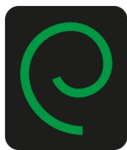 Emerald Insight

critical perspectives on international business

Reflective and cognitive perspectives on international capital budgeting

Avo Schönbohm Anastasia Zahn

Article information:

To cite this document:
Avo Schönbohm Anastasia Zahn , (2016),"Reflective and cognitive perspectives on international capital budgeting", critical perspectives on international business, Vol. 12 Iss 2 pp. 167 - 188
Permanent link to this document:
http://dx.doi.org/10.1108/cpoib-02-2013-0006

Downloaded on: 14 November 2016, At: 22:55 (PT)
References: this document contains references to 94 other documents.
To copy this document: permissions@emeraldinsight.com
The fulltext of this document has been downloaded 184 times since 2016*

Users who downloaded this article also downloaded:

(2015),"Capital budgeting practices: evidence from Sri Lanka", Journal of Advances in Management Research, Vol. 12 Iss 1 pp. 55-82 http://dx.doi.org/10.1108/JAMR-01-2014-0004

(2010),"Improved capital budgeting decision making: evidence from Canada", Management Decision, Vol. 48 Iss 2 pp. 225-247 http://dx.doi.org/10.1108/00251741011022590

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/1742-2043.htm

Reflective and cognitive perspectives on international capital budgeting

Avo Schönbohm and Anastasia Zahn
Department of Business and Economics, Berlin School of Economics and Law, Berlin, Germany

Received 19 February 2013
Revised 27 February 2014
20 December 2014
16 February 2015
Accepted 1 March 2015

Abstract

Purpose – The purpose of this paper is to develop a framework for an enlightened management and governance praxis against a backdrop of cognitive and motivational biases promoting a reflected international capital budgeting decision process. Furthermore, societally relevant questions are raised whether these biases might have an effect on various stakeholders in public–private partnerships. Recurring failures of international business investments motivate reflective, cognitive and socio-constructivist perspectives on the international capital budgeting process.

Design/methodology/approach – Based on an interdisciplinary literature review and substantiated by empirical studies, the cognitive biases and flaws of the international capital budgeting process are discussed making use of a five-stage process scheme. The article applies the interpretative paradigm and regards the international capital budgeting process stages as a socio-political process of reality construction and critically assesses the motives of its actors. Consequently, the authors develop and discuss three principle-based behavioural rationalisation factors.

Findings – International capital budgeting is not a process of rational choice but of social construction of reality. Reflective prudence, critical communication and independence are three rationalisation factors which could, if applied along the five stages of the international capital budgeting process, systematically lead to de-biasing and thus enhance the performative praxis of international investment decisions.

Research limitations/implications – The international capital budgeting process deals with the construction of future scenarios under uncertainty and assessment of potential success and failure of future projects. The defined (or any other) rationalisation factors are subject to cultural biases and can naturally not guarantee successful investment projects. Although the success of the application of various de-biasing tactics was empirically confirmed, the aggregated rationalisation factors of the paper have not been tested.

Practical implications – The paper is aimed at enhancing the reflective understanding and the performative praxis of the international capital budgeting process. The practical recommendations aggregated in the rationalisation factors are explicitly elaborated for international business practitioners.

Social implications – Societally relevant questions are raised whether systematic biases have an effect on various stakeholders in international public–private partnerships. Especially in large investment projects, where capturing private value might be boosted by actively exploiting biases of the public decision makers, active stakeholder engagement could enhance the social and ecological value of investments.

Originality/value – The article provides a rare interdisciplinary literature review on cognitive biases in the international capital budgeting process. It critically reflects the social construction of it various

The authors express their gratitude for the valuable and constructive comments they have received from the anonymous reviewers.

critical perspectives on international business
Vol. 12 No. 2, 2016
pp. 167-188
© Emerald Group Publishing Limited
1742-2043
DOI 10.1108/cpoib-02-2013-0006

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

stages and its social repercussions and develops practical rationalisation factors for an enhancement of the international capital budgeting process as a performative praxis.

Keywords Corporate governance, Stakeholder, International investment, Multinational companies, Critical management, International business

Paper type Conceptual paper

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

1. Introduction: politics and flawed perceptions in international capital budgeting

International business is driven by international and foreign direct investment decisions of multinational enterprises that are made under conditions of risk, uncertainty and insufficient information (Aharoni *et al.*, 2011). This often results in foreign direct investment not meeting expectations or, succinctly stated, failures (Koko and Zejan, 1996). Recent spectacular examples such as the disastrous Deepwater Horizon investment of BP (*The Economist*, 2013a) or the unsuccessful investments of the German steel-maker ThyssenKrupp in American and Brazilian steel mills (*The Economist*, 2013b) show the dire repercussions of ill-informed investments based on wrong risk assessments or flawed market perceptions (Heinz and Tomenendal, 2012). International public–private partnership infrastructure projects like the Cross City Tunnel in Sydney (Haughton and McManus, 2012) are special cases of international investment decisions which often have not fulfilled expectations and are mingling private and public interests (Mahoney *et al.*, 2009). International capital budgeting or investment decisions have thus substantial impact on companies' long-term financial performance (Beddingfield, 1969; Atkinson *et al.*, 1997; Eggers, 2012) as well as on the well-being of the local economic, social and ecological systems (Bardy *et al.*, 2012; Wang *et al.*, 2013).

It is no new insight that corporate investment decisions are not purely rational, but dependent on individual and psychological factors (Keynes, 1936, pp. 97-98). In multinational enterprises these decisions are subject to power negotiations (Blaszejewski, 2009) of subsidiaries or individuals (Gammelgaard, 2009). There has been articulate frustration that neither capital budgeting theory nor the scientific model has offered practitioners valuable advice (King, 1974). Bounded rationality concepts (Simon, 1976, 1986) have gained recognition in the field of international business (Birkinshaw and Ridderstråle, 1999). Thaler (1999) argued that in the near future, finance and behavioural finance would merge into one respected domain since there cannot be "non-behavioural" finance (Thaler, 1999). However, 15 years later, even though behavioural finance is not as disputed, it still lacks a generally recognised definition, a unified framework and a theoretical core (De Bondt *et al.*, 2008). Furthermore, literature on international business tends to see the companies as rational decision makers and neglects to recognise those in management – and their human character – as the true decision makers (Aharoni, 2011; Devinney, 2011). Behavioural research, which focuses on how individuals make decisions and influence other individuals (Birnberg and Ganguly, 2012), has stayed a research niche in accounting. It sharply differentiates itself from mainstream accounting or management accounting research. One particular form of this research area consists of studying systematic biases in decision making (Kahneman and Tversky, 1973), developing links among decision making, cognitive science and management/finance/accounting (Peters, 1993) as well as depicting heuristics presented under the titles of behavioural accounting or finance (Schönbohm and Zahn, 2012). However, despite the growing popularisation of cognitive biases, most

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

of the accounting literature ignores the influence of behavioural biases on the international capital investment decision-making process (Kahneman, 2012).

From an interpretative perspective, capital budgeting might be regarded more as a process of reality construction than as a rational choice (Morgan, 1988), or a "fabrication" (Latour, 1999) or "manufacturing of rationality" (Cabantous and Gond, 2011). The social construction (Berger and Luckmann, 1966) of rational choice is bound to cultural definitions about the right approach to deal with social dilemmas (Trompenaars and Hamden-Turner, 1997) and is also influenced by ideological settings: The whole capital budgeting process in multinational enterprises might be regarded as a tool transporting financial and thus "capitalist" biases (Walle, 1990), focussing on a singular financial dimension (Marcuse, 1964) in decision making.

Critical and interpretative perspectives on international capital budgeting have remained marginal and exclusively academic (Miller and O'Leary, 2007). This paper contributes to closing this gap by answering the following research questions:

RQ1. What are the main biases in international investment projects?

RQ2. What are suitable tactics to create a framework for alternative rational decision making (Cabantous and Gond, 2011) for an enlightened management and governance praxis against a backdrop of cognitive and motivational biases?

Furthermore, societally relevant questions are raised as to whether these biases might have an effect on various stakeholders of the investment decisions (Turan and Needy, 2013). This is especially the case in large investment projects, where capturing private value (Kivlenience and Quelin, 2012) in interdependent, public and private interests might be boosted by actively exploiting the biases of public decision makers. Active stakeholder engagement could thus enhance the social and ecological value of international investments (Agudo-Valiente *et al.*, 2015; Burchell and Cook, 2013).

This article provides international capital budgeting practitioners with an alternative and dialectical view on investment decisions and behavioural rationalisation factors as well as recommendations for the stages of the capital budgeting process beyond the rational (financial) choice paradigm (Kuhn, 1996).

The capital budgeting process is regarded as a financially driven "performative praxis" (Cabantous and Gond, 2011) to identify opportunities and justify substantial resource allocations for an uncertain future such as foreign direct investments, operational investments or public–private partnerships. The application of investment tools such as net present value calculations serve as "rationality carriers" (Cabantous and Gond, 2011) to transcend a fundamentally socio-political interaction into a "rational" process.

In an initial step, insights from behavioural corporate finance and implications on capital budgeting from the behavioural accounting view are synthesised and enriched by the body of literature stemming from the international business research stream. Researchers highlight the importance of managerial behaviour in decision making especially when talking about international capital investment, either in the form of fund allocation to a foreign subsidiary, FDI, or internationalisation, especially with new experiences (e.g. a first internationalisation) or during the earlier stages of capital budgeting decision making (Sykianakis, 2007; Aharoni *et al.*, 2011; Kalinic *et al.*, 2014).

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

The first step draws on empirical studies to substantiate the characteristics of the stages and the cognitive biases typically applied.

In a second step, this article applies the interpretative paradigm and regards the international capital budgeting process stages as a socio-political process of reality construction and critically assesses the motives of its actors. The reflective social constructionist perspective on capital budgeting does not accept the notion of rational (financial) choice but concentrates on a complex, socially rich process of storytelling, reality construction, market making and justifications (Ardley, 2006; Miller and O'Leary, 2007). Therefore, the process becomes the key angle for understanding and amending international capital budgeting decision-making processes from a financial "performative praxis" (Cabantous and Gond, 2011) to an enlightened management and governance praxis.

Consequently, the authors develop and discuss three principle-based behavioural rationalisation factors (reflective prudence, critical communication and independence) for the five stages of the international capital budgeting process. This merges various pieces of micro-advice from the literature oriented towards practitioners with management and board responsibilities and adds to the isomorphic rationality of international capital budgeting praxis (DiMaggio and Powell, 1983). In addition, it shows the reflective awareness of practitioners and researchers of social and ecological dimensions of international investment projects.

2. Stages of the international corporate budgeting process

For reasons of framing, the capital budgeting process is divided into five different stages, following Maccarrone (1996) and contrasts with a plethora of different approaches (Burns and Walker, 2009; Ducai, 2009; Kalyebara and Ahmed, 2011; King, 1974; Pinches, 1982): identification and filtering, selection, authorisation, implementation, performance measurement and control. The five stages are an idealised form of an existing "performative praxis" from an Anglo-Saxon perspective, culturally defined by a relatively low power distance and low uncertainty avoidance (Hofstede and Hofstede, 2005).

2.1 Stage 1: identification and filtering of investment proposals

This stage is regarded as sensitive since it provides fundamental information crucial for the whole process (Sykianakis, 2007; Kalyebara and Ahmed, 2011). The creative process of generating an investment idea, framing it into a compelling investment story and building a convincing business report in line with the overall strategy of the organisation in a given environmental context, evades pure analytical reasoning and can be at best analysed by narrative research (Ardley, 2006). Project ideas can, on the one hand, either emerge bottom-up, identified by (foreign subsidiary) operations management, or top-down, such as strategic investment proposals by senior headquarter management. Foreign subsidiary managers are often able to suggest strategically viable decisions, but they need to build up strong credibility to be able to promote their ideas with the headquarters' management (Birkinshaw and Ridderstråle, 1999; Bouquet and Birkinshaw, 2008). On the other hand, investment ideas can be driven by an opportunity or by a need for an investment, e.g. for replacement or expansions. After the identification of proposals, these undergo a preliminary screening and filtering among others for inconsistencies with strategic goals, inadequate hurdle rate, risk levels

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

and feasibility. Interestingly, around 70 per cent of firms accept investment proposals which do not meet the required hurdle rate for strategic considerations (Kalyebara and Ahmed, 2011), because of the opportunity to be the first in a new market (Sykianakis, 2007) or due to possible legal constraints, etc. This indicates that many companies already deliberately deviate from a formalistic financial rationality at this stage.

2.2 Stage 2: selection

The most promising investment proposals are examined at this stage including projections of cash flows, risk, demand for and cost of capital, timing of investments, personnel involved and a first implementation plan (Burns and Walker, 2009; Kalyebara and Ahmed, 2011). As an ideal result, the most promising projects are selected and forwarded to top management for approval and authorisation. From an interpretative perspective, it sounds simplistic to compare the highly uncertain future cash flow streams of two projects that are completely unrelated in nature and make a selection based on an algorithm generating a marginal net present value difference without considering social and ecological impacts (Hebb *et al.*, 2010). Furthermore, empirical evidence exists indicating that decisions are being made even prior to the thorough financial examination of international investment proposals. In these cases, strategic and market considerations or information provided through managers' social networks make the same commit to an investment idea in a subconscious way (Aharoni, 1966, 2011; Aharoni *et al.*, 2011; Cheng, 2010; Kalinic *et al.*, 2014; Sykianakis, 2007). Thus, financial analysis results might be calculated in the hope of proving the already taken decision since, according to Arnold and Hatzopoulos (2000), evidence of calculations is not sufficient for rational decision making within the rational (financial) choice paradigm. However, the application of the calculations form part of the fabrication of a rational process, in which the players apply "commodities of rationality" (Cabantous and Gond, 2011) created by academics, consultants and practitioners to socially justify the investment process.

2.3 Stage 3: authorisation

Excellent projects might not be authorised if they do not appear at the right time, are not presented by the right person in the right manner or – in the ideal case – do not match the funding capacities or strategic goals of a given organisation. King (1974) argues that capital budgeting, especially in large organisations, is a process taking place in different points of time and space, and if this process is suitable, i.e. stimulating creative thinking, then, typically, the project is accepted. This is especially the case with investment proposals made to the corporate headquarters from foreign subsidiaries (Birkinshaw and Ridderstråle, 1999; Bouquet and Birkinshaw, 2008). For international projects, the perceived risk of a country plays a significant role (Hayakawa *et al.*, 2011). After all, projects perceived as the most justifiable are authorised for implementation. The financial tools applied form part of the fabrication of a rational decision and exhibit how a social "engineering process" (Cabantous and Gond, 2011) provides "rational" support to various actors in the company including the board of directors.

2.4 Stage 4: implementation

In the implementation phase, a detailed implementation plan is set up and disseminated down the organisation, since the implementation itself is essentially the task of operations management while being monitored by senior management. This stage can

follow the common practice of project management. That means, first, that a work breakdown structure with different work packages and individual activities/tasks with respective owners, time frames and budgets has to be installed. Finally, milestones are set (Project Management Institute, 2008) and a project management committee is created in charge of planning, implementing and reporting (Kalyebara and Ahmed, 2011). However, still not enough research is being pursued here for an integrated view of strategy and capital budgeting management (Pinches, 1982; Turner and Guilding, 2012).

2.5 Stage 5: performance measurement and control

A project's performance can be monitored shortly before and after the start of the implementation to detect and counteract previously unforeseen problems. Also, monitoring during the implementation assists detecting overruns in timing and expenditures so that problems can be addressed adequately. And finally, a post-audit mainly gathers lessons for the coming projects but also, in a limited way, examines the quality of forecasts made by project initiators (André *et al.*, 2011). To audit the outcome, usually, financial estimates are compared to actual results (Kalyebara and Ahmed, 2011). Post-audits are performed by 76 per cent to 85 per cent of corporations; however, for most of the companies, they are neither regular nor risk-adjusted or thoroughly documented (Gordon and Myers, 1991), and often, companies do not collect all the data required for a thorough post-audit (Bennouna *et al.*, 2010), thus making it a one-dimensional evaluation, ignoring the social and ecological impact of investments.

3. Behavioural implications of cognitive biases in the international capital budgeting process

The capital budgeting approach as a financial performative praxis has recently been enriched by calls for incorporating the cognitive, organisational and institutional dimensions of decision making (Biondi and Marzo, 2011; Cheng, 2010; Gervais, 2010; Iyer *et al.*, 2012). The main driver for this development has probably been the desire of scholars and business executives to elaborate a "rational" method of decision making and predicting future cash flows, which mirrors today's complex adaptive economic world better than the traditional approach (Mouck, 2000). Cognitive biases are, in this view, accepted as flaws in the rational functioning of managers or form part of the praxis of "manufacturing rationality" (Cabantous and Gond, 2011).

The international capital investment decision-making process is a dynamic social process with mutual influence from several individuals/interested parties (Aharoni, 1966). Moreover, the decision making takes place in conditions of uncertainty due to lack of information, time and a limited capacity of the human mind. Nevertheless, individuals strive to decide rationally even though they can only apply rationality after having greatly simplified their available choices (Aharoni, 2011; Devinney, 2011). Due to the aforementioned factors, individuals are subject to bounded rationality and thus can never arrive at an optimal decision (Kahneman and Tversky, 1973). On top of this, only utilising financial decision models is no longer in line with societal expectations on sustainable company behaviour (Turan and Needy, 2013). Table I lists and briefly explains the main cognitive biases and their impact on the corporate capital budgeting process.

In the following sections, the most relevant families of cognitive biases in the investment process will be explained and applied along the stages of the international

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Table I. Overview of main cognitive biases and their impact on the international capital budgeting process

	Bias	Explanation	Impact
Sentiment/beliefs	Cultural bias	Long-term investment decisions are a social dilemma due to uncertainty, which are solved differently in different cultures Different cultures have different approaches to deal with uncertainty and power within an organization	Rationality, as a social convention about acceptably dealing with an uncertain future, changes within cultures Misunderstandings and conflicts due to the enforcement of certain cultural standards
	Financial bias	Reduction of multi-dimensional decisions with economic, ecological and social impacts on a financial rational choice Underestimation of non-financial risks and opportunities	Decision making justification is only directed at shareholders Negative social and ecological impact for stakeholders might go unnoticed
	Over-confidence	Overestimation of own knowledge, abilities (e.g. to control risk), possibilities, precision of information, value of own company Underestimation of risk (highest in the least equity-dependent firms)–in capital budgeting, essentially the same as optimism	Overinvestment due to an understatement of project cost and time and overstatement of revenues More investment into new projects, products and markets Preference for internal over external financing and for debt over equity
	Anchoring and availability bias	Beliefs rely on the first piece of information without adjustment afterwards Overweighting of easily/readily accessible information Over reliance on stereotypes and /or recent time-series or events	Decision making based on partially/entirely wrong information
	Ethno-centrism	Preoccupation of corporate headquarter managers with their own identity and a belief in its superiority over others	Rejection, delay or request for greater justification of project initiatives coming from foreign subsidiaries Missing profitable foreign investment opportunities
	Mental accounting	Categorisation and valuing of financial outcomes (a Euro does not equal a Euro based on circumstances or perceived country risk)	Tendency to treat a new risk separately from existing ones Three mental incomes: current income, current wealth, future income
	Escalation of commitment	Justifying further investments in a special project is based on accumulated prior investments and not on updated cost-benefit analysis Assuming a possible ex-post regret of a wrong investment	Ignorance of sunk costs "Throwing good money after bad" Procrastination to stop failed projects and reluctance to loss realization
	Partition dependence	Allocating available corporate funds rather equally over the business of the firm by division, nation or region	Subsidizing poorly performing or non-profitable divisions/subsidiaries Omitting promising investment projects

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

capital budgeting process. The section closes with a discussion of the political dimensions of the international capital budgeting process.

3.1 Cultural bias

Cultural bias in capital budgeting is the tendency to interpret social situations and decision-making processes by standards inherent to the national culture of individuals (Douglas, 1982). This includes assumptions about logical validity, acceptability of evidence or taboos. In other words, the rationality of the capital budgeting process as such does not naturally travel beyond cultures. The notion of "rational choice" or the agreed on "performative praxis" is bound to cultural definitions about the right approach to deal with social dilemmas (Trompenaars and Hamden-Turner, 1997), such as the necessity to invest without assurance about the outcome of an investment against the backdrop of an uncertain future. Cultural insensitivity could thus lead to misunderstandings and conflicts.

3.2 Financial bias

Interestingly enough, the financial bias is rarely discussed and only few alternatives such as triple bottom line investment models are presented (Turan and Needy, 2013). The standard financial bias reduces the international capital budgeting decision to a one-dimensional decision based on future cash flow projections, which is in line with shareholder interests. Social and ecological impacts of the decision are not explicitly regarded. The performative praxis of the international capital budgeting process is mainly driven to serve shareholders' interests. This ideological bias is dominant, since it reduces managers to one-dimensional decision makers (Marcuse, 1964). Although quantitative models for a balanced stakeholder consideration in capital budgeting are possible (Turan and Needy, 2013), they have neither found their way into the performative praxis of capital budgeting nor into the governance by supervisory boards.

The subsequent biases mainly deal with the assessment of financial dimensions. The greater part of literature on the topic of behavioural corporate capital budgeting inspects the bias of overconfidence and biases related to it in different types and stages of projects (Malmendier and Tate, 2005; Baker *et al.*, 2007; De Bondt *et al.*, 2008; Gervais, 2010; Biondi and Marzo, 2011). In the international context, the availability bias, even though not explicitly named so by the international business researchers, is widely present (Sykianakis, 2007; Aharoni, 2011; Aharoni *et al.*, 2011; Kalinic *et al.*, 2014) and closely related to overconfidence. Mental accounting and escalation of commitment to failing projects are also specific cognitive flaws in the process and will be treated afterwards.

3.3 Overconfidence and availability bias

The Sydney Cross City Tunnel is just one example of how international public–private partnership projects suffered from overconfident expectation that were never fulfilled, as it was from the start underused and the operating company went bankrupt (Haughton and McManus, 2012). Overconfidence is the overestimation of one's own knowledge, abilities (e.g. to control risk), possibilities, precision of information as well as the value of one's own company (De Bondt *et al.*, 2008). Individuals with availability bias tend to treat easily accessible or imaginable information as too important (De Bondt *et al.*, 2008). Bazerman and Moore (2009) argue that overconfidence is related to

confirmation heuristics since the human mind is better in searching memory for confirmative rather than dissenting evidence (Cheng, 2010). When investing internationally, managers often value their own knowledge, experience and even instinct as important and are thus prone to availability bias. Furthermore, evidence shows that international investments are repeatedly built upon information that managers receive from the host country through own social networks. This "outside influence" forces them to look abroad (Aharoni *et al.*, 2011), which may lead to a subconscious decision already made in the early identification stage of the process, especially when backed up by the available information from strategic or market analysis (Sykianakis, 2007) which often serves the purpose of minimising risks (Aharoni, 2011). Thus, a decision to internationalise is the initial decision or the self-generated anchor, which is not always adequately adjusted but rather perceived infallible (Cheng, 2010). Hence, after deciding to internationalise, the financial analysis will be accomplished, often as a mere justification or a determination of the investment size (Sykianakis, 2007). Thus, the analysis may be conducted under wrong premises. To conclude, it is arguable that the availability bias and confirmation heuristics reinforce managers' overconfidence.

Besides the identification phase, overconfidence also occurs in both the stage of selection and partially the stage of authorisation. Especially with projects financed from free cash flow, overconfident managers are found to overinvest due to an overestimation of cash inflows and an underestimation of project time and cost (Baker *et al.*, 2007; Gervais, 2010). Thereby, multinationals tend to overinvest less than purely domestic companies (Greene *et al.*, 2009). Furthermore, overconfident managers tend to engage more in mergers and acquisitions and strategic alliances than more critical managers. The managers especially do so if they feel that their firm has benefited from such, or their actions, thus they are the victim of the representativeness and self-attribution biases (De Bondt *et al.*, 2008) in addition to confirmation heuristics. Meanwhile, there is robust data indicating that acquisitions tend to diminish the value of the acquiring firm, at least as measured by the share price (Gervais, 2010). Rare and often non-qualitative feedback reinforces the attribution bias preventing managers from learning from their mistakes because international capital budgeting occurs infrequently (Gervais, 2010). On the other hand, individuals in a state of high dispositional negative affect (i.e. stress, fear or anger) are found to be more risk averse (Iyer *et al.*, 2012).

Gervais (2010) and Brealey *et al.* (2011) suggest overconfidence contributes positively to internal company processes through raised effort, commitment and persistence. This parallels the self-fulfilling prophecy, which states that overconfidence motivates individuals to work harder, resulting in the achievement of goals that would have otherwise not been achieved.

Overconfidence seems to influence the whole capital budgeting process. In the context of corporate internationalisation, managers often act based on their instincts and take decisions prior to a proper investigation process (Aharoni, 1966, 2011; Aharoni *et al.*, 2011; Kalinic *et al.*, 2014), which indicates a certain level of overconfidence. On the upside, it provides a faster decision-making process since managers only rely on the information they already have. However, it also increases the risk of a wrong investment decision considerably. Furthermore, consistent with representativeness, self-attribution and availability biases, managers, who have gained knowledge in a first internationalisation process, take on higher amounts of risk in subsequent

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

internationalisation attempts even though they internationalise in a more structured way (Sykianakis, 2007; Aharoni, 2011; Sahgal, 2011). Thus, managers become even more overconfident through experience instead of, as one would rather expect, becoming more cautious. Overconfidence is interrelated with several other biases, whereby they often mutually reinforce each other. Findings of Shimizu and Tamura (2012) on the correlation between managerial traits and companies' investment policies are consistent with Gervais in the assumption that overconfident managers are more likely to experience outstanding successes, e.g. with innovative products or internationalisation. However, they are also more likely to suffer great failures as well (Gervais, 2010), which can be explained by the lack of learning effects due to the absence of proper post-auditing.

The bias of overconfidence can also occur at the authorisation stage. Since overconfident managers perceive their company as undervalued, they are hesitant to issue equity (Heaton, 2002). Hence, they tend to finance their projects from internal equity reserves, which in turn has been found to be the main reason for capital rationing (Mukherjee and Hingorani, 1999, p. 14). Another effect of overconfidence is the understatement of the risks of many projects (Brealey *et al.*, 2011). Moreover, based on past experience (Iyer *et al.*, 2012), the degree of everyone's personal risk-seeking or risk-aversion differs and thus influences the perception of a risk's impact and probability, crucial for assessment and anticipation of risks and creation of risk responses. Nevertheless, many managers were found to be risk averse. They applied capital rationing to reject projects they perceived as too risky (Mukherjee and Hingorani, 1999). However, in this attempt, managers indirectly created more upward biases in cash flow estimation in the first place (Turner and Guilding, 2012). The strategic importance and thus ranking of projects can similarly be affected by personal preferences leading to possible distortion or the authorisation of a set of projects that is less profitable than another possible set of projects would have been.

3.4 Mental accounting and escalation of commitment

Another widely examined and expensive failure of managers is the escalation of commitment, i.e. holding on to unprofitable projects for too long, unprofitability being observable in the implementation and control stages. In the case of ThyssenKrupp, the steelmaker finally had to book a €5 billion loss in 2012 for the two above mentioned steel mills. Three management board members had to resign and no dividend was paid. The chairman of the supervisory board admitted that the board was too credulous and acted too late (*The Economist*, 2013b).

Statman and Caldwell showed that mental accounting or framing intertwined with the loss and regret aversions are important reasons for "throwing good money after bad" to save poorly performing projects (Fennema and Perkins, 2008). Mental accounting means that managers do not treat sunk cost as sunk. In their mental accounts, they want to offset them by project revenues so that they can "close" the account at least at zero, and not at a loss, thereby avoiding disappointment (Statman and Caldwell, 1987). Loss aversion means that individuals do not want to make decisions based on the outcomes of which they might be disappointed in the future. Thus, managers try to "even out" losses by further investing in the project in the hope of a final profit. This might eventually lead to the perpetuation of projects that have negative social, ecological or reputational repercussions.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Furthermore, investors' positive reactions to announcements of cancelling bad projects (Statman and Caldwell, 1987) could be interpreted as another hint to managers that they should quit a project earlier rather than later. Most often, mental accounting together with loss aversion lead to even higher losses as managers assume a greater risk in avoiding a bigger loss by saving the project. This causes them to act highly irrationally, initiating further expenditures on the failing project. An increasing amount of complexity reinforces this behaviour (Aharoni, 2011). Hence, it can be argued that escalation of commitment tends to be even greater in an international setting due to its higher intercultural complexity. However, multinationals have been found to make more value-enhancing capital budgeting decisions than purely domestic enterprises; most efficient were those which were present in ten or more foreign countries (Greene *et al.*, 2009).

Furthermore, one might argue that overconfidence reinforces regret and loss aversions, thus contributing to the escalation of commitment. The partition dependence can produce another form of wrong escalation of commitment – commitment to badly performing divisions or subsidiaries instead of their liquidation. However, due to ethnocentrism, i.e. headquarters' tendency to overrate home divisions or investments *vis-à-vis* the foreign ones (Birkinshaw and Ridderstråle, 1999; Bouquet and Birkinshaw, 2008), partition dependence can be reversed causing negligence of international divisions or subsidiaries among corporate managers in favour of homeland subsidiaries.

It is to say that the great variety of competing research on the topic of escalation of commitment shows that less is known than has been thought (Klimek, 1997). Until now, no theorist has produced a clearly superior model of escalation of commitment. This might stem from political reasons for escalation of commitment rather than cognitive.

3.5 Political dimensions of international capital budgeting

Biases have so far been presented as ethically neutral "flaws" in the reasoning of the corporate actors involved in the corporate capital budgeting process. This is the view of behavioural economics. However, there are various ethical lenses on the topic. On the one hand, the financial bias can be understood as the performative praxis of the capitalistic order. On the other hand, the biases might actually be power strategies for the achievement of the managers' personal objectives.

From an ideological point of view, the financial or "capitalist bias" (Walle, 1990) offers room for criticism, since it solely or one-dimensionally (Marcuse, 1964) serves the shareholders' interest at the negligence or even the expense of other relevant stakeholders (Turan and Needy, 2013). This is especially true in the foreign countries in which the investments will have an impact on the economic, social and ecological systems (Agudo-Valiente *et al.*, 2015), which notably applies to less developed countries (Bardy *et al.*, 2012).

From a reflective perspective, it can be argued that many decision imperfections within the performative praxis of international capital budgeting are not necessarily neutral cognitive biases, but conscious or unconscious power strategies (Dörrenbächer and Geppert, 2013) and game play by individual actors (Geppert and Dörrenbächer, 2014; Blaszejewski, 2009) and foreign subsidiaries in multinational enterprises applying various negotiation tactics (Gammelgaard, 2009). Therefore, it is advisable to rethink the intention of the players influencing the international capital budgeting process

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

(Hutzschenreuter *et al.*, 2010). Particularly important in the stages of identification and selection is the fact that especially bottom-up originating ideas can be associated with seeking benefits or a fast career growth. The overstatement of investment opportunities in their respective home markets might, for example, be beneficial for the management attention (Bouquet and Birkinshaw, 2008) and career perspectives of foreign subsidiary managers. Pruitt and Gitman found that 80 per cent of top executives have spotted upward biases in revenue forecasts and more subtle downward ones in cost forecasts. Two third of them felt the biases were introduced either intentionally or through a lack of experience (Pruitt and Gitman, 1987). Other studies associated such biases with inaccurate information from top management as well as unintentional and often unperceived inadequate managerial behaviour (Belkaoui, 1985; Bart, 1988; De Bondt *et al.*, 2008), thus confirming the bounded rationality of the neoclassical view itself. Furthermore, a growing number of researchers indicate limits to the "unconstrained opportunism assumption" of the agency theory: reciprocal behaviour and self-imposed opportunism restraint to achieve fair outcomes (Schatzberg and Stevens, 2008).

In capital budgeting of multinational enterprises, the fear of subjective budget reductions by top management during the year might create elevated revenue forecasts channelling the executives' attention toward an "even more promising project" (Birkinshaw *et al.*, 2006). A company's formal and informal performance appraisal schemes combined with the manager's overconfidence might also lead to predictions of elevated profits or short implementation time, especially with new products (Bart, 1988). However, the other side of the coin of power politics in subsidiaries is that good investment proposals from foreign subsidiaries have to fight the "corporate immune system" (Birkinshaw and Ridderstråle, 1999) and ethnocentrism to get through.

Whether assuming the bounded rationality hypothesis or the political power view, the lens of cognitive biases can enrich the comprehension of the social process of international capital budgeting and add to a well-reflected decision-making process.

4. Recommendations for an enlightened management and governance praxis

Perceiving the capital budgeting process in multinational enterprises as a performative praxis is not an end in itself, but opens the discourse for prescriptive "rationality engineering" (Cabantous and Gond, 2011): The descriptive knowledge of systematic biases is integrated and transformed into recommendations for reality construction with implications for management and governance bodies. Consequently, the following three policies, diminishing the negative impacts of aforementioned behavioural biases are proposed: reflective prudence, critical communication (cf. conventionalisation of rationality) and independence (cf. commodification of rationality). They merge various micro-tactics proposed by the literature into three principle-based strategies to deal with cognitive biases in the international capital budgeting process to promote a financially, socially and ecologically reflected international investment process.

4.1 Reflective prudence

Reflective or self-reflective prudence in capital budgeting means, on the one hand, to be aware of the classical decision biases everyone is subjected to – cf. conventionalisation of rationality (Cabantous and Gond, 2011) – and, on the other hand, to diligently generate the data needed to make a decision. This reflective prudence should be well

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

institutionalised and framed into a standard procedure, which all international investment proposals in question have to undergo in accordance with the engineering of rationality (Cabantous and Gond, 2011). The transformation of lofty visions and ambitious plans under uncertainty into cash in- and outflows with defined risk profiles qualifies as "manufacturing of rationality" (Cabantous and Gond, 2011). This applies even stronger to international capital investments since here several other factors such as country risk, exchange rate fluctuations and a different local environment with different stakeholders have to be considered (Hayakawa *et al.*, 2011). Some managers might even improve their decision-making skills by the creation of awareness for psychological biases alone (Russo and Schoemaker, 1992). Thus, it is advisable to perform special trainings with investment project participants to partially address the cognitive biases and develop good meta-knowledge, which is, according to Russo and Schoemaker, a "teachable and learnable" skill (Russo and Schoemaker, 1992). Fennema and Perkins found that factors such as training and experience positively influence managers in their investment decisions involving sunk cost considerations. Training, in this case, meant a sufficient amount of managerial accounting courses, while experience was seen as adequate professional experience in working with investment projects including sunk cost principles (Fennema and Perkins, 2008). The two aforementioned authors suggest that individuals with either one or both preconditions are more likely to make investment decisions leading to satisfactory financial results.

Reflective prudence also manifests itself in a diligent data gathering and an assumption clarification phase. Gathering, filtering, analysing and applying suitable information for decision making is crucial. Stakeholder dialogues can integrate social and environmental dimensions (Hebb *et al.*, 2010; Agudo-Valiente *et al.*, 2015; Turan and Needy, 2013). This phase, however, should not be regarded as a way to generate an objective truth about the future. Reflective prudence counteracts the availability and representativeness bias during identification and assessment of investment proposals. Moreover, it has an effect during implementation and controlling of investments.

Finally, reflective prudence institutionalises areas of self-reflection within the capital budgeting process: a critical self-assessment might be a productive way to enhance personal bias management. The potential list of cognitive control techniques for the overconfidence has been explored before by Russo and Schoemaker (1992). Furthermore, through feedback, overconfidence and self-attribution can be lowered, leading to less biased decision making for future projects bringing reflective prudence to the control stage as well. An important role of the supervisory board or other governing bodies is to de-bias management decision making. Therefore, the board members could benefit from cognitive and behavioural bias trainings.

Put in a nutshell, self-reflective consciousness about cognitive biases enhances the international capital budgeting process and should be trained and integrated into the capital budgeting process and its governance.

4.2 Critical communication

Communication is a multidimensional phenomenon. It should start with training about the investment process and meta-knowledge about classical decision biases, as discussed above. Since objectivity is hard to be achieved, inter-subjective story development becomes the key. The danger of closed loops and groupthink might exchange individual biases for even more dangerous group biases (Eisenhardt and

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Kahwajy, 1997; Horton, 2002). Even emotional group dynamics might negatively affect capital budgeting decisions (Kida *et al.*, 2001).

The critical communication about a potential investment project should include extensive and comprehensive communication in the form of standardised reports as well as review and feedback meetings. It should include the outcome of discussions with relevant stakeholders including non-governmental organisations and labour representatives (Burchell and Cook, 2013). Procedural fairness and formal and informal contracts in public–private partnerships are perceived to be important factors for the success of cooperative investment project success (Zhe and Ming, 2010). The communication of the potential pitfalls and risks involved and a reflected statement about the self-assessment of cognitive biases would most certainly enrich the project selection and decision process. Actively addressing the questions of ethnocentrism, overconfidence and mental accounting as well as an open analysis of the intentionality and potential career implications of the international investment project promoter could lead to an institutionalised de-biasing of the process. The simple comparison of net present values, from a behavioural or social constructivist perspective, does not suffice to decide on an investment project (Arnold and Hatzopoulos, 2000). Critical communication provides transparency about the actions of the project co-workers and the reasons behind them. Top management should refrain from communicating hurdle rates or short payback periods, even though it is found to be common in striving to reduce overconfidence (Pruitt and Gitman, 1987; Gervais, 2010). Senior managers should ask the project proponents for justification of their proposals, i.e. explanation of their judgment through thorough calculation as well as literal description. This practice has been found to make decision makers and the proposers of projects more self-critical about their judgment process and, as a result, lead to more adequate and less biased decision making (Fennema and Perkins, 2008). Encouraging feedback and appropriate performance measurement and compensation schemes should be installed (Turner and Guilding, 2012; Pinches, 1982; Iyer *et al.*, 2012), albeit this might be challenging across borders. The system should reward only behaviours that benefit the company and should present financial and non-financial indicators (Bart, 1988). A reward system should first and foremost reward the provision of correct information by the managers, and it should reward early disclosure over a late one. Furthermore, while negative feedback can also be motivating, one has to use it with great caution. Negative feedback on self-esteem, for example, was found to distort the assumptions and estimates of the concerned person in question (Belkaoui, 1985). Feedback should be performed on a regular basis and anonymously by means of software, which increases honesty, especially from subordinates towards superiors and in an international headquarter-subsidiary relationship.

Furthermore, it is advisable to agree on a set of goals to be reached within e.g. the next six months. Both behavioural finance and behavioural accounting scholars agree on the controllability principle: managers should not be held liable for performance that is subject to factors outside of their control (Bart, 1988; Atkinson *et al.*, 1997). Statman and Caldwell (1987) empirically found that escalation of commitment is less expressed when the subjects do not feel anxious due to the possibility of punishment by upper management for inappropriate performance of the project.

Escalation of commitment is the main danger when implementing investment projects since it aggravates the failure of a project, thus possibly threatening the

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

very existence of the company. Real options are considered to provide better decision making than net present value alone due to increased flexibility and quality of information (Denison, 2009). Furthermore, they seem to decrease the escalation of commitment since managers are confronted with the abandonment option already in the selection stage.

Critical communication can be interpreted as the natural outflow of the consciousness of the cognitive and political biases that the actors in the capital budgeting process have. By structuring the capital budgeting with built-in critical communication, some pitfalls of cognitive biases might be amended.

4.3 Independence

The best way to avoid individual and group biases is to integrate independent views into the project assessment and decision team; this might, from a constructivist point of view also help "commodifying rationality" (Cabantous and Gond, 2011). Thereby, the personal, cultural, national and professional backgrounds of the various members must be considered, which is especially true for international projects. Ethnocentrism can naturally be best avoided by a multi-cultural decision team. Besides, team members' and (designated project) managers' overconfidence can be measured based e.g. on Malmendier and Tate (2005). Consequently, the right mix of (behavioural) competencies for the implementation and supervision of the project can be provided. Internal or external auditors (Russo and Schoemaker, 1992) and advisors representing relevant stakeholders (Agudo-Valiente *et al.*, 2015; Burchell and Cook, 2013) might, for example, enrich the team or support the management from the identification phase onwards. A special committee in charge of assumption evaluation and feasibility analysis of investment proposals, including finance or managerial accountant staff, and the above-mentioned external advisors might enhance transparency and provide another layer of rationality and objectivity correcting for proposers' overconfidence biases.

A problem of self-control explains aversion to termination of failing endeavours. Even though rules are good means of counteraction, since their implementation or obedience would again fall to the biased manager, distinct organisational structures are needed to fight over-investment and escalation of commitment (Statman and Caldwell, 1987). Such structures can be benchmarks of financial or reputational losses that trigger the cessation nearly automatically. One benchmark can be present termination value equal to sunk cost. Mentally, the account then closes at zero without loss, making it easier for the concerned person to cope with. For assessment of the present termination value, regular net present value reconsiderations must be introduced by someone who is not personally responsible for the project (Statman and Caldwell, 1987), e.g. from the internal auditing department, consulting personnel or someone who reports to the Board of Directors and not to the management. The financial manager should be empowered to enforce project dissolution, overruling, if necessary, the project manager.

Altogether, not enough attention seems to be paid to project evaluation, especially to post-auditing (Statman and Caldwell, 1987; Burns and Walker, 2009; Denison, 2009; Kalyebara and Ahmed, 2011). Thus, it might be useful to actually make it a standard behaviour. The control stage is about gathering, analysing and providing objective information for "potentially unpopular decisions" now and in the future (Burns and

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Walker, 2009). Hence, information support systems must be established, potentially engaging relevant stakeholders (Driessen *et al.*, 2013). However, not only information technology but also interpersonal communication can be helpful. Personal, formal and informal meetings among project managers, financial controllers and external advisors are advisable to enhance general understanding. Nevertheless, the controller has to retain his neutrality.

Irrational managers can especially impact an organisation with weak corporate governance (Baker *et al.*, 2007). The establishment of strong and independent corporate governance is thus important in all process stages. However, it is particularly important in the authorisation stage to provide transparency as well as to enforce reflective prudence and critical communication.

It goes without saying that the defined (or any other) rationalisation factors cannot guarantee successful investment projects neither on a national nor on an international scale. Although the success of the application of various de-biasing tactics was empirically confirmed, the aggregated rationalisation factors of the paper have not been subjected to rigorous testing, yet.

5. Conclusion and research outlook

International capital budgeting is not a process of rational choice but of the social construction of reality (Morgan, 1988). The present paper provides international capital budgeting practitioners and academics with a reflective view on investment. Therefore, the term capital budgeting was defined and the stages of the capital budgeting process were identified, namely identification, selection, authorisation, implementation and performance control. The underlying areas of behavioural finance, behavioural accounting and behavio, ur in international business were contrasted. Finally, a social constructivist perspective was integrated. Section 3 presented the main biases: the cultural, financial and cognitive biases and their behavioural implications on international capital budgeting, such as the reasons for over-investment and escalation of commitment to failing projects. Section 4 discussed the policies reflective prudence, critical communication and independence, providing practical recommendations for international capital budgeting practitioners.

Behaviour in international capital budgeting still offers a broad field of research opportunities. Apart from the more explicit integration of stakeholders' influence, possible streams of investigation include empirical studies on the influences on the capital budgeting processes including culture (on a broad international scale), size of the company (e.g. surveys of small and medium-sized enterprises) and gender (contrasting implications of gender-biased behaviour such as e.g. degrees of overconfidence). Also, studies on the subject of this paper performed within companies might provide results well mirroring the corporate reality. Further investigations on biases which have not yet received considerable attention such as cultural bias, representativeness, availability, anchoring, mental accounting (Baker *et al.*, 2007), managerial traits (Gervais, 2010; Shimizu and Tamura, 2012) and real options or opportunity cost, in case of project cancelation, could be undertaken.

A next practical step could be the development and empirical testing of a self-assessment test based on insights from this paper and enriched by other studies such as those of Shimizu and Tamura (2012) and Malmendier and Tate (2005).

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

The international capital budgeting process in multinational enterprises deals with the construction of future scenarios under uncertainty and the assessment of the potential success and failure of future projects. The defined (or any other) recommendations can naturally not guarantee successful investment projects. However, the practical recommendations to implement the policies of reflective prudence, critical communication and independence might diminish the effect of cognitive, emotional and political biases and thus enhance the economic, social and environmental impact of international investment decisions. In any case, it could contribute to a more reflective, if not enlightened, management and government praxis.

References

Agudo-Valiente, J.M., Garcés-Ayerbe, C. and Salvador-Figueras, M. (2015), "Corporate social performance and stakeholder dialogue management", *Corporate Social Responsibility and Environmental Management*, Vol. 22 No. 1, pp. 13-31.

Aharoni, Y. (1966), *The Foreign Investment Decision Process*, Harvard University, Cambridge, MA.

Aharoni, Y. (2011), "Behavioral elements in foreign direct investment decisions, in Ramamurti, R. and Hashai, N. (Eds)", *The Future of Foreign Direct Investment and the Multinational Enterprise (Research in Global Strategic Management)*, Emerald Group Publishing Limited, Bingley, Vol. 15, pp. 23-60.

Aharoni, Y., Tihanyi, L. and Connelly, B.L. (2011), "Managerial decision making in international business: a forty-five-year retrospective", *Journal of World Business*, Vol. 46 No. 2, pp. 135-142.

André, J., Brüggen, A. and Moers, F. (2011), "Capital budget renegotiations and the adverse consequences of delegating investment decision rights", paper presented at the AAA 2012 Management Accounting Section (MAS), Washington, DC, 15 August, available at: http://dx.doi.org/10.2139/ssrn.1909800 (accessed 4 February 2015).

Ardley, B. (2006), "Telling stories about strategies: a narratological approach to marketing planning", *The Marketing Review*, Vol. 6 No. 3, pp. 197-209.

Arnold, G.C. and Hatzopoulos, P.D. (2000), "The theory-practice gap in capital budgeting: evidence from the United Kingdom", *Journal of Business Finance & Accounting*, Vol. 26 Nos 5/6, pp. 603-626.

Atkinson, A., Banker, R., Kaplan, R. and Young, S. (1997), *Management Accounting*, Prentice Hall, Upper Saddle River, NJ.

Baker, M., Ruback, R.S. and Wurgler, J. (2007), "Behavioral corporate finance: a survey", in Eckbo, B.E. (Ed.), *Handbook in Corporate Finance: Empirical Corporate Finance*, Elsevier, North Holland, Amsterdam, pp. 145-181.

Bardy, R., Drew, S. and Kennedy, T. (2012), "Foreign investment and ethics: how to contribute to social responsibility by doing business in less-developed countries", *Journal of Business Ethics*, Vol. 106 No. 3, pp. 267-282.

Bart, C.K. (1988), "Budgeting gamesmanship", *The Academy of Management Executive*, Vol. 2 No. 4, pp. 285-294.

Bazerman, M. and Moore, D. (2009), *Judgment in Managerial Decision Making*, John Wiley & Sons, Hoboken, NJ.

Beddingfield, R. (1969), "Human behaviour: the key to success in budgeting", *Management Accounting*, Vol. 3 No. 14, pp. 54-56.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Belkaoui, A. (1985), "Slack budgeting, information distortion and self-esteem", *Contemporary Accounting Research*, Vol. 2 No. 1, pp. 111-123.

Bennouna, K., Meredith, G.G. and Marchant, T. (2010), "Improved capital budgeting decision making: evidence from Canada", *Management Decision*, Vol. 48 No. 2, pp. 225-247.

Berger, P. and Luckmann, T. (1966), *The Social Construction of Reality*, Doubleday, Garden City, NY.

Biondi, Y. and Marzo, G. (2011), "Decision making using behavioral finance for capital budgeting", in Baker, K.H. and English, P. (Eds), *Capital Budgeting Valuation: Financial Analysis for Today's Investment Projects (Robert Kolb Finance Series)*, John Wiley & Sons, Hoboken, NJ, pp. 421-444.

Birkinshaw, J., Bouquet, C. and Ambos, T. (2006), "Attention HQ", *Business Strategy Review*, Vol. 17 No. 3, pp. 4-9.

Birkinshaw, J. and Ridderstråle, J. (1999), "Fighting the corporate immune system: a process study of subsidiary initiatives in multinational corporations", *International Business Review*, Vol. 8 No. 2, pp. 149-180.

Birnberg, J. and Ganguly, A. (2012), "Is neuroaccounting waiting in the wings? An essay", *Accounting, Organizations and Society*, Vol. 37 No. 1, pp. 1-13.

Blaszejewski, S. (2009), "Actors' Interests and local contexts in intrafirm conflict: the 2004 GM and Opel crisis", *Competition & Change*, Vol. 13 No. 3, pp. 229-250.

Bouquet, C. and Birkinshaw, J. (2008), "Weight versus voice: how foreign subsidiaries can gain attention from corporate headquarters", *Academy of Management Journal*, Vol. 51 No. 3, pp. 577-601.

Brealey, R.A., Myers, S.C. and Allen, F. (2011), *Principles of Corporate Finance*, McGraw-Hill/Irwin, New York, NY.

Burchell, J. and Cook, J. (2013), "Sleeping with the enemy? Strategic transformations in business-NGO relationships through stakeholder dialogue", *Journal of Business Ethics*, Vol. 113 No. 3, pp. 505-518.

Burns, R.M. and Walker, J. (2009), "Capital budgeting surveys: the future is now", *Journal of Applied Finance*, Vol. 19 Nos 1/2, pp. 78-90.

Cabantous, L. and Gond, J.-P. (2011), "Rational decision making as performative praxis: explaining rationality's Éternel Retour", *Organization Science*, Vol. 22 No. 3, pp. 573-586.

Cheng, P.Y. (2010), "Improving financial decision making with unconscious thought: a transcendent model", *The Journal of Behavioral Finance*, Vol. 11 No. 2, pp. 92-102.

De Bondt, W., Muradoglu, G., Shefrin, H. and Staikouras, S.K. (2008), "Behavioral finance: Quo Vadis?", *Journal of Applied Finance*, Vol. 19, pp. 9-21.

Denison, C.A. (2009), "Real options and escalation of commitment: a behavioral analysis of capital investment decisions", *The Accounting Review*, Vol. 84 No. 1, pp. 133-155.

Devinney, T. (2011), "Bringing managers' decision models into FDI research", in Ramamurti, R. and Hashai, N. (Eds), *The Future of Foreign Direct Investment and the Multinational Enterprise (Research in Global Strategic Management)*, Emerald Group Publishing, Bingley, pp. 61-83.

DiMaggio, P. and Powell, W. (1983), "The iron case revisited: institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 2, pp. 147-160.

Dörrenbächer, C. and Geppert, M. (2013), "The dark side of the moon: power and politics in the multinational corporation", *The European Financial Review*, Nos 4/5, pp. 25-28.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Douglas, M. (1982), "Cultural bias", in Douglas, M. (Ed.), *In the Active Voice*, Routledge & Kegan Paul, London, pp. 183-254.

Driessen, P.H., Kok, R.A. and Hillebrand, B. (2013), "Mechanisms for stakeholder integration: bringing virtual stakeholder dialogue into organizations", *Journal of Business Research*, Vol. 66 No. 9, pp. 1465-1472.

Ducai, M.T. (2009), "Aspects regarding the capital budgeting", *Revista de Management şi Inginerie Economică*, Vol. 8 No. 1, pp. 173-182.

Eggers, J. (2012), "Falling flat: failed technologies and investment under uncertainty", *Administrative Science Quarterly*, Vol. 57 No. 1, pp. 47-80.

Eisenhardt, K. and Kahwajy, J.B. (1997), "How management teams can have a good fight", *Harvard Business Review*, Vol. 75 No. 4, pp. 77-85.

Fennema, M.G. and Perkins, J.D. (2008), "Mental budgeting versus marginal decision making: training, experience and justification effects on decisions involving sunk cost", *Journal of Behavioral Decision Making*, Vol. 21 No. 3, pp. 225-239.

Gammelgaard, J. (2009), "Issue selling and bargaining power in intrafirm competition: the differentiating impact of the subsidiary management composition", *Competition & Change*, Vol. 13 No. 3, pp. 214-228.

Geppert, M. and Dörrenbächer, C. (2014), "Politics and power within multinational corporations: mainstream studies, emerging critical approaches and suggestions for future research", *International Journal of Management Reviews*, Vol. 16 No. 2, pp. 226-244.

Gervais, S. (2010), "Behavioral finance: capital budgeting and other investment decisions", in Baker, H.K. and Nofsinger, J.R. (Eds), *Behavioral Finance: Investors, Corporations, and Markets*, John Wiley & Sons, Hoboken, NJ, pp. 413-434.

Gordon, L. and Myers, M. (1991), "Post-auditing capital projects: are you in step with the competition?", *Management Accounting*, Vol. 72 No. 7, pp. 39-42.

Greene, W.H., Hornstein, A.S. and White, L.J. (2009), "Multinationals do it better: evidence on the efficiency of corporations' capital budgeting", *Journal of Empirical Finance*, Vol. 16, pp. 703-720.

Haughton, G. and McManus, P. (2012), "Neoliberal experiments with urban infrastructure: the cross city tunnel, Sydney", *International Journal of Urban and Regional Research*, Vol. 36 No. 1, pp. 90-105.

Hayakawa, K., Kimura, F. and Lee, H.-H. (2011), "How does country risk matter for foreign direct investment?", IDE Discussion Paper No. 281, Institute of Developing Economies, Japan External Trade Organization, Mihamaku, February.

Heaton, J. (2002), "Managerial optimism and corporate finance", *Financial Management*, Vol. 31 No. 2, pp. 33-45.

Hebb, T., Hamilton, A. and Hachigian, H. (2010), "Responsible property investing in Canada: factoring both environmental and social impacts in the Canadian real estate market", *Journal of Business Ethics*, Vol. 92 No. 1, pp. 99-115.

Heinz, D. and Tomenendal, M. (2012), "The emerging market hype – putting market size and growth in BRIC countries into perspective", *Critical Perspectives on International Business*, Vol. 8 No. 3, pp. 241-258.

Hofstede, G. and Hofstede, G. (2005), *Cultures and Organizations, Software of the Mind*, McGraw-Hill, New York, NY.

Horton, T. (2002), "Groupthink in the boardroom", *Directors & Board*, Vol. 26 No. 2, p. 9.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Hutzschenreuter, T., Han, U.-S. and Kleindienst, I. (2010), "Exploring the role of managerial intentionality in international business", in Devinney, P.T. (Ed.), *The Past, Present and Future of International Business & Management (Advances in International Management)*, Emerald Group Publishing, Bingley, Vol. 23, pp. 113-135.

Iyer, G., McBride, D. and Reckers, P. (2012), "The effect of a decision aid on risk aversion in capital investment decisions", *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 28 No. 1, pp. 64-74.

Kahneman, D. (2012), *Thinking, Fast and Slow*, Penguin Books, London.

Kahneman, D. and Tversky, A. (1973), "On the psychology of prediction", *Psychological Review*, Vol. 80 No. 4, pp. 237-251.

Kalinic, I., Sarasvathy, S. and Forza, C. (2014), "'Expect the unexpected': implications of effectual logic on the internationalization process", *International Business Review*, Vol. 23 No. 3, pp. 635-647.

Kalyebara, B. and Ahmed, A.D. (2011), "Determination and use of a hurdle rate in the capital budgeting process: evidence from listed Australian companies", *The IUP Journal of Applied Finance*, Vol. 17 No. 2, pp. 59-76.

Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money*, Harcourt, Brace and Company, New York, NY.

Kida, T., Moreno, K. and Smith, J. (2001), "The influence of affect on managers' capital-budgeting decisions", *Contemporary Accounting Research*, Vol. 18 No. 3, pp. 477-494.

King, P. (1974), "Is the emphasis of capital budgeting theory misplaced?", *Journal of Business Finance & Accounting*, Vol. 2 No. 1, pp. 69-82.

Kivlenience, I. and Quelin, B. (2012), "Creating and capturing value in public-private ties: a private actor's perspective", *Academy of Management Review*, Vol. 37 No. 2, pp. 272-299.

Klimek, J.L. (1997), "Escalation of commitment and its effect on capital budgeting: a review of the literature", *Academy of Accounting and Financial Studies Journal*, Vol. 1 No. 2, pp. 96-115.

Koko, A. and Zejan, M. (1996), "Planned and failed foreign direct investment in Vietnam", *Asia-Pacific Development Journal*, Vol. 3 No. 1, pp. 37-54.

Kuhn, T. (1996), *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago, IL.

Latour, B. (1999), *Pandora's Hope: Essays on the Reality of Science Studies*, Harvard University Press, Cambridge, MA.

Maccarrone, P. (1996), "Organizing the capital budgeting process in large firms", *Management Decision*, Vol. 34 No. 6, pp. 43-56.

Mahoney, J., McGahan, A. and Pitelis, C. (2009), "The interdependence of private and public interests", *Organization Science*, Vol. 20 No. 6, pp. 1034-1052.

Malmendier, U. and Tate, G. (2005), "Does overconfidence affect corporate investment? CEO overconfidence measures revisited", *European Financial Management*, Vol. 11 No. 5, pp. 649-659.

Marcuse, H. (1964), *The One-Dimensional Man, Studies in the Ideology of Advanced Industrial Society*, Beacon Press, Boston, MA.

Miller, P. and O'Leary, T. (2007), "Mediating instruments and making markets: capital budgeting, science and the economy", *Accounting, Organizations and Society*, Vol. 32 Nos 7/8, pp. 701-734.

Morgan, G. (1988), "Accounting as reality construction: towards a new epistemology for accounting practice", *Accounting, Organizations and Society*, Vol. 13 No. 5, pp. 477-485.

Mouck, T. (2000), "Beyond Panglossian theory: strategic capital investing in a complex adaptive world", *Accounting, Organizations and Society*, Vol. 25 No. 3, pp. 7-15.

Mukherjee, T. and Hingorani, V. (1999), "Capital-rationing decisions of fortune 500 firms: a survey", *Financial Practice and Education*, Vol. 9 No. 1, pp. 7-15.

Peters, J. (1993), "Decision making, cognitive science and accounting: an overview of the intersection", *Accounting, Organizations and Society*, Vol. 18 No. 5, pp. 383-405.

Pinches, G.E. (1982), "Myopia, capital budgeting and decision making", *Financial Management*, Vol. 11 No. 3, pp. 6-19.

Project Management Institute (2008), *PMBoK Guide – A Guide to the Project Management Body of knowledge*, PMI Project Management Institute, Newtown Square, PA.

Pruitt, S. and Gitman, L. (1987), "Capital budgeting forecast biases: evidence from the fortune 500", *Financial Management*, Vol. 16 No. 1, pp. 46-51.

Russo, E. and Schoemaker, P. (1992), "Managing Overconfidence", *Sloan Management Review*, Vol. 33 No. 2, pp. 7-17.

Sahgal, R. (2011), *Foreign Direct Investment Decision-Making Processes: The Case of Swiss Companies in India*, D-Druck Spescha, St. Gallen.

Schatzberg, J.W. and Stevens, D.E. (2008), "Public and private forms of opportunism within the organization: a joint examination of budget and effort behaviour", *Journal of Management Accounting Research*, Vol. 20 No. 1, pp. 59-81.

Schönbohm, A. and Zahn, A. (2012), "Corporate capital budgeting – success factors from a behavioural perspective", *Beiträge zur Controlling-Forschung*, Technische Universität Kaiserslautern, Kaiserslautern, Vol. 21.

Shimizu, N. and Tamura, A. (2012), "Connecting capital budgeting practice with the miles-snow strategic type: a novel managerial accounting approach", *Global Conference on Business and Finance Proceedings*, Vol. 7 No. 1, pp. 45-56.

Simon, H. (1976), *Administrative Behaviour*, Free Press, New York, NY.

Simon, H. (1986), "Rationality in psychology and economics", *Journal of Business*, Vol. 59 No. 4, pp. 209-224.

Statman, M. and Caldwell, D. (1987), "Applying behavioral finance to capital budgeting: project terminations", *Financial Management*, Vol. 16 No. 4, pp. 7-15.

Sykianakis, N. (2007), "Risk assessment and management in FDIs: a case study in the Balkans", *Investment Management and Financial Innovation*, Vol. 4 No. 1, pp. 31-39.

Thaler, R.H. (1999), "The end of behavioural finance", *Financial Analysts Journal*, Vol. 55 No. 6, pp. 12-17.

The Economist (2013a), "The deepwater horizon disaster – spills and bills", Vol. 406 No. 8822, p. 58.

The Economist (2013b), "ThyssenKrupp – nerves of steel", Vol. 406 No. 8821, p. 52.

Trompenaars, F. and Hamden-Turner, C. (1997), *Riding the Waves of Culture – Understanding Cultural Diversity in Business*, Nicholas Brealey Publishing, London.

Turan, F. and Needy, K. (2013), "A quantitative decision model towards maximizing organizational sustainability", *Engineering Management Journal*, Vol. 25 No. 1, pp. 3-18.

Turner, M.J. and Guilding, C. (2012), "Factors affecting biasing of capital budgeting cash flow forecasts: evidence from the hotel industry", *Accounting and Business Research*, Vol. 42 No. 5, pp. 519-545.

Walle, A. (1990), "Reducing the capitalist bias in marketing", *Management Decision*, Vol. 28 No. 8, pp. 31-35.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)

Wang, D., Gu, F., Tse, D. and Yim, C. (2013), "When does FDI matter? The roles of local institutions and ethnic origins of FDI", *International Business Review*, Vol. 22 No. 2, pp. 450-465.

Zhe, Z. and Ming, J. (2010), "Procedural fairness and cooperation in public private partnerships in China", *Journal of Managerial Psychology*, Vol. 25 No. 5, pp. 513-538.

About the authors

Avo Schönbohm is Business Administration Professor with focus on Management Accounting at the Berlin School of Economics and Law. Before joining the University in 2010, he had worked in various assignments in the industry, including the responsibilities as Internal Audit Manager and Vice President Strategic Planning. His current research focusses on enhancing corporate decision making, corporate governance and corporate gamification. Avo Schönbohm is the corresponding author and can be contacted at: avo.schoenbohm@hwr-berlin.de

Anastasia Zahn is a former Master student of Accounting and Controlling at the Berlin School of Economics and Law currently working at DB Mobility Logistics AG Berlin.

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:55 14 November 2016 (PT)