

# **Controlling International Joint Ventures from a Distance**

by

**Francesco Giacobbe**  
**B.Bus (UTS), M.Bus (UTS)**

A thesis  
submitted for the degree of  
Doctor of Philosophy

**School of Accounting**  
**Faculty of Business**  
**University of Technology, Sydney**

**2007**

# Certificate of Authorship/Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

Production Note:  
Signature removed prior to publication.

---

# Acknowledgements

My doctoral thesis has been a long journey. This journey commenced over twenty years ago, when I decided to settle permanently in Australia. Originally, I had never considered that I would dedicate myself to pursue and complete all levels of academia education in an adopted language. Meanwhile this journey has at times been challenging, but overall enjoyable and full of satisfaction. Many people have travelled this path with me and it is with great satisfaction and sincerity I am able to express my gratitude and thanks. I have made many new friends along the way. I respect their friendships which are more valuable to me than any formal achievements. It is an almost impossible task to mention every person who has assisted me; instead I offer my thanks to all of you for your faith in me and your sincere friendship.

The work and publications of many have inspired and guided my doctoral thesis. I would like to mention some. A book on international joint ventures written by Professor Elita Schillaci of the University of Catania ignited that strong sense of curiosity that all researchers share, the need to understand why. The publications of Professors Barbara Gray of the Pennsylvania State University and Aimin Yan of the Boston University inspired me to select a specific area for an accounting research project on international joint ventures. It was at the Management Accounting Symposium of the University of New South Wales, where Professor Ken Merchant, of the University of Southern California, presented a paper of a joint project with Professor Tom Groot, of Vrije Universiteit, that sparked my interest and convinced me of the relevance of the topic for my doctoral thesis. Dr. David Smith and Professor Kim Langfield-Smith of Monash University provided me with the motivation to select a methodology not widely used in accounting research and my good friend Dr Adrian Djajadikerta of Edith Cowan University, who has also been a great source of encouragement, having introduced to me the statistical technique I finally used in this doctoral thesis. Thank you for your work and inspiration.

With my doctoral thesis, I have received valuable comments and constructive feedback. The members of the Doctoral Assessment Committee, Professors Tony Veal, Zoltan Matolcsy and Donald Stokes; the participants at the European Accounting Congress in Munich, the participants at the Workshop on Interorganisational Collaboration in Melbourne, Professor Stewart Clegg and the members of the Collaboration Research Group at the University of Technology, Sydney; are some of the reviewers who have patiently listened to my ideas and provided valuable suggestions. Thank you for your motivation and encouragement.

This doctoral thesis, and by extension my academic career, would not have been possible without the support and assistance of the Faculty of Business and the School of Accounting at the University of Technology, Sydney. Professor Zoltan Matolcsy, the Head of the School of Accounting, has always provided sound advice and supported all my requests. With Professor Matolcsy, I share the common challenge of English as our adopted language; he has been and continues to be an inspiration for my professional and academic achievements. Mrs Judy Dousha, the Office Manager in the School of Accounting, has guided me, through the cumbersome tasks of using effectively and efficiently resources made available by the School of Accounting for my project, well beyond her role of administrator. I can never thank her enough for her help and assistance over the years. Ms Tania Tambiah, the Research Manager in

the Faculty of Business, has assisted me greatly with management of enrolment and reports.

Professor Teemu Malmi, of the University of the Helsinki School of Economics, spent a significant amount of time guiding me through the process of designing a relevant research program. He was critically supportive of my ideas and significantly contributed to my understanding of variables and constructs. I am very grateful for his advice. Thanks also to Dr. Paul Wang, of the University of Technology Sydney, who taught me how to deal with complex statistical issues and how to use PLS-Graph.

Professor Peter Booth, Senior Deputy Vice Chancellor at the University of Technology, Sydney, has been my supervisor. My very deepest admiration and respect go to him for his advice and direction. He has been a constant source of encouragement and support. He has guided me through the process and provided the most valuable advice on issues ranging from editorial style to complex research problems. He has an outstanding ability for gently and patiently reviewing and exploring new ways of continuously improving to achieve the best outcome. I have learnt a lot from him and I treasure his intellectual rigor, wisdom and sincere friendship. Thank you very much.

Primarily I would like to thank my family. Marie, David, Daniel and Nicholas you are my best friends. You have offered a loving and supportive environment at home during this long journey, but also throughout our life together. You have kept me motivated and focused when I needed support and you have always encouraged me whenever I have completed even the smallest of tasks. Without your understanding I would never been able to achieve my goals. I have been so focused on completing these objectives that at times I have not been able to be there when you have needed me. Marie, you have often played the role of both parents with our children and I have great pride and respect for all that you have achieved. We have worked together over this, long journey and I believe that you all must share in the recognition of my work. I now look forward to sharing my time with you. Thank you.

# Table of Contents

<b>Certificate of Authorship/Originality .....</b>	<b>i</b>
<b>Acknowledgements .....</b>	<b>ii</b>
<b>List of Figures .....</b>	<b>viii</b>
<b>List of Tables.....</b>	<b>ix</b>
<b>Abstract.....</b>	<b>xi</b>
<b>1 Introduction .....</b>	<b>1</b>
1.1 Research Issues.....	1
1.2 Motivation .....	3
1.2.1 The Extant Literature .....	3
1.2.2 Research Opportunities Arising from the Literature.....	6
1.3 The Research Program.....	10
1.4 Contributions .....	12
1.5 Summary.....	14
<b>2 Literature Review .....</b>	<b>16</b>
2.1 Introduction .....	16
2.2 International Joint Ventures.....	17
2.2.1 Collaboration and Joint Ventures.....	17
2.2.2 Distinctive Characteristics of International Joint Ventures.....	21
2.2.2.1 International Joint Ventures Vs Domestic Joint Ventures .....	21
2.2.2.2 International Joint Ventures Vs Wholly Owned Subsidiaries.....	24
2.2.2.3 Summary of the Distinctive Characteristics of International Joint Ventures .....	27
2.3 International Joint Ventures and Management Control Systems .....	28
2.3.1 Understanding Control in International Joint Ventures .....	29
2.3.1.1 Conceptualising Control .....	29
2.3.1.2 A Model to Classify Research on Control .....	32
2.3.1.3 The Extant Literature .....	34
2.3.2 Autonomous Elements of Management Control Systems of International Joint Ventures .....	36
2.3.3 Parent Partner Influence over International Joint Ventures Management Control Systems .....	40
2.3.3.1 Parent Control .....	41
2.3.3.2 Motives and International Joint Ventures' Control.....	47
2.3.3.3 Determinants of Control.....	49
2.3.3.4 Summary of Parent Influence over International Joint Ventures Management Control Systems .....	51
2.3.4 Parent Monitoring of International Joint Ventures .....	52
2.3.4.1 Controlling from a Distance.....	52
2.3.4.2 Bargaining Power.....	57
2.3.4.3 Summary of Parent Monitoring of International Joint Ventures.....	60
2.4 Performance of International Joint Ventures.....	61
2.4.1 Evaluating the Performance of International Joint Ventures .....	61
2.4.2 Evaluating International Operations .....	67
2.4.3 Accounting and Performance Evaluation of International Joint Ventures.....	69

2.4.4	Control and Performance of International Joint Ventures .....	70
2.4.5	Interpartner Relationships and Performance .....	73
2.4.6	Summary .....	75
2.5	Parent Partners .....	75
2.5.1	Interpartner Working Relationship .....	75
2.5.1.1	Trust .....	76
2.5.1.2	Conflict .....	81
2.5.1.3	Summary .....	81
2.5.2	International Experience .....	82
2.6	Synthesis of the Extant Literature .....	85
2.6.1	Antecedents of Control and Management Control System Choices .....	85
2.6.2	Management Control Systems .....	87
2.6.2.1	Focus of Control.....	88
2.6.2.2	Extent of Control.....	89
2.6.2.3	Mechanisms of Control.....	89
2.6.2.4	Summary of Management Control Systems.....	93
2.6.3	Performance .....	93
2.7	Summary of Literature Review and Research Opportunities.....	96
<b>3</b>	<b>Research Framework and Proposition Development .....</b>	<b>101</b>
3.1	Research Framework Model.....	101
3.1.1	Antecedents of Control .....	103
3.1.2	Control .....	104
3.1.3	Performance .....	105
3.2	Propositions Development.....	106
3.2.1	Interpartner Working Relationships and Management Control Systems.....	106
3.2.2	Interpartner working relationship and performance.....	107
3.2.3	Motives .....	108
3.2.4	Bargaining Power.....	110
3.2.5	International Experience and Management Control Systems .....	110
3.2.6	International Experience and Performance .....	112
3.2.7	Management Control Systems and Performance .....	112
3.2.8	Other Relationships.....	115
3.2.8.1	Bargaining Power Factors .....	115
3.3	Summary.....	116
<b>4</b>	<b>Research Methodology.....</b>	<b>121</b>
4.1	Introduction .....	121
4.2	Research Design .....	121
4.3	Data Analysis Method .....	125
4.4	Variable Measurement.....	130
4.4.1	Constructs and Indicators.....	130
4.4.2	Study Variables .....	134
4.4.2.1	Interpartner Working Relationships .....	134
4.4.2.2	Motives .....	135
4.4.2.3	Bargaining Power.....	138
4.4.2.4	International Experience .....	141
4.4.2.5	Focus of Control.....	143
4.4.2.6	Extent of Control.....	145
4.4.2.7	Mechanisms of Control.....	147
4.4.2.8	Performance .....	149
4.4.3	Summary of Constructs and Indicators .....	152
4.5	Questionnaire Development .....	156
4.5.1	The Survey questionnaire.....	156

4.5.2	Design of the Survey Questionnaire .....	157
4.5.3	Pilot Test .....	160
4.6	Sample .....	161
4.7	Questionnaire Administration and Response .....	165
4.7.1	Questionnaire administration .....	165
4.7.2	Survey Response .....	167
4.8	Responses and Respondents .....	168
4.8.1	Characteristics of Respondents .....	169
4.8.2	Characteristics of Respondent Companies .....	170
4.8.3	Characteristics of International Joint Ventures .....	172
4.9	Summary .....	179
<b>5</b>	<b>Data Analysis and Results .....</b>	<b>181</b>
5.1	Introduction .....	181
5.2	Descriptive Statistics of Constructs and Indicators .....	181
5.3	Exploratory Analysis .....	182
5.3.1	Model Validity .....	185
5.3.2	Reflective Indicators .....	186
5.3.2.1	Convergent Validity .....	186
5.3.2.1.1	Indicator Reliability .....	186
5.3.2.1.2	Composite Reliability .....	191
5.3.2.1.3	Discriminant Validity .....	193
5.3.3	Formative Indicators .....	194
5.3.4	Summary .....	198
5.4	PLS Modeling .....	199
5.4.1	PLS Model Evaluation .....	199
5.4.1.1	Outer Model .....	201
5.4.1.2	Inner (Structural) Model .....	205
5.4.1.3	R-squares .....	208
5.4.1.4	Model Validation .....	212
5.4.2	Structural Paths .....	214
5.4.2.1	Structural Path on Focus of Control .....	214
5.4.2.2	Structural Path on Extent of Control .....	215
5.4.2.3	Structural Path on Formal Mechanisms of Control .....	216
5.4.2.4	Structural Path on Social Mechanisms of Control .....	217
5.4.2.5	Structural Path on Performance .....	217
5.5	Additional PLS Modeling .....	219
5.5.1	Dimensions of Performance .....	219
5.5.2	Bargaining Power Factors .....	221
5.5.3	Motives .....	223
5.5.4	Testing for Size .....	225
5.5.5	Summary .....	229
5.6	Summary .....	229
<b>6</b>	<b>Discussion of Findings .....</b>	<b>231</b>
6.1	Introduction .....	231
6.2	Determinants of Management Control System Choices .....	231
6.2.1	Interpartner Working Relationship .....	231
6.2.2	Motives .....	233
6.2.3	Bargaining Power .....	235
6.2.4	International Experience .....	240
6.2.5	Summary .....	242
6.3	Impacts on Performance .....	243
6.3.1	Interpartner Working Relationship .....	244

6.3.2	International Experience .....	245
6.3.3	Management Control Systems and Performance .....	248
6.3.3.1	Focus of Control.....	250
6.3.3.2	Extent of Control.....	250
6.3.3.3	Mechanisms of Control.....	251
6.3.3.4	General Comments.....	253
6.3.4	Summary.....	255
6.4	The Theoretical Framework Model .....	256
6.5	Size of Parent Partners.....	258
6.6	Summary.....	262
<b>7</b>	<b>Conclusion.....</b>	<b>268</b>
7.1	Introduction .....	268
7.2	Summary of Aims and Findings.....	268
7.3	Contribution to Research.....	271
7.3.1	Contribution to Theory.....	271
7.3.2	Contribution to Methodology.....	274
7.4	Implications for Practice.....	276
7.5	Limitations and Future Research.....	280
7.6	Concluding Comments .....	286
<b>8</b>	<b>References .....</b>	<b>291</b>
8.1	Additional Readings .....	306
<b>9</b>	<b>Appendix A .....</b>	<b>308</b>
	Letter Accompanying Survey Questionnaire .....	308
<b>10</b>	<b>Appendix B.....</b>	<b>310</b>
	Survey Questionnaire .....	310
<b>11</b>	<b>Appendix C .....</b>	<b>318</b>
	Card Accompanying Survey Questionnaire .....	318
<b>12</b>	<b>Appendix D .....</b>	<b>320</b>
	Letter Accompanying Survey Questionnaire - Second Mailout.....	320
<b>13</b>	<b>Appendix E.....</b>	<b>322</b>
	Correlation Matrix of Reflective Indicators .....	322
<b>14</b>	<b>Appendix F.....</b>	<b>334</b>
	Statistics of Excluded Indicators .....	334
<b>15</b>	<b>Appendix G .....</b>	<b>336</b>
	Modified Model Reliability and Validity.....	336

## List of Figures

Figure 2.1 – Factors Impacting the Need to Network .....	18
Figure 2.2 – International Joint Venture Control Framework.....	33
Figure 2.3 – A Model of Parent Control in International Joint Ventures .....	44
Figure 2.4 – Learning-Control Model .....	58
Figure 2.5 – Influence of Anticipated and Realized Bargaining Power on Management Control System Choices .....	60
Figure 2.6 – The Input-Output Continuum .....	63
Figure 2.7 – Factors Explaining International Joint Ventures Control System Differences.....	86
Figure 2.8 – Dimensions of International Joint Ventures Control .....	88
Figure 2.9 – Killing Model of International Joint Venture Performance .....	94
Figure 2.10 – Yan and Gray Model of International Joint Venture Performance.....	95
Figure 3.1 – Conceptual Theoretical Model .....	103
Figure 3.2 – Conceptual Theoretical Model and Propositions.....	120
Figure 4.1 – Reflective Indicators Model .....	131
Figure 4.2 – Formative Indicators Model .....	132
Figure 4.3 – Interpartner Working Relationship Construct .....	135
Figure 4.4 – Motives Constructs .....	137
Figure 4.5 – The Bargaining Power Construct.....	140
Figure 4.6 – Stake, Alternatives and Resources Constructs .....	141
Figure 4.7 – International Experience and Involvement in International Joint Ventures Constructs .....	143
Figure 4.8 – Focus of Control Construct .....	145
Figure 4.9 – Extent of Control Construct.....	147
Figure 4.10 – Mechanisms of Control Constructs.....	149
Figure 4.11 – International Joint Venture Performance Construct .....	152
Figure 5.1 – PLS Estimates for the Theoretical Framework Model.....	206

## List of Tables

Table 2.1 – A Typology of Joint Ventures .....	21
Table 2.2 – Main Characteristics of International and Domestic Joint Ventures .....	23
Table 2.3 – Three Perspectives on the Role of the General Manager .....	38
Table 2.4 – Learning, Capability Transfer and Control Mechanisms .....	59
Table 2.5 – Mechanisms of Control .....	92
Table 3.1 – Propositions .....	118
Table 4.1 – Reflective and Formative Models .....	133
Table 4.2 – Summary of Constructs and Indicators .....	153
Table 4.3 – Current Position of Respondents.....	169
Table 4.4 – Employment Characteristics of Respondents .....	169
Table 4.5 – Period of Employment of Respondents.....	169
Table 4.6 – Size Characteristics of Respondent Companies.....	170
Table 4.7 – Australian Companies ANZSIC Classification .....	170
Table 4.8 – Australian Companies Involvement in International Joint Ventures ....	171
Table 4.9 – Motives .....	172
Table 4.10 – Age of International Joint Ventures .....	173
Table 4.11 – Nationality of Partners (by Continent) .....	173
Table 4.12 – Continent of Operations of International Joint Ventures .....	174
Table 4.13 – International Joint Ventures: Single Multiple Partners .....	174
Table 4.14 – Line of Business of International Joint Ventures.....	175
Table 4.15 – Line of Business of International Joint Ventures and Parent Companies .....	175
Table 4.16 – International Joint Ventures Board Composition.....	175
Table 4.17 – Appointment of International Joint Ventures' General Manager .....	176
Table 4.18 – Appointment of IJV's General Manager and IJV Board Composition	176
Table 4.19 – Conflict Resolution Mechanisms .....	177
Table 4.20 – International Joint Ventures Control System Similarity with that of Parent Partner.....	178
Table 4.21 – IJVs Performance .....	178
Table 5.1 – Constructs and Indicators Descriptive Statistics.....	183
Table 5.2 – Reflective Indicators Reliability Based on PCA Analysis .....	187
Table 5.3 – Factor Analysis of Performance measures .....	189

Table 5.4 – Performance Second Order Factor - Statistics .....	190
Table 5.5 – Constructs Descriptive Analysis .....	191
Table 5.6 – Constructs and Composite Reliability Based on PCA Analysis.....	193
Table 5.7 – Correlation Among Constructs (Square Root of AVE in Diagonal)....	196
Table 5.8 – Formative Indicators: Validity Based on PLS Analysis.....	198
Table 5.9 – Individual Reliability Based on PLS Analysis .....	202
Table 5.10 – Constructs and Composite Reliability Based on PLS Analysis.....	203
Table 5.11 – Correlation Among Constructs (Square Root of AVE in Diagonal)...	204
Table 5.12 – Inner Structural Model Analysis .....	207
Table 5.13 – Total Causal Effect of Constructs .....	208
Table 5.14 – Effect Size $f^2$ .....	211
Table 5.15 – Communality ( $H^2$ ) and Redundancy ( $F^2$ ) Indices Based on Blindfolding Procedures .....	213
Table 5.16 – Model Inner Structural Analysis: Performance Constructs.....	220
Table 5.17 – Model Inner Structural Analysis: Bargaining Power Constructs.....	222
Table 5.18 – Modified Model Inner Structural Analysis: Breadth of Motives.....	224
Table 5.19 – Composite Reliability: Original, Larger and Smaller Samples .....	225
Table 5.20 – R-Square Values: Original, Larger and Smaller Samples .....	226
Table 5.21 – Model Inner Structural Analysis: Original, Larger and Smaller Samples.....	227
Table 6.1 – Summary of Testing Results on Endogenous Constructs.....	264
Table 6.2 – Summary of Testing Results by Exogenous Constructs .....	266
Table 13.1 – Correlation Matrix of Reflective Indicators .....	323
Table 14.1– Statistics of Excluded Indicators.....	335
Table 15.1 – Individual Reliability Based on PLS Analysis – Modified Model .....	337
Table 15.2 – Constructs Composite Reliability Based on PLS Analysis – Modified Model.....	338
Table 15.3 – Correlation Among Constructs (Square Root of AVE in Diagonal)...	339

## Abstract

*International joint ventures (IJVs) are increasingly used as an important strategic option for pursuing international strategies. An extensive body of literature has investigated the processes leading to the formation of IJVs, parent partner's control and performance evaluation of IJVs. Issues associated with how parent companies control IJVs, the use of accounting and other information in the management control system (MCS) and to evaluate the performance of IJVs have not attracted the same attention.*

*This study proposes a research model to investigate (i) the effect of motives, bargaining power, international experience, involvement in other IJVs and interpartner working relationship, on parent partners' MCS choices and (ii) the effect of international experience, involvement in other IJVs, interpartner working relationship and MCS choices on IJVs performance.*

*A cross-sectional questionnaire was used to collect data from Australian parent partners of IJVs operating outside Australia. The research model was tested using PLS-Graph, a structural equation modeling technique.*

*Strong results were found supporting the research model and indicating that most of the factors investigated influence parent partners MCS choices and/or impact on the performance of IJVs.*

*The results confirm that bargaining power (in particular, the relative provision of critical resources) and motives have a significant effect on parent partner's choices on all dimensions of the MCS, while international experience and involvement in other IJVs have a significant effect on focus of control. The most substantial significant effect on performance was that of the state of interpartner working relationship. Involvement in other IJVs, control extent and the use of formal control also had a significant positive effect on performance, while broader control focus was found to be negatively associated with performance outcomes. Additional tests indicated that the size of parent partners of IJVs could explain some aspects of the variance in MCS choices and the impact on performance outcomes. The results also revealed multiple dimensions of IJVs performance measured as achievement of parent partners' objectives.*

*Robust results indicate that the model may be used as a reliable tool in future research. The research provided confirmation of prior findings and, at the same time, exploration of novel effects and relationships. Finally, the study suggested an IJV control framework model identifying different domains and levels of research to review, classify and evaluate the extant literature.*

*Contributions of this study provide useful indications to researchers, management, practitioners and those searching for a better understanding of issues related to control and performance of IJVs.*