even was reached                               | <input type="text"/> | <input type="text"/> |

| <b>Venture Manager – Question 8 (Experience)</b>                                                                                       |                    |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| How many years of experience (including you and excluding your supervisor) does your team have with the development of a new business? |                    |
| <input type="radio"/>                                                                                                                  | Less than 1 year   |
| <input type="radio"/>                                                                                                                  | 1-2 years          |
| <input type="radio"/>                                                                                                                  | 2-3 years          |
| <input type="radio"/>                                                                                                                  | 3-4 years          |
| <input type="radio"/>                                                                                                                  | 4-5 years          |
| <input type="radio"/>                                                                                                                  | 5-6 years          |
| <input type="radio"/>                                                                                                                  | 6-7 years          |
| <input type="radio"/>                                                                                                                  | 7-8 years          |
| <input type="radio"/>                                                                                                                  | 8-9 years          |
| <input type="radio"/>                                                                                                                  | 9-10 years         |
| <input type="radio"/>                                                                                                                  | 10-15 years        |
| <input type="radio"/>                                                                                                                  | 15-20 years        |
| <input type="radio"/>                                                                                                                  | More than 20 years |



| How frequently can you make decisions concerning the development of the new business without the approval of your supervisor(s)? |                      |   |   |   |   |   |                       |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------|---|---|---|---|---|-----------------------|
|                                                                                                                                  | Is almost never true |   |   |   |   |   | Is almost always true |
|                                                                                                                                  | 1                    | 2 | 3 | 4 | 5 | 6 |                       |
| I can start research and development activities without the approval of my supervisor(s)                                         | ○                    | ○ | ○ | ○ | ○ | ○ | ○                     |
| I am able to develop new products and services without the approval of my supervisor(s)                                          | ○                    | ○ | ○ | ○ | ○ | ○ | ○                     |
| I can qualify employees for new projects without the approval of my supervisor(s)                                                | ○                    | ○ | ○ | ○ | ○ | ○ | ○                     |
| I can decide without the approval of my supervisor(s) in which market segments future activities are conducted                   | ○                    | ○ | ○ | ○ | ○ | ○ | ○                     |
| I can decide without the approval of my supervisor(s) which customer segments are targeted in the future                         | ○                    | ○ | ○ | ○ | ○ | ○ | ○                     |
| I can introduce new policies and practices without the approval of my supervisor(s)                                              | ○                    | ○ | ○ | ○ | ○ | ○ | ○                     |

| <b>Venture Manager – Question 13 (Decision Autonomy)</b> |                                                          |   |   |                                                         |   |   |
|----------------------------------------------------------|----------------------------------------------------------|---|---|---------------------------------------------------------|---|---|
|                                                          | Approval though my supervisor is almost always necessary |   |   | Approval though my supervisor is almost never necessary |   |   |
|                                                          | 1                                                        | 2 | 3 | 4                                                       | 5 | 6 |
| Marketing                                                | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Human Resource Development                               | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Sales                                                    | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Service                                                  | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Finance and Controlling                                  | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Legal Affairs                                            | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Project Management                                       | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |
| Research and Development                                 | ○                                                        | ○ | ○ | ○                                                       | ○ | ○ |

| <b>Venture Manager – Question 14 (Functional Autonomy)</b> |                                            |   |   |                                              |   |   |
|------------------------------------------------------------|--------------------------------------------|---|---|----------------------------------------------|---|---|
|                                                            | Expertise is primarily provided externally |   |   | Expertise is primarily available in the team |   |   |
|                                                            | 1                                          | 2 | 3 | 4                                            | 5 | 6 |
| Marketing                                                  | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Human Resource Development                                 | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Sales                                                      | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Service                                                    | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Finance and Controlling                                    | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Legal Affairs                                              | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Project Management                                         | ○                                          | ○ | ○ | ○                                            | ○ | ○ |
| Research and Development                                   | ○                                          | ○ | ○ | ○                                            | ○ | ○ |

## Venture Manager – Question 15 (Exploitation Priority)

In which order does your supervisor prioritize the following aspects in the current maturity stage of the new business. Please use the Drag & Drop function to order the following aspects according to the priority of your supervisor.

(1=not important to my supervisor, 6= important to my supervisor).

|   |                                                                                    |
|---|------------------------------------------------------------------------------------|
| 1 | My team is forced to identify new market segments                                  |
| 2 | My team is forced to explore innovative solution or services for commercialization |
| 3 | My team is forced to look for novel ideas by thinking “outside the box”            |
| 4 | My team is forced to penetrate more deeply into the existing customer base         |
| 5 | My team is forced to increase the levels of routinization of operations            |
| 6 | My team is forced to improve quality and lower cost                                |

**Venture Manager – Question 16 (Corporate Venture Success)**

Please assess the extent to which the following aspects concerning the development of the new business are true

## APPENDIX F: CORRELATION MATRIX OF THE FOUR AUTONOMY SCALES

The following table reports the correlations between the items of the four autonomy scales functional autonomy (items 22-29), decision autonomy (items 14-21), strategic autonomy (items 8-13) and job autonomy (items 1-7).

| Item | 22     | 23     | 24     | 25     | 26     | 27    | 28     | 29     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21    | 8      | 9      | 10     | 11     | 12     | 13    | 1      | 2      | 3      | 4      | 5      | 6      | 7 |  |  |  |  |  |  |  |  |  |  |
|------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|---|--|--|--|--|--|--|--|--|--|--|
| 22   | 1      |        |        |        |        |       |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 23   | ,186   | 1      |        |        |        |       |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 24   | ,393** | -,051  | 1      |        |        |       |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 25   | ,149   | ,161   | ,231*  | 1      |        |       |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 26   | ,218*  | ,351** | ,064   | ,338** | 1      |       |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 27   | ,001   | ,118   | ,121   | -,037  | ,331** | 1     |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 28   | ,167   | ,134   | -,073  | ,195   | ,392** | ,168  | 1      |        |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 29   | -,045  | ,258*  | -,230* | ,087   | ,144   | ,222* | ,409** | 1      |        |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 14   | ,338** | -,040  | ,308** | ,309** | ,127   | ,056  | ,094   | -,081  | 1      |        |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 15   | -,097  | ,132   | -,072  | ,112   | ,060   | ,183  | ,145   | ,209   | ,331** | 1      |        |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 16   | ,113   | ,136   | ,440** | ,167   | -,146  | ,115  | -,035  | -,038  | ,542** | ,220*  | 1      |        |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 17   | -,092  | -,086  | ,260*  | ,288** | -,097  | ,102  | -,020  | ,012   | ,316** | ,367** | ,481** | 1      |        |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 18   | -,160  | ,085   | -,067  | ,059   | ,255*  | ,182  | ,061   | ,146   | ,173   | ,341** | ,140   | ,458** | 1      |        |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 19   | -,074  | -,049  | ,068   | ,072   | -,014  | ,048  | -,037  | ,029   | ,232*  | ,368** | ,263*  | ,347** | ,576** | 1      |        |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 20   | -,114  | ,089   | ,024   | -,104  | ,032   | ,178  | ,154   | ,107   | ,138   | ,350** | ,190   | ,564** | ,525** | ,319** | 1      |       |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 21   | -,142  | ,084   | -,211* | -,055  | -,044  | ,042  | ,145   | ,369** | ,092   | ,098   | ,017   | ,275** | ,337** | ,217*  | ,537** | 1     |        |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 8    | -,156  | -,007  | -,062  | ,096   | ,042   | ,000  | -,052  | ,165   | -,003  | ,028   | ,062   | ,176   | ,291** | ,083   | ,140   | ,268* | 1      |        |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 9    | ,088   | ,103   | ,161   | ,108   | ,124   | ,141  | ,015   | -,090  | ,264*  | ,281** | ,194   | ,307** | ,139   | ,118   | ,273   | ,189  | ,383** | 1      |        |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 10   | -,075  | -,010  | ,053   | ,178   | ,022   | -,172 | -,044  | -,034  | -,053  | ,303** | -,043  | ,213*  | ,213*  | ,070   | ,292** | ,116  | ,292** | ,382** | 1      |        |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 11   | ,023   | -,064  | ,359** | ,144   | -,062  | -,008 | -,001  | -,079  | ,239*  | ,241*  | ,414** | ,303** | ,041   | ,072   | ,077   | ,093  | ,284** | ,471** | ,234*  | 1      |        |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 12   | -,096  | -,093  | ,338** | ,235*  | -,075  | ,149  | -,093  | ,012   | ,195   | ,305** | ,435*  | ,463*  | ,172   | ,140   | ,128   | ,142  | ,347** | ,381** | ,225*  | ,739** | 1      |       |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 13   | ,269*  | ,055   | ,300** | ,236*  | ,168   | ,185  | ,163   | -,015  | ,367** | ,214*  | ,267*  | ,267*  | ,182   | -,003  | ,109   | ,136  | ,251*  | ,517** | ,271*  | ,483** | ,522** | 1     |        |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 1    | -,131  | -,043  | ,081   | ,130   | ,133   | ,035  | -,051  | -,121  | ,239*  | ,258*  | ,270*  | ,178   | ,188   | ,182   | ,196   | ,193  | ,236*  | ,437** | ,325** | ,369** | ,405** | ,274* | 1      |        |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 2    | -,201  | -,122  | -,083  | ,060   | ,152   | ,004  | ,059   | ,057   | -,154  | ,048   | -,017  | ,064   | ,128   | ,038   | ,173   | ,186  | ,235*  | ,150   | ,340** | ,128   | ,154   | ,032  | ,454** | 1      |        |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 3    | -,208  | -,177  | -,047  | -,027  | ,040   | ,026  | -,039  | -,005  | -,079  | ,155   | ,052   | ,101   | ,163   | ,125   | ,214*  | ,193  | ,259*  | ,283** | ,335** | ,160   | ,259*  | ,134  | ,449** | ,762** | 1      |        |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 4    | -,108  | -,196  | ,173   | ,024   | -,037  | -,132 | -,022  | -,180  | -,022  | ,147   | ,010   | ,145   | ,099   | ,175   | ,129   | ,112  | ,071   | ,211*  | ,377** | ,161   | ,158   | ,082  | ,337** | ,609** | ,588** | 1      |        |        |   |  |  |  |  |  |  |  |  |  |  |
| 5    | ,008   | -,085  | ,242*  | ,069   | ,145   | ,058  | ,024   | -,171  | ,020   | -,028  | ,168   | ,134   | ,033   | ,082   | ,087   | ,031  | ,186   | ,282** | ,242*  | ,169   | ,209   | ,180  | ,351** | ,392** | ,404** | ,579** | 1      |        |   |  |  |  |  |  |  |  |  |  |  |
| 6    | ,153   | -,017  | ,001   | -,040  | ,292** | ,024  | ,173   | ,018   | ,067   | ,113   | ,017   | -,060  | ,089   | -,071  | ,110   | ,058  | ,310** | ,311** | ,273*  | ,059   | ,049   | ,232* | ,285** | ,286** | ,330** | ,285** | ,462** | 1      |   |  |  |  |  |  |  |  |  |  |  |
| 7    | ,226*  | -,045  | ,159   | -,055  | ,033   | -,069 | ,020   | ,013   | ,069   | ,103   | ,112   | -,027  | ,059   | -,043  | ,095   | ,046  | ,396** | ,209   | ,229*  | ,210   | ,153   | ,154  | ,264*  | ,326*  | ,325** | ,356*  | ,340** | ,662** | 1 |  |  |  |  |  |  |  |  |  |  |

\*\*. Correlation is significant at level of p ≤ .01; \*. Correlation is significant at level of p ≤ .05

## APPENDIX G: SYNTAX USED TO RUN THE PARALLEL ANALYSIS

Appendix G provides the Syntax used to perform the parallel analysis. The syntax is developed and published by Brian O'Connor. The publication of the syntax can be found in the following reference: O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instrumentation, and Computers*, 32, 396-402. The syntax reads as follows.

---

\* Parallel Analysis Program For Raw Data and Data Permutations.

\* To run this program you need to first specify the data for analysis and then RUN, all at once, the commands from the MATRIX statement to the END MATRIX statement.

\* This program conducts parallel analyses on data files in which the rows of the data matrix are cases/individuals and the columns are variables; Data are read/entered into the program using the GET command (see the GET command below); The GET command reads an SPSS data file, which can be either the current, active SPSS data file or a previously saved data file; A valid filename/location must be specified on the GET command; A subset of variables for the analyses can be specified by using the "/ VAR =" subcommand with the GET statement; There can be no missing values.

\* You must also specify:

the # of parallel data sets for the analyses; the desired percentile of the distribution and random data eigenvalues; whether principal components analyses or principal axis/common factor analysis are to be conducted, and whether normally distributed random data generation or permutations of the raw data set are to be used in the parallel analyses.

\* Permutations of the raw data set can be time consuming; Each parallel data set is based on column-wise random shufflings of the values in the raw data matrix using Castellan's (1992, BRMIC, 24, 72-77) algorithm; The distributions of the original raw variables are exactly preserved in the shuffled versions used in the parallel analyses; Permutations of the raw data set are thus highly accurate and most relevant, especially in cases where the raw data are not normally

distributed or when they do not meet the assumption of multivariate normality (see Longman & Holden, 1992, BRMIC, 24, 493, for a Fortran version); If you would like to go this route, it is perhaps best to (1) first run a normally distributed random data generation parallel analysis to familiarize yourself with the program and to get a ballpark reference point for the number of factors/components; (2) then run a permutations of the raw data parallel analysis using a small number of datasets (e.g., 100), just to see how long the program takes to run; then (3) run a permutations of the raw data parallel analysis using the number of parallel data sets that you would like use for your final analyses; 1000 datasets are usually sufficient, although more datasets should be used if there are close calls.

\* These next commands generate artificial raw data (500 cases) that can be used for a trial-run of the program, instead of using your own raw data; Just select and run this whole file; However, make sure to delete the artificial data commands before attempting to run your own data.

```
set mxloops=9000 printback=off width=80 seed = 1953125.  
matrix.
```

\* Enter the name/location of the data file for analyses after "FILE ="; If you specify "FILE = \*", then the program will read the current, active SPSS data file; Alternatively, enter the name/location of a previously saved SPSS data file instead of "\*"; you can use the "/ VAR =" subcommand after "/ missing=omit" subcommand to select variables for the analyses. GET raw / FILE = \* / missing=omit / VAR = Q34.16\_1, Q34.16\_2, Q34.16\_3, Q34.16\_4, Q34.16\_5, Q34.16\_6, Q34.16\_7, Q34.16\_8  
Q34.10\_1, Q34.10\_2, Q34.10\_3, Q34.10\_4, Q34.10\_5, Q34.10\_6, Q34.10\_7  
Q34.11\_1, Q34.11\_2, Q34.11\_3, Q34.11\_4, Q34.11\_5, Q34.11\_6  
Q.15\_1u, Q.15\_2u, Q.15\_3u, Q.15\_4u, Q.15\_5u, Q.15\_6u, Q.15\_7u, Q.15\_8u.

\* Enter the desired number of parallel data sets here.  
compute ndatasets = 1000.

\* Enter the desired percentile here.  
compute percent = 95.

\* Enter either  
1 for principal components analysis, or  
2 for principal axis/common factor analysis.  
compute kind = 2 .

\* Enter either

1 for normally distributed random data generation parallel analysis, or

2 for permutations of the raw data set.

compute randtype = 2.

\*\*\*\*\* End of user specifications. \*\*\*\*\*

compute ncases = nrow(raw).

compute nvars = ncol(raw).

\* principal components analysis & random normal data generation.

do if (kind = 1 and randtype = 1).

compute nm1 = 1 / (ncases-1).

compute vcv = nm1 \* (sscp(raw) - ((t(csum(raw))\*csum(raw))/ncases)).

compute d = inv(mdiag(sqrt(diag(vcv)))).

compute realeval = eval(d \* vcv \* d).

compute evals = make(nvars,ndatsets,-9999).

loop #nds = 1 to ndatsets.

compute x = sqrt(2 \* (ln(uniform(ncases,nvars)) \* -1) ) &

cos(6.283185 \* uniform(ncases,nvars) ).

compute vcv = nm1 \* (sscp(x) - ((t(csum(x))\*csum(x))/ncases)).

compute d = inv(mdiag(sqrt(diag(vcv)))).

compute evals(:,#nds) = eval(d \* vcv \* d).

end loop.

end if.

\* principal components analysis & raw data permutation.

do if (kind = 1 and randtype = 2).

compute nm1 = 1 / (ncases-1).

compute vcv = nm1 \* (sscp(raw) - ((t(csum(raw))\*csum(raw))/ncases)).

compute d = inv(mdiag(sqrt(diag(vcv)))).

compute realeval = eval(d \* vcv \* d).

compute evals = make(nvars,ndatsets,-9999).

loop #nds = 1 to ndatsets.

compute x = raw.

loop #c = 1 to nvars.

loop #r = 1 to (ncases - 1).

compute k = trunc( (ncases - #r + 1) \* uniform(1,1) + 1 ) + #r - 1.

compute d = x(#r,#c).

compute x(#r,#c) = x(k,#c).

compute x(k,#c) = d.

```

end loop.
end loop.
compute vcv = nm1 * (sscp(x) - ((t(csum(x))*csum(x))/ncases)).
compute d = inv(mdiag(sqrt(diag(vcv)))). 
compute evals(:,#nds) = eval(d * vcv * d).
end loop.
end if.

* PAF/common factor analysis & random normal data generation.
do if (kind = 2 and randtype = 1).
compute nm1 = 1 / (ncases-1).
compute vcv = nm1 * (sscp(raw) - ((t(csum(raw))*csum(raw))/ncases)).
compute d = inv(mdiag(sqrt(diag(vcv)))). 
compute cr = (d * vcv * d).
compute smc = 1 - (1 &/ diag(inv(cr))).
call setdiag(cr,smc).
compute realeval = eval(cr).
compute evals = make(nvars,ndatsets,-9999).
compute nm1 = 1 / (ncases-1).
loop #nds = 1 to ndatsets.
compute x = sqrt(2 * (ln(uniform(ncases,nvars)) * -1) ) &*
            cos(6.283185 * uniform(ncases,nvars) ).
compute vcv = nm1 * (sscp(x) - ((t(csum(x))*csum(x))/ncases)).
compute d = inv(mdiag(sqrt(diag(vcv)))). 
compute r = d * vcv * d.
compute smc = 1 - (1 &/ diag(inv(r))).
call setdiag(r,smc).
compute evals(:,#nds) = eval(r).
end loop.
end if.

* PAF/common factor analysis & raw data permutation.
do if (kind = 2 and randtype = 2).
compute nm1 = 1 / (ncases-1).
compute vcv = nm1 * (sscp(raw) - ((t(csum(raw))*csum(raw))/ncases)).
compute d = inv(mdiag(sqrt(diag(vcv)))). 
compute cr = (d * vcv * d).
compute smc = 1 - (1 &/ diag(inv(cr))).
call setdiag(cr,smc).
compute realeval = eval(cr).
compute evals = make(nvars,ndatsets,-9999).
compute nm1 = 1 / (ncases-1).
loop #nds = 1 to ndatsets.

```

```

compute x = raw.
loop #c = 1 to nvars.
loop #r = 1 to (ncases -1).
compute k = trunc( (ncases -#r + 1) * uniform(1,1) + 1 ) + #r - 1 .
compute d = x(#r,#c).
compute x(#r,#c) = x(k,#c).
compute x(k,#c) = d.
end loop.
end loop.
compute vcv = nm1 * (sscp(x) - ((t(csum(x))*csum(x))/ncases)).
compute d = inv(mdiag(sqrt(diag(vcv)))). 
compute r = d * vcv * d.
compute smc = 1 - (1 &/ diag(inv(r))).
call setdiag(r,smc).
compute evals(:,#nds) = eval(r).
end loop.
end if.

```

\* identifying the eigenvalues corresponding to the desired percentile.

```

compute num = rnd((percent*ndatsets)/100).
compute results = { t(1:nvars), realeval, t(1:nvars), t(1:nvars) }.
loop #root = 1 to nvars.
compute ranks = rnkorder(evals(#root,:)).
loop #col = 1 to ndatsets.
do if (ranks(1,#col) = num).
compute results(#root,4) = evals(#root,#col).
break.
end if.
end loop.
end loop.
compute results(:,3) = rsum(evals) / ndatsets.

```

```

print /title="PARALLEL ANALYSIS:".
do if (kind = 1 and randtype = 1).
print /title="Principal Components & Random Normal Data Generation".
else if (kind = 1 and randtype = 2).
print /title="Principal Components & Raw Data Permutation".
else if (kind = 2 and randtype = 1).
print /title="PAF/Common Factor Analysis & Random Normal Data Generation".
else if (kind = 2 and randtype = 2).
print /title="PAF/Common Factor Analysis & Raw Data Permutation".
end if.

```

```
compute specifs = {ncases; nvars; ndatasets; percent}.
print specifs /title="Specifications for this Run:"
/rlabels="Ncases" "Nvars" "Ndatsets" "Percent".
print results
/title="Raw Data Eigenvalues, & Mean & Percentile Random Data Eigenvalues"
/clabels="Root" "Raw Data" "Means" "Prcentyle" /format "f12.6".

do if (kind = 2).
print / space = 1.
print /title="Warning: Parallel analyses of adjusted correlation matrices".
print /title="eg, with SMCs on the diagonal, tend to indicate more factors".
print /title="than warranted (Buja, A., & Eyuboglu, N., 1992, Remarks on parallel".
print /title="analysis. Multivariate Behavioral Research, 27, 509-540.)".
print /title="The eigenvalues for trivial, negligible factors in the real".
print /title="data commonly surpass corresponding random data eigenvalues".
print /title="for the same roots. The eigenvalues from parallel analyses".
print /title="can be used to determine the real data eigenvalues that are".
print /title="beyond chance, but additional procedures should then be used".
print /title="to trim trivial factors.".
print / space = 2.
print /title="Principal components eigenvalues are often used to determine".
print /title="the number of common factors. This is the default in most".
print /title="statistical software packages, and it is the primary practice".
print /title="in the literature. It is also the method used by many factor".
print /title="analysis experts, including Cattell, who often examined".
print /title="principal components eigenvalues in his scree plots to determine".
print /title="the number of common factors. But others believe this common".
print /title="practice is wrong. Principal components eigenvalues are based".
print /title="on all of the variance in correlation matrices, including both".
print /title="the variance that is shared among variables and the variances".
print /title="that are unique to the variables. In contrast, principal".
print /title="axis eigenvalues are based solely on the shared variance".
print /title="among the variables. The two procedures are qualitatively".
print /title="different. Some therefore claim that the eigenvalues from one".
print /title="extraction method should not be used to determine".
print /title="the number of factors for the other extraction method.".
print /title="The issue remains neglected and unsettled.".
end if.

compute root    = results(:,1).
compute rawdata = results(:,2).
compute percntyl = results(:,4).
```

```
save results /outfile= 'C:\Users\jgard\Desktop\ Dissertation\ Daten\ Business Developer\ Parallel Analysis\screedata.sav' / var=root rawdata means percntyl .  
end matrix.
```

\* plots the eigenvalues, by root, for the real/raw data and for the random data; This command works in SPSS 12, but not in all earlier versions.

```
GET      file=      'C:\Users\jgard\Desktop\ Dissertation\ Daten\ Business      Developer\ Parallel Analysis\screedata.sav'.
```

```
TS PLOT VARIABLES= rawdata means percntyl /ID= root /NOLOG.
```

---

## APPENDIX H: PRINCIPAL COMPONENT ANALYSIS WITH THREE VARIABLES

Appendix H provides the results of the principal component analysis, including the reduced six-item scale for job autonomy (items 2-7), the reduced four-item scale for strategic autonomy (items 9, 11, 12 and 13) and the seven items measuring corporate venture success (items 14-20).

| Item | Component |      |   |
|------|-----------|------|---|
|      | 1         | 2    | 3 |
| 2    | .805      |      |   |
| 3    | .764      |      |   |
| 4    | .783      |      |   |
| 5    | .655      |      |   |
| 6    | .620      |      |   |
| 7    | .619      |      |   |
| 9    |           | .604 |   |
| 11   |           | .863 |   |
| 12   |           | .843 |   |
| 13   |           | .748 |   |
| 14   |           | .850 |   |
| 15   |           | .752 |   |
| 16   |           | .765 |   |
| 17   |           | .831 |   |
| 18   |           | .782 |   |
| 19   |           | .776 |   |
| 20   |           | .831 |   |

<sup>a</sup> Varimax rotated component matrix

<sup>b</sup> Table includes all component loadings above the .30 cut-off point

<sup>c</sup> Results after erasing item 1 for job autonomy and items 1 and 3 for strategic autonomy

<sup>d</sup> The items 8 to 13 refer to the strategic autonomy scale, the items 1 to 7 refer to the job autonomy scale and the items 14 to 20 refer to the strategic autonomy scale

## APPENDIX I: ANOVA FOR TESTING NON-RESPONSE BIAS

The analysis of variance (ANOVA) compares (a) the turnover and (b) the number of employees of firms that did not respond to the survey and of those firms that responded to the survey. The descriptive statistics (Table 1) show that non-responding firms have with 15.1 million Euro on average (mean) a higher turnover and are with 86 employees smaller than responding firms. Responding firms have on average a turnover of 13.3 million Euro and 93 employees. However, the analysis of variance (Table 2) shows that these differences are not significant. Thus, we may state that non-responding firms and responding firms are not different.

### Descriptives

| <b>Turnover</b>       | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> | <b>Std. Error</b> | <b>95% Confidence Interval for Mean</b> |                    |      | <b>Min.</b> | <b>Max.</b> |
|-----------------------|----------|-------------|-----------------------|-------------------|-----------------------------------------|--------------------|------|-------------|-------------|
|                       |          |             |                       |                   | <b>Lower Bound</b>                      | <b>Upper Bound</b> |      |             |             |
| Non-Responding Firms  | 2097     | 15.1245     | 27.3320               | .5968             | 13.9540                                 | 16.2950            | .03  | 549.30      |             |
| Responding Firms      | 72       | 13.3086     | 11.6406               | 1.3718            | 10.5732                                 | 16.0440            | 3.30 | 60.00       |             |
| Total                 | 2169     | 15.0642     | 26.9588               | .5788             | 13.9290                                 | 16.1993            | .03  | 549.30      |             |
| <b># of Employees</b> |          |             |                       |                   |                                         |                    |      |             |             |
| Non-Responding Firms  | 2363     | 86.02       | 70.031                | 1.441             | 83.20                                   | 88.85              | 0    | 650         |             |
| Responding Firms      | 77       | 93.62       | 65.346                | 7.447             | 78.79                                   | 108.46             | 27   | 335         |             |
| Total                 | 2440     | 86.26       | 69.889                | 1.415             | 83.49                                   | 89.03              | 0    | 650         |             |

### Analysis of Variance

| <b>Turnover</b>       | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |
|-----------------------|-----------------------|-----------|--------------------|----------|-------------|
| Between Groups        | 229.524               | 1         | 229.524            | .316     | .574        |
| Within Groups         | 1575423.354           | 2167      | 727.007            |          |             |
| Total                 | 1575652.878           | 2168      |                    |          |             |
| <b># of Employees</b> |                       |           |                    |          |             |
| Between Groups        | 4310.641              | 1         | 4310.641           | .882     | .348        |
| Within Groups         | 11908747.103          | 2438      | 4884.638           |          |             |
| Total                 | 11913057.744          | 2439      |                    |          |             |

## APPENDIX J1: ANOVA TO TEST SOURCE BIAS ON CORPORATE VENTURE SUCCESS

The analysis of variance (ANOVA) compares the venture manager's and corporate manager's assessment of corporate venture success. The descriptive statistics (Table 1) shows that venture managers assess corporate venture success with 30.4 on average higher than the corporate managers with 29.6. However, the analysis of variance (Table 2) shows that these differences are not significant. Thus, we may conclude that the assessment of corporate venture success does not distinguish among venture managers and corporate managers.

### Descriptives

| Corporate<br>Venture<br>Success | N   | Mean    | Std.<br>Deviation | Std. Error | 95% Confidence<br>Interval for Mean |                | Minimum | Maximum |
|---------------------------------|-----|---------|-------------------|------------|-------------------------------------|----------------|---------|---------|
|                                 |     |         |                   |            | Lower<br>Bound                      | Upper<br>Bound |         |         |
| Venture<br>Manager              | 87  | 30.3908 | 6.8528            | .7347      | 28.9303                             | 31.8513        | 7.00    | 42.00   |
| Corporate<br>Manager            | 287 | 29.5645 | 6.8194            | .4025      | 28.7721                             | 30.3568        | 14.00   | 42.00   |
| Total                           | 374 | 29.7567 | 6.8270            | .3530      | 29.0625                             | 30.4508        | 7.00    | 42.00   |

### Analysis of Variance

| Corporate<br>Venture<br>Success | Sum of<br>Squares | df  | Mean<br>Square | F    | Sig. |
|---------------------------------|-------------------|-----|----------------|------|------|
| Between Groups                  | 45.588            | 1   | 45.588         | .978 | .323 |
| Within Groups                   | 17339.270         | 372 | 46.611         |      |      |
| Total                           | 17384.858         | 373 |                |      |      |

## APPENDIX J2: ANOVA FOR TESTING SOURCE BIAS ON STRATEGIC AUTONOMY

The analysis of variance (ANOVA) compares the assessment of the strategic autonomy venture managers enjoy, given by the venture managers and the corporate managers. The descriptive statistics (Table 1) shows that venture managers assess the strategic autonomy on average higher (18.3) than the corporate managers (14.6). The analysis of variance (Table 2) shows that these differences are significant at  $p < .001$ . Thus, we may conclude that the assessment of strategic autonomy differs between venture managers and corporate managers.

### Descriptives

| Corporate<br>Venture<br>Success | N   | Mean    | Std.<br>Deviation | Std. Error | 95% Confidence<br>Interval for Mean |                | Minimum | Maximum |
|---------------------------------|-----|---------|-------------------|------------|-------------------------------------|----------------|---------|---------|
|                                 |     |         |                   |            | Lower<br>Bound                      | Upper<br>Bound |         |         |
| Venture<br>Manager              | 87  | 18.3218 | 5.6967            | .6107      | 17.1077                             | 19.5360        | 5.00    | 30.00   |
| Corporate<br>Manager            | 289 | 14.6851 | 5.9191            | .3481      | 13.9998                             | 15.3704        | 5.00    | 30.00   |
| Total                           | 376 | 15.5266 | 6.0587            | .3124      | 14.9122                             | 16.1410        | 5.00    | 30.00   |

### Analysis of Variance

| Corporate<br>Venture<br>Success | Sum of<br>Squares | df  | Mean<br>Square | F      | Sig. |
|---------------------------------|-------------------|-----|----------------|--------|------|
| Between Groups                  | 884.400           | 1   | 884.400        | 25.678 | .000 |
| Within Groups                   | 12881.335         | 374 | 34.442         |        |      |
| Total                           | 13765.734         | 375 |                |        |      |

### APPENDIX J3: ANOVA FOR TESTING SOURCE BIAS ON JOB AUTONOMY

The analysis of variance (ANOVA) compares the assessment of the job autonomy venture managers enjoy, given by the venture managers and the corporate managers. The descriptive statistics (Table 1) shows that venture managers assess the job autonomy on average higher (33.3) than the corporate managers (31.1). The analysis of variance (Table 2) shows that these differences are significant at  $p < .01$ . Thus, we may conclude that the assessment of job autonomy differs between venture managers and corporate managers.

#### DESCRIPTIVES

| Corporate<br>Venture<br>Success | N   | Mean    | Std.<br>Deviation | Std. Error | 95% Confidence<br>Interval for Mean |                | Minimum | Maximum |
|---------------------------------|-----|---------|-------------------|------------|-------------------------------------|----------------|---------|---------|
|                                 |     |         |                   |            | Lower<br>Bound                      | Upper<br>Bound |         |         |
| Venture<br>Manager              | 87  | 33.2529 | 5.7712            | .6187      | 32.0229                             | 34.4829        | 15.00   | 42.00   |
| Corporate<br>Manager            | 289 | 31.1142 | 5.7455            | .3379      | 30.4490                             | 31.7794        | 10.00   | 42.00   |
| Total                           | 376 | 31.6090 | 5.8143            | .2998      | 31.0194                             | 32.1986        | 10.00   | 42.00   |

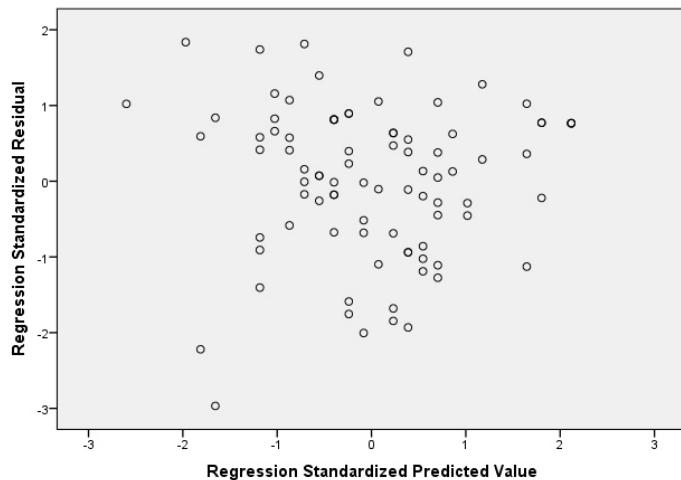
#### Analysis of Variance

| Corporate<br>Venture<br>Success | Sum of<br>Squares | df  | Mean<br>Square | F     | Sig. |
|---------------------------------|-------------------|-----|----------------|-------|------|
| Between Groups                  | 305.861           | 1   | 305.861        | 9.246 | .003 |
| Within Groups                   | 12371.669         | 374 | 33.079         |       |      |
| Total                           | 12677.529         | 375 |                |       |      |

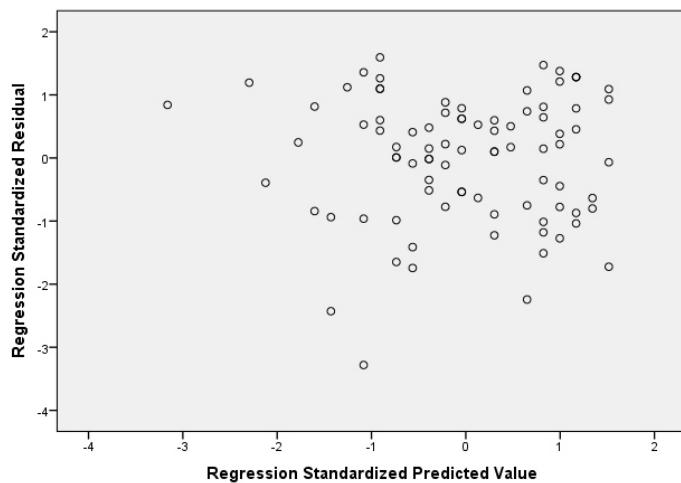
**APPENDIX K: RESIDUAL PLOTS OF THE VARIABLES USED IN THE REGRESSION ANALYSIS**

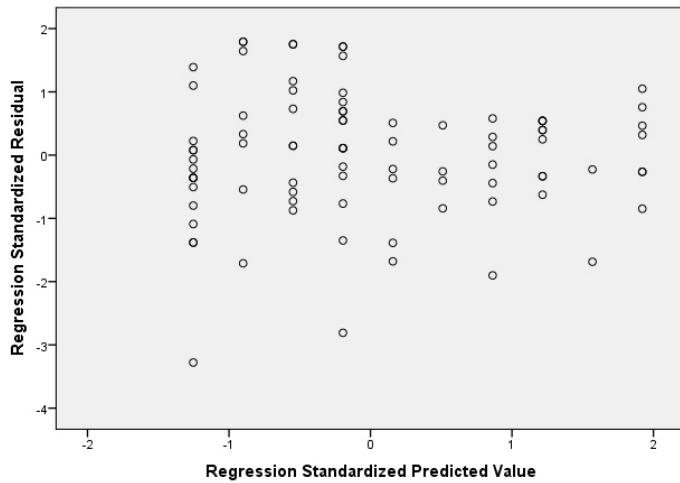
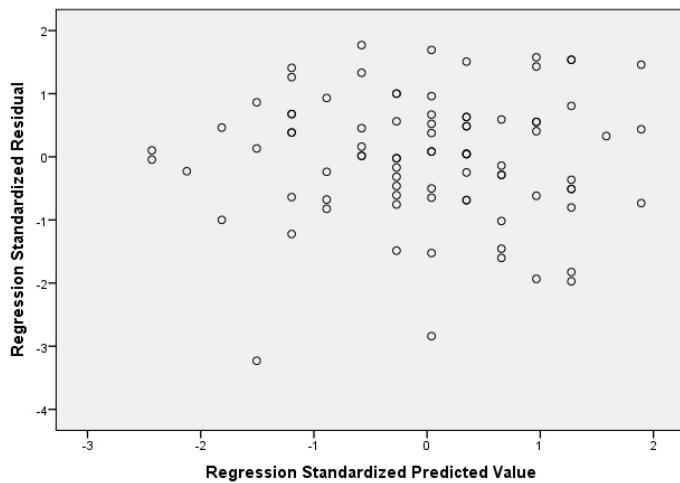
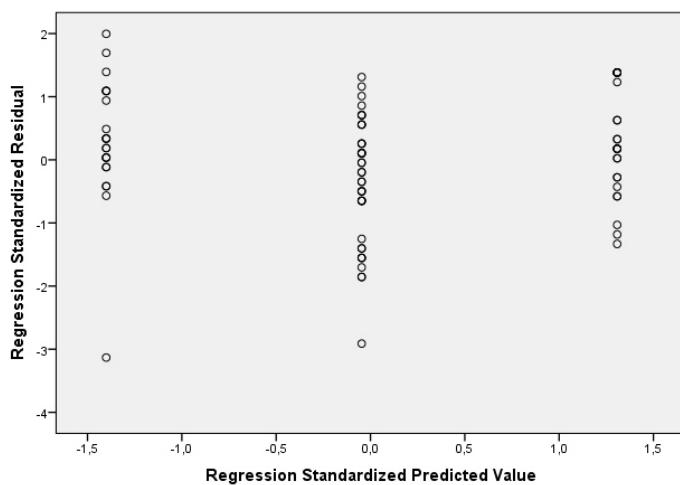
Residual plots using standardized residuals (y-axis) with standardized predictor values (x-axis) are generated for the two main variables (strategic autonomy and job autonomy), the moderator variable (exploitation priority) and the control variables (environmental dynamism, maturity stage, team experience, total employees, total sales and team size) using corporate venture success as the independent variable. The nine residual plots are illustrated below.

K1: Strategic autonomy on corporate venture success

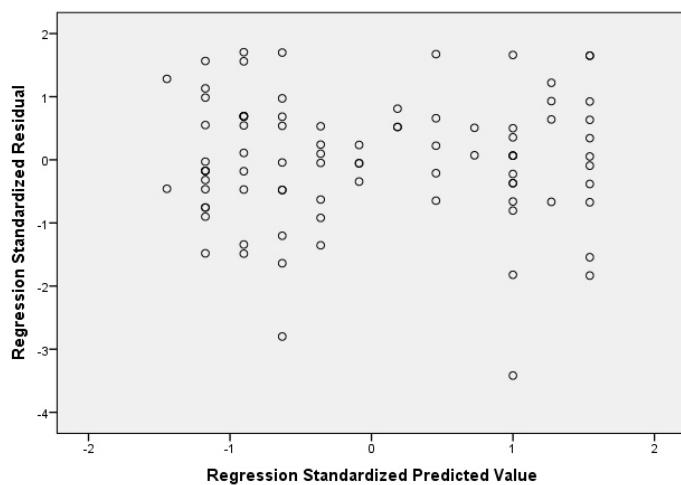


K2: Job autonomy on corporate venture success

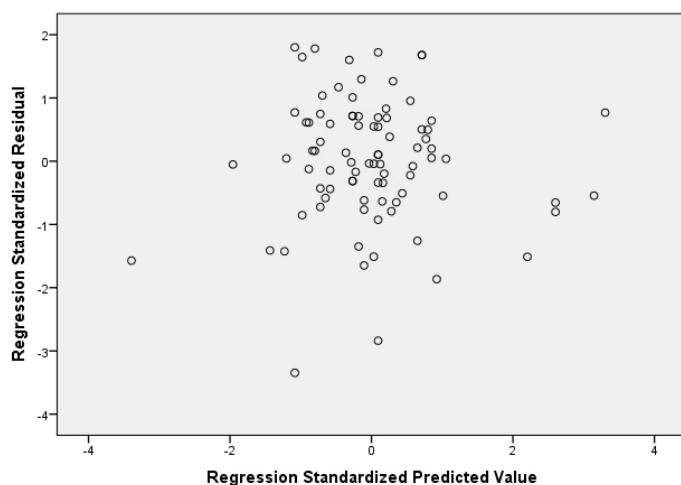


**K3: Exploitation Priority on corporate venture success****K4: Environmental Dynamism on corporate venture success****K5: Maturity Stage on corporate venture success**

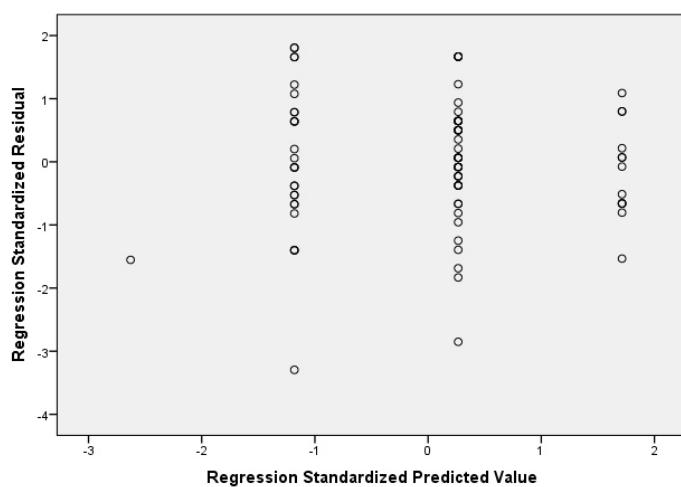
K6: Team Experience on corporate venture success

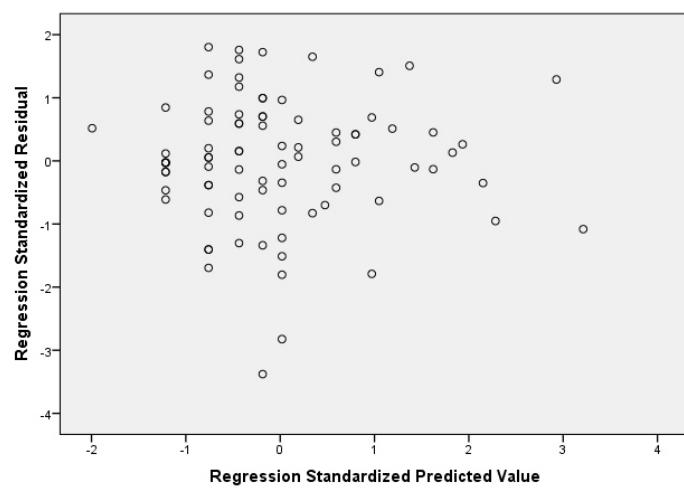


K7: Total employees on corporate venture success



K8: Total sales on corporate venture success



**K9: Team Size on corporate venture success**

## APPENDIX L: SYNTAX USED TO RUN THE HETEROSCEDASTICITY ANALYSIS

Appendix K provides the Syntax used to perform the heteroscedasticity analysis. The syntax is developed by Gwilym Pryce and acknowledged as an official SPSS macro. The syntax reads as follows.

---

\* BREUSCH-PAGAN & KOENKER TEST MACRO \*

\* See 'Heteroscedasticity: Testing and correcting in SPSS'

\* by Gwilym Pryce, for technical details.

\* Code by Marta Garcia-Granero 2002/10/28.

\* The MACRO needs 3 arguments:

\* the dependent, the number of predictors and the list of predictors

\* (if they are consecutive, the keyword TO can be used) .

\* (1) MACRO definition (select an run just ONCE).

```
DEFINE bpktest(!POSITIONAL !TOKENS(1) /!POSITIONAL !TOKENS(1) /!POSITIONAL !CMDEND).
```

\* Regression to get the residuals and residual plots.

REGRESSION

/STATISTICS R ANOVA

/DEPENDENT !1

/METHOD=ENTER !3

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/RESIDUALS HIST(ZRESID) NORM(ZRESID)

/SAVE RESID(residual) .

do if \$casenum=1.

print /"Examine the scatter plot of the residuals to detect"

/"model misspecification and/or heteroscedasticity"/""/"Also, check the histogram and np plot of residuals "/"to detect non normality of residuals "/"Skewness and kurtosis more than twice their SE indicate non-normality ".

end if.

\* Checking normality of residuals.

DESCRIPTIVES

VARIABLES=residual

/STATISTICS=KURTOSIS SKEWNESS .

\* New dependent variable (g) creation.

COMPUTE sq\_res=residual\*\*2.

compute constant=1.

```
AGGREGATE
/OUTFILE='tempdata.sav'
/BREAK=constant
/rss = SUM(sq_res)
/N=N.
MATCH FILES /FILE=*
/FILE='tempdata.sav'.
EXECUTE.
if missing(rss) rss=lag(rss,1).
if missing(n) n=lag(n,1).
compute g=sq_res/(rss/n).
execute.
* BP&K tests.
* Regression of g on the predictors.
REGRESSION
/STATISTICS R ANOVA
/DEPENDENT g
/METHOD=ENTER !3
/SAVE RESID(resid) .
*Final report.
do if $casenum=1.
print /" BP&K TESTS"
/" =====".
end if.
* Routine adapted from Gwilym Pryce.
matrix.
compute p=!2.
get g /variables=g.
get resid /variables=resid.
compute sq_res2=resid**2.
compute n=nrow(g).
compute rss=msum(sq_res2).
compute ii_1=make(n,n,1).
compute i=ident(n).
compute m0=i-((1/n)*ii_1).
compute tss=transpos(g)*m0*g.
compute regss=tss-rss.
print regss
/format="f8.4"
/title="Regression SS".
print rss
/format="f8.4"
/title="Residual SS".
```

---

```

print tss
/format="f8.4"
/title="Total SS".
compute r_sq=1-(rss/tss).
print r_sq
/format="f8.4"
/title="R-squared".
print n
/format="f4.0"
/title="Sample size (N)".
print p
/format="f4.0"
/title="Number of predictors (P)".
compute bp_test=0.5*regss.
print bp_test
/format="f8.3"
/title="Breusch-Pagan test for Heteroscedasticity"
+ "(CHI-SQUARE df=P)".
compute sig=1-chicdf(bp_test,p).
print sig
/format="f8.4"
/title="Significance level of Chi-square df=P (H0:"
+ "homoscedasticity)".
compute k_test=n*r_sq.
print k_test
/format="f8.3"
/title="Koenker test for Heteroscedasticity"
+ "(CHI-SQUARE df=P)".
compute sig=1-chicdf(k_test,p).
print sig
/format="f8.4"
/title="Significance level of Chi-square df=P (H0:"
+ "homoscedasticity)".
end matrix.
!ENDDEFINE.

```

\* (2) Sample data (replace by your own)\*.

#### INPUT PROGRAM.

- VECTOR x(20).
- LOOP #I = 1 TO 50.
- LOOP #J = 1 TO 20.

- COMPUTE x(#J) = NORMAL(1).  
- END LOOP.  
- END CASE.  
- END LOOP.  
- END FILE.  
END INPUT PROGRAM.  
execute.

\* x1 is the dependent and x2 TO x20 the predictors.

\* (3) MACRO CALL (select and run).

BPKTEST x1 19 x2 TO x20.

---