Due to globalization and internationalization of production, the arena of competition and competitive advantage is moving from individual firms operating on spot markets towards supply chains and networks. Therefore, coordination mechanisms between firms within the chain become more important. It took decades before research explicitly started to focus on (the reason behind) vertical relationships, production chains and networks. This resulted in a large body of research on transaction costs. While these costs have been looked at extensively, the costs of producing in chains and the chain processes have received relatively little attention. Topics like costs, efficiency, risk and investment analysis have hardly received any empirical attention within chain and network research. Nonetheless, these performance measures are of vital importance for continuity of individual companies, chains and networks.

Even though many people attempt to, and actually do, quantify supply-chain performance, risk and investment behaviour, it has mostly been done more or less ad hoc. To develop a more coherent view on this matter, a workshop with experts in the field was held in October 2004 at Wageningen, The Netherlands. The goal of the workshop was to develop a framework for quantification of costs, benefits, efficiency and risk in agri-food chains. The challenge was to compare agri-food chains on their effectiveness and to bridge the gap between management science and the technical sciences. Thirty scientists participated in the workshop, which was organized by Frontis – Wageningen International Nucleus for Strategic expertise, the Business Economics Group of the Department of Social Sciences, and the Horticultural Production Chains Group of the Department of Plant Sciences, all part of Wageningen University and Research Centre.

The workshop was organized in five sessions: ‘Sharing costs, benefits and risk in agri-food chains’, ‘Measuring performance in agri-food chains’, ‘Modelling agri-food chains’, ‘The value of information in agri-food chains’ and ‘Supply chain organization and chain performance’. Within each session, presentations included different perspectives and approaches. The state of the art, areas for new research and areas where knowledge from other scientific disciplines is needed, were addressed. This book follows the same outline: five sections organized around the papers presented at the workshop.

We would like to thank the authors for their contributions, Petra van Boetzelaer for making the organizational arrangements for the workshop, Christien Ondersteijn and
Jo Wijnands for editing the manuscripts and Jos Smelik for facilitating the lay-out process.

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Wageningen, September 2005