

Hasebrook, Joachim / Zawacki-Richter, Olaf / Erpenbeck, John (Hrsg.):

Kompetenzkapital:

Verbindungen zwischen Kompetenzbilanzen und Humankapital

Bankakademie Verlag, Frankfurt am Main 2004, 346 S., € 45.-

This edited book is the result of a symposium about competence statements and intellectual capital statements at the Hochschule für Bankwirtschaft (HfB, now Frankfurt School of Finance & Management) which took place early in the year 2004. Like the symposium, which aimed at a broad target group, from academia to practice, the book's 16 articles cover a wide spectrum of orientation. The subtitle is misleading. The scholarly interested reader who expects well-founded models for competence statements *and* human capital will be disappointed.

In fact, sections of the book represent a widespread set of topics ranging from aspects of human and intellectual capital (sometimes with differing definitions), to competence measurement and also knowledge management issues. As far as their orientation is concerned, the articles vary from well-grounded papers to concepts used by consultancies..

Although this book assembles articles which are well worth reading, the editor's self-stated goal of building a bridge, "[...] between the almost entirely detached fields of research in competence measurement and development in social sciences and the human capital accounting and balancing of intangible assets in business sciences" (pp. 3; translation by the reviewers), is only partially achieved.

In addition to the editor's introduction, the book is divided into four sections of three to four articles each. *Part I* contains the "Introduction: Human capital, intellectual capital and competence statements". First Barthel/Gierig/Kühn outline common approaches of evaluating human capital. In the following article, Erpenbeck marks the dimensions of modern competence measurement methods. Part I ends with a section about human performance management in the banking sector (van Gisteren).

Part II focuses on the analysis and valuation of human capital. In a very worthwhile article, Leitner/Kasztler give an account of the experiences concerning intellectual capital statements in the Austrian Research Centers (ARC), Austria's largest non-university research facilities. Alzenauer/Kiefel/Wille elaborate on the valuation of knowledge products, followed by a report of a human capital rating system (Friederichs) developed by the Human-Capital-Club e.V.

Part III of the book deals with competence statements. First Haasler/Schnitger report on the results of an ongoing research project, where the portability of instruments for competence balancing of work-seekers from European countries to Germany is analysed. Next Janas/Meszler present the concept of "KOMBI", a process model for competence balancing. In the third article, Gester describes the Swiss CH-Q-Model for competence development. Finally, a verification procedure for autonomously organized, acquired IT competences (Hanft/Müskens) forms the conclusion of this section.

Part IV finally deals with the topic of the book. In his article about operational level competence management and e-learning scenarios, Zawacki-Richter again presents a very broad view of the topic, which also comprises technocratic instruments of knowledge management. Following this, North deals with competence management in small and medium-sized companies. In their article about operational level compe-

tences, Kinkel/Kirner/Wengel point out the relations between individual and organizational competences. Finally, Romeis reports about competence capital in the practice of an education provider.

To conclude, it must be stated that the editors compiled relevant, worthwhile articles concerning the different subjects addressed above. Nevertheless, the dilemma of the book can also be found here, since it could have been focused more precisely stronger on the subject matter of its title. In this context the remark, "Even if competence statements are not directly thematized, they are always to be added mentally [...]" (pp. 9; translation by the reviewers) is hardly helpful. Fewer, more differentiated, articles would have been more worthwhile, although time would have been arguably too tight for the contributors (cf., p. 12).

Ingolstadt, June 2007

Max Ringlstetter, Tim Kampe*

Herbst, Partrick

**Humankapital und lokale Arbeitsmärkte –
Eine theoretische Analyse von Investitionsanreizen**

dissertation.de Verlag im Internet, Berlin 2004, 236 pp, € 43.-

In 2004, the book "Humankapital und lokale Arbeitsmärkte" was accepted as a dissertation by the University of Tübingen, Germany. In the context of his work, the author Patrick Herbst discusses human capital from a macroeconomic point of view and links the theoretical aspects with problems regarding educational policy. At the same time, the dissertation's reference framework is based on considerations that have been made on an individual level. Ultimately the author's incentive-theoretical remarks can be attributed to those considerations. Although not explicitly stated, it seems that the author's work is related to aspects of behavioral science. However, the author argues – and this is of major significance to the argumentation in the dissertation – that it is precisely not the sociological and psychological (p. 2) approaches which are worth considering, but that, rather, it is purely economic considerations, which shape occupational decisions. Furthermore, it could be of interest to the reader of this journal that the work of Patrick Herbst does not focus on drawing conclusions for managerial, or HR-related, theory and practice.

Considering the object of investigation, the author decides to focus exclusively on the analysis of so-called occupational human capital. This concept comprises those abilities and skills of human resources which normally contribute to an increase in productivity in a certain occupational field. By utilizing such a precise definition of the object of investigation, basic skills and qualifications, knowledge imparted in school and also general experience gained in everyday life are excluded from the analysis. In fact, the author aims at analyzing the accumulation of occupational human capital on a theoretical level by developing a model that depicts its formation as an investment decision, in which both employees and

* Prof. Dr. Max Ringlstetter und Dipl.-Kfm. Tim Kampe, Katholische Universität Eichstätt-Ingolstadt, Lehrstuhl für ABWL, Organisation und betriebliches Personalwesen, Auf der Schanz 49, D – 85051 Ingolstadt. E-mail: max.ringlstetter@ku-eichstaett.de.

companies participate. Therefore, two alternatives regarding the occupational human capital model are considered: First, decisions made by employers and employees are examined within the scope of an existing employment. Second, a model is developed with which the employee's decisions about his own structure of human capital previous to entering the labor market can be examined.

The first chapter, in which the author reviews the literature, builds on the work of Gary S. Becker and expands his theory by incorporating the introduction of an imperfect labor market and the assumption of heterogeneity of employees into the model. Based on the ideas outlined in the first chapter, a model is developed in the following chapter, which characterizes employees by the multidimensional heterogeneity of their human capital and which characterizes corporations by asymmetric information concerning the individual attributes of employees. By these means, the author aims at accommodating the complex reality.

The following two chapters focus on the accumulation of human capital by employees prior to entering the (local) labor market. Models referring to this aspect point out that the structure that has been anticipated for local labor markets is highly relevant for investment decisions of potential employees. At the same time – virtually in reverse – it becomes possible to explain regional differences in human capital and the long-term disparate growth potentials that arise from these differences. In the last chapter the author extends the model once more by integrating market changes – in terms of fluctuating prices. By means of this complex model, the author establishes a connection between labor and product markets and explains the way both markets influence the investments of employees in the accumulation of human capital. A closing section sums up the work's central findings and comes up with questions identifying the need for further research.

Overall, the book makes an exciting contribution to the analysis of human resources from a labor market economic point of view. The author has succeeded in refining the classical theories of Nobel Prize laureate Gary S. Becker by adding new assumptions or by modifying them. Therefore, the author has helped to increase the model's correspondence to reality. All in all, the statements and conclusions made by the author appear to be substantiated and convincing. However, several questions necessarily arise that require further deliberation, which may, finally, that may impair the general composition of the argumentation. To begin with, the author acknowledges that an extension of the models complicates their structure, so that effects are less explicitly to be allocated. Bearing in mind that the highly sophisticated models are still unsatisfactory for adequately representing reality, one may conclude that, lacking in explanatory power, these models do not serve for backing up overall argumentation. From the perspective of management research, one has to question the practical relevance of the findings and their implications for (human resource) management. In this regard, one has to state that this question was surely not in the primary focus of the author.

If the reader tries to draw his own conclusions from the present findings, it may be difficult in at least two regards. First, it is not sufficiently discussed, who – despite the individual worker - engages in calculating the investment in occupational human capital. The author refers to firms, yet it remains ambiguous which individuals or committees are concerned. In addition to top management or the company's owner, line managers or also human resources employees might be involved to mention only two alternatives for the

type of individuals the author refers to. Second, even if this differentiation appears to be “academic” at first glance, it must be stated that thereby varying political interests of the actors as well as divergent economic calculations are associated. The same can be elaborated regarding the fact that the author assumes the classical conception of a world of permanent employment. Other incentives or calculations for making investments on the part of temporary workers or self-employed workers are not subject to examination. Meanwhile, in a steadily changing working environment, these objects of investigation would be appropriate, in particular when deducting economic and political recommendations and measures for the labor market.

Eichstätt-Ingolstadt, June 2007

Stephan Kaiser*

Nieland, Boris

Probleme der Unternehmensbewertung in der Praxis.

Berücksichtigung von Humankapital, Synergien und Flexibilität

VDM Verlag Dr. Müller, Saarbrücken 2006, 92 pp, € 49.-

The book by Boris Nieland starts with the explicit assumption: “The valuation of firms is one of the most extensive task of business economics, since a plurality of value drivers have to be identified in a precise way so that the value of a firm can be determined” (p.1, translated by the reviewer) This core statement creates high expectations. However, I wondered how this complex task could be accomplished within seventy pages.

What is the goal of the book? It states: “The aim of the book is to give an overview over the presently used procedures of firm valuation and to assess their deficits according to appropriate criteria. Moreover, practitioners of firm valuation should be sensitized for the topics of human capital, synergies and flexibility” (p. 2).

The intention of the author is to reach his goals in two distinct chapters. The first chapter contains foundations of firm valuation. In the first part of this chapter, the author presents some key success factors which precede an acquisition. This description appears to be very selective and is written in an extremely brief manner. The author needs only thirty-four pages to deal with one of the most complex themes of firm valuation. To describe the financial due diligence, the tax due diligence, the market due diligence, the human resource due diligence and the environmental due diligence, the author needs one each page respectively. A brief excursion into the Internet led me to numerous websites which give more comprehensive descriptions of key success factors that usually precede an acquisition. Similarly, the author lists the most basic, simple equations of financial valuation, which are offered more comprehensively in any first-year finance text book. Merely reproducing the basic formulas, such as the Discounted Cash Flow Model, the Weighted Average Cost of Capital Approach, the Total Cash Flow Approach, and the Adjusted Present Value Approach, does not capture the complexity of these methodologies.

* Dr. Stephan Kaiser, Jg. 1971, wissenschaftlicher Assistent an der Kath. Universität Eichstätt-Ingolstadt, Lehrstuhl für ABWL, Organisation und betriebliches Personalwesen, Auf der Schanz 49, D – 85049 Ingolstadt. E-Mail: stephan.kaiser@ku-eichstaett.de.

The reflection of these methodologies is beneath any academic discussion in common textbooks. Furthermore, it does not reach the academically specified depths of firm valuation.

The second part of the book deals with some restrictions of firm valuation. Overall, three limitations of firm valuation are discussed. With regard to human capital, it takes the author seven pages to elaborate on a field that normally fills libraries. However, the lack of content is compensated by a quote from Pope Paul II, who - according to the author - made an important contribution to the field of firm valuation, by recognizing the importance of knowledge resources in our contemporary economy (p. 38). Furthermore, another nine pages deal with the problem of exploiting synergies in firm acquisitions. It is unbelievable how selectively and briefly the author deals with the core problems of the field. Even the handling of the flexibility problem merely scratches the surface. Although there is a brief description of flexibility factors, he avoids appropriate quantification and their contribution to the practical field. Instead, the reader is faced with some philosophical statements like: "In the course of history those professionals who occupied themselves with the process have always held on to the opinion that the actually deployed methods finally were able to determine the objective value. Following generation of consultants and investment bankers have so far known better" (p. 70).

In conclusion, for the reader who is academically interested in an introduction to firm valuation and its restrictions, it is recommended that she or he buy any normal standard textbook on firm or investment valuation, which deals with this subject more extensively and precisely. The reader who is interested in the managerial utilization will be astonished that the book does not have even one new idea that goes beyond the usual applications. The final question remains: Why do publishers produce 70-page books that contain no added academic or practical value?

Hannover, July 2007

Hans-Gerd Ridder*

Gebauer, Michael

Unternehmensbewertung auf der Basis von Humankapital

Eul-Verlag, Lohmar 2005, 259 pp, € 49.-

The book is the publication of a dissertation Gebauer wrote at the University of Witten/Herdecke. The author presents a method for determining a company's value by determining its human capital (p. 2). This rhetoric is a little bit ambiguous, because, obviously, a company's value is not identical with its human capital. Therefore, for Gebauer, methods for determining the human capital are only a complement to the prevalent capital-based methods in determining a company's value (p. 9). Regrettably Gebauer does not explain how to supplement the amount of human capital to compute the company's value. To get a close relationship between the two constructs he concentrates his considerations on "personnel intensive" firms.

* Prof. Dr. Hans-Gerd Ridder, Universität Hannover, Institut für Betriebsforschung, Königsworther Pl. 1, D – 30167 Hannover. E-mail: ridder@mbox.ifb.uni-hannover.de.

In the first part of his dissertation, Gebauer presents cost-based and value-based methods for determining the human capital of a firm. He describes the philosophy of the diverse approaches, their weaknesses and presuppositions. Some of these approaches are quite absurd and deserve more decisive comments than Gebauer gives. More unfortunate is that Gebauer does not use a consistent method in assessing the various approaches.

In another chapter the author explains his own approach. The central variable in his model is the difference between the (discounted) future payments and outpayments, which can be ascribed to the employees. Gebauer uses aggregated values, i.e. he does not look at every single person but takes the mean payments and outpayments for the hierarchical levels of the firm. Changing allocations of the employees to these hierarchical levels are taken into account by a „Rank Transition Matrix“. The corporate value is defined as the sum of the values of the hierarchical levels. The determination of the outpayments are comparatively unproblematic (insofar as statements about the future can be considered unproblematic). The determination of the expected payments – and their causal assignment to the employees – however carries substantial problems. Gebauer recommends the use of internal accounting systems or, as a substitute, asking the (internal) customers for the prices they would accept in getting the services from the respective employees or departments. With the first alternative one has to deal with the many problems in determining internal prices; with the second alternative one has to struggle with even greater problems. So one has to define unambiguously distinct services and to accept subjective appraisals, which may be severely biased.

To get predictions for the future, Gebauer looks at wages, fringe benefits, costs for education and further education as possible determinants of future payments. By regression analyses he computes the weights of these factors. Thereby he uses the outpayments of the past periods (wages etc.) up to the present and the payments in these periods. The resulting regression equation is used to forecast the future payments. The computation is supplemented by a correction factor, which is determined by changes in the employees' soft skills. To measure the soft skills (capacity for teamwork, customer focus etc.) a questionnaire with 153 items is used, by means of which the employees must determine their worth through self-assessments (!).

In another chapter Gebauer describes a concrete application. This is laudable because the case study shows very vividly the many problems which arise when using his model. One example is the determination of the payments. In his analysis of a personnel department he identifies 26 processes for which he has to determine internal prices. Regrettably, the precise procedure is not documented. Gebauer only mentions very globally the use of the interview method. At the level of the ordinary employee he identifies payments of € 14.867 per person; at the level of the first line management the amount is € 65.161 per person. Obviously, the genuine work in this department is done by the managers and not by the ordinary staff, a result which is somewhat astonishing, to say the least.

To summarize: Gebauer wants to develop a well-grounded and practicable (model-) theoretical approach. But his theoretical foundation is not well elaborated - behavioral theoretical insights are missing. The only behavioral variables included in his model are formal and soft skills, which are measured by weak instruments. With regard to the model-theoretical aspect three particularities are remarkable: the aggregation of the data at various hierarchical levels, the inclusion of personnel movements and the use of regression analy-

sis. All three points have their own problems which cannot be discussed here at length. So, for example, the use of regression analysis implies assumptions about scaling, linearity, additivity and the relevance of interaction terms. Further problems may arise from the selectivity and incompleteness of the set of variables and from large amounts of unexplained variance. Last not least, building the model on data from the past rises doubts about its robustness in making forecasts - the more so as we are dealing with human behavior. Looking at the many variables which influence performance behavior (personnel policies, leadership style, industrial relations, the economic situation, market shifts, the arise of new tasks etc. etc.) makes the assumption of stability look somewhat heroic. Consequently, the practicability of the model is rather small, simply because the effort to get high-quality data might be formidable. The inherent limits for getting data with high reliability and high validity, will cause the cost-benefit relation to be seldom favorable. Finally, since the results of the method are neither precise nor robust, no one will really base his decisions on them. Nevertheless the model is not worthless. It has a straightforward logic and can be used very well for didactical purposes, such as for showing the many assumptions which need to be made to determine the value of human labor.

Lüneburg, July 2007

Albert Martin*

Scholz, Christian / Stein, Volker / Bechtel, Roman

Human Capital Management

Luchterhand Verlag, München, 2nd edition 2005, 296 pp, € 35.-

Summary: The 2nd edition of the book by Scholz, Stein, and Bechtel covers an important field of HRM: the accounting and measurement of human capital, i.e. it aims at enhancing our understanding of the value adding functions of human resources. On the one hand, this field of research is characterized by a lack of coherency, for there are many different concepts competing with one another. The management, on the other hand, often just uses some sort of rule-of-thumb. By offering a precise description of the field the authors give rise to an advanced understanding in theory as well as in practice.

In the first part of the book different criteria for assessing prevalent approaches in Human Capital Management are presented. Ten criteria are subsequently used to structure and to assess the most important approaches dealing with the operationalization of Human Capital: market-based, cost-based, indicator-based, and finally revenue-based approaches.

The second part offers a brief practical guideline for human resource managers which can be used for organizational decision making. In this context a decision tree is presented which should help managers to choose between several options (p. 217).

Scholz/Stein/Bechtel finally develop an assessment approach themselves, the so called "Saarbrücken formula", which can be seen as a first step toward a synthesis of exist-

* Prof. Dr. Albert Martin, University of Lüneburg, Institute for Small Business Research, Campus 6/10, D – 21335 Lüneburg, Germany. E-mail: martin@uni-lüneburg.de, see also: <http://www.mil.uni-lüneburg.de>.

ing approaches. This formula is not intended to be a catch-all-approach nor does it claim to challenge former approaches; the authors just try to initiate further scientific and practical discussions. Nevertheless, this formula can be viewed as an important creative input of the authors worth considering.

Appraisal: In an economy where knowledge-based work has become an integral part of innovation it is absolutely necessary to discuss issues presented in this book. For human resources are not only an important competitive advantage in the 21st century but also a very cost-intensive factor within corporate management. Thus, the issues discussed here are of highly practical value. But the term ‚human capital‘ has a bad connotation in German, too. In 2004 it was declared to be an “ugly word”. Besides, the term is extensively used by consulting firms to make money. Therefore, the authors’ endeavour to get to a more scientifically-based understanding of Human Capital is without any doubt desirable and worth mentioning.

The discussion of measurement concepts of nearly encyclopedic scope is indeed impressive. Developing relevant criteria is also another strength of the book. How these criteria can be practically used, however, is not always readily observable at first glance. How to create an optimal mix of human resources also remains unclear. Nevertheless, this book hasn’t lost its value in current theory and still seems “fresh” within the field of quantitative measurement of Human Capital. This could possibly be one reason for the fact that the 2nd edition didn’t have to be revised.

The “Saarbrücken formula” immediately has been criticized by many scientists. This is not the place to recapture the ongoing debate in all its details. In summary the “Saarbrücken formula” is characterized by a clear focus towards human potentials. It is able to overcome some of the structural deficiencies of many market-based as well as revenue-based approaches. As human beings are part of the intangible assets of a firm, it is certainly appreciable to – at least implicitly – take into account their ambiguous and dynamic nature. Above this the formula contains a comparative dimension, i.e. not only human resource activities of competitors are considered but also the worker’s own strategic and opportunistic behavior. I think this is indeed noteworthy.

The style of the book is highly readable. Short summaries in the text make it easy to follow the authors’ reasoning. The graphics used in the text also contribute to a better understanding.

Conclusion: The book discussed here has initiated a scientific debate which has not been finished yet. The emphasis lies on the human resources as one of the most important strategic assets of a firm. The book certainly cannot comprise all the topics covered in the field, but it is a large step forward toward a more professional human resource planning and accounting. This step is to be expected by human resource managers but it often fails in practice. So this book could provide useful insights especially for practitioners.

Ilmenau, May 2007

Dietrich von der Oelsnitz*

* Prof. Dr. Dietrich von der Oelsnitz, Technische Universität Ilmenau, Fakultät für Wirtschaftswissenschaften, Fachgebiet Unternehmensführung, Postfach 100 565, D – 98684 Ilmenau. E-mail: D.Oelsnitz@tu-ilmenau.de.

Dürndorfer, Martina / Nink, Marco / Wood, Gerald
Human Capital Management in deutschen Unternehmen.
Eine Studie von Gallup und The Value Group

Murmann, Hamburg 2005, 224 pp, € 48.-

Human capital is in fashion. In recent years, numerous publications have dealt with concepts of evaluating and measuring Human Capital in companies. The publication under review does not fit in this category. The title Human Capital Management suggests approaches to assessing human assets, but the title is misleading. In fact, the study examines practices of human resource management in German companies. It follows the tradition of empirical studies like the so-called Cranfield study which provides empirical data on practices of human resource management. The first chapter "Human Capital: The Success Factor for Companies" is meant to clarify definitions, but contributes rather to the above-mentioned confusion.

Despite these problems, the empirical study is very informative with regard to the practice of human resource management in German companies. The design of the empirical study (chapter 2) is performed by empirical research professionals. Gallup and the Value Group describe, step by step, the design of the study (random selection of a representative sample, computer-assisted telephone interviewing, respondents and interpretation of results, etc.). The sample was taken from all German companies listed on the stock exchange and had a response rate of 30 per cent. 235 managers were interviewed (110 HR-directors, 75 sales directors and 50 chief financial officers). This part of the book has the character of a case study on how to design an empirical study.

The results of the study (chapter 3) consist of a differentiated insight of how German companies manage their human resources. They are presented according to the value chain of personnel activities and offer, to some extent, surprising evidence.

Recruitment is merely done through homepages, recommendations and advertisements. At the same time, every second company states that these instruments are inefficient. Selection of candidates is not performed in a systematic way, since 64 per cent use informal interviews. The forthcoming demographic change in Germany is seen as a problem, but German companies have not yet taken any measures to deal with the problem. Retention is seen as a critical success factor and is especially supported by employee surveys in high-performance companies. Development is still seen as a cost factor and thus varies according to the success of companies. Managers recognize that employee satisfaction contributes to customer satisfaction and customer loyalty. In only 41 per cent of the companies are measurement systems in place which are supposed to evaluate the value added of the employees. Compensation systems aim to reward the quality of work.

In the study, these results are summarized and interpreted in a rather negative way. With regard to human capital in Germany, companies do not meet challenges with adequate strategies and can be divided into two groups: one group which neglects human resources through an attempt at "pseudoquantifications" and another group which is not well orientated and engages in numerous activities which are inefficient. Human capital is being destroyed in German companies to a certain extent (p. 161).

In this rather desolate situation a "Quick-Win" and a "Dig-Deep" strategy are recommended for German companies. The first strategy aims at increasing the emotional in-

volvement of employees through trust, integrity, commitment, and passion, which will lead to more customer loyalty. In the long run this strategy has to be accompanied by sustainable developments in all areas of human resource management. The two strategies are then shown in a case study of the “Wachovia Bank” in order to illustrate a human capital agenda, which is summarized in ten guidelines at the end of the book.

The study and the results are very informative, but the conclusions are questionable. Is it possible to gain an objective view on human resource management by asking only for instruments and gathering subjective attitudes? Could Germany be the world export champion if our companies were destroying human capital to a large extent? Is it not human capital which attracts foreign investors to Germany more than anything else? In view of these questions, the conclusions drawn are too drastic. But drastic scenarios sometimes help creating awareness of some problems. If this were to result in an improvement of human resource management practices in Germany, our success factor “human capital” would be strengthened. German companies would be able to manage this without common sense-grounded advice and guidelines.

In summary, the book has a misleading title and offers an informative empirical study and debateable conclusions.

Mannheim, June 2007

Walter A. Oechsler*

Schmeisser, Wilhelm / Schindler, Falko / Clausen, Lydia / Lukowski, Martina / Görlitz, Bennet

Einführung in den Berliner Balanced Scorecard Ansatz.

Ein Weg zur wertorientierten Performancemessung für Unternehmen

Hampf, München, Mering 2006, IV, 119 pp, with figures and tables, € 17.80

14 years after the first publication of the balanced scorecard by *Kaplan* and *Norton* in the *Harvard Business Manager* and after gaining more than 1,100 hits for balanced scorecard books in Google’s book search, the reader hopes that there are enough good reasons to be additionally confronted with a “Berlin” balanced scorecard approach.

The book “Introduction to the Berlin Balanced Scorecard Approach” claims to contribute to the value-oriented performance measurement of enterprises. It is structured into six chapters. After an introduction to the shareholder value-oriented management (chapter I), the objective of the book is formulated: the linking of single perspectives of the balanced scorecard through calculable key figures and the dynamization of these for the future, in respect to a potential enhancement of value (chapter II). Subsequently, the finance-oriented perspective (chapter III), the customer-oriented perspective (chapter IV) and the potential-oriented perspective (chapter V) of the balanced scorecard are quantified in key figures. Finally, the additional insight out of the closed ratio system resulting from the integration of the perspectives is stressed (chapter VI).

* Prof. Dr. Walter A. Oechsler, Universität Mannheim, Lehrstuhl für ABWL und Organisation, D – 68131 Mannheim. E-mail: oechsler@bwl.uni-mannheim.de.

Basically, the starting position of the present book of Schmeisser et al. can be shared: If an enterprise follows the shareholder value idea and consequently aims to use the shareholder value not only for the value-oriented performance measurement but also for controlling and management, then a consistent implementation and alignment of this basic orientation will be necessary, from the strategic level down to the operational level. The fact that the use of a balanced scorecard is helpful for this purpose is undisputed. In order to find an access to this topic, the short fundamental overview of the shareholder value approach in chapter I of the book (pp. 1-43) is suitable. It is informative, presents financial calculation methods for the shareholder value as well as for various components, and conveys the basic logic of the performance measurement, the result of which ultimately states how well the maximization of the enterprise value and thus the increase in value for the investors succeeds.

In chapter II (pp. 45-59), the authors approach their actual topic. Their main complaint is that so far no linkage or dynamization of the four balanced scorecard perspectives exist, and that up to now no overall judgments based on key performance indicators can be derived from loose quantitative and qualitative key figures or ratio systems. This complaint raises two questions: How do the authors know this, and is this actually correct? On the one hand, any references for the asserted statement are missing here. On the other hand, the central challenge for balanced scorecards (i.e., a few, but at the same time relevant key figures should ideally influence each other among the different perspectives) has been broadly recognized for a long time, for instance in the value-based management approach. In addition, the linkage examples selected by the authors themselves show: If the combination of the customer perspective (contribution costing) and financial perspective (RoI) results in a break-even point analysis or if the combination of the potential perspective (process cost calculation) and financial perspective (productivity) results in an output-capital ratio, this is not really new. The overview illustration on page 57 therefore supports the calculability of the individual balanced scorecard perspectives but not the innovative nature of the presented approach.

As a means to determine the creation of value of an enterprise also from the outside, in chapter III (pp. 61-75) the authors introduce value creation calculations, both generally and through an enterprise example, as income statement-based determination instruments for finance-oriented performance components. The results serve as a basis for period-spanning enterprise growth analyses and as a basis for a whole set of key figures, which can be used in the internal and external statement analysis.

As an innovation, Schmeisser et al. in chapter IV (pp. 77-90) take up the trend of enterprises to complete or even to replace product-oriented strategies with customer-oriented strategies. The performance contributions of customers can be assessed by customer contribution costing especially when using the balanced scorecard within the customer perspective. The conversion into liquidity-effective sizes and their aggregation leads to the customer cash flow and to the future-oriented customer value and thus to a contribution to the shareholder value which is oriented to the achievement of market objectives. The value-increasing or value-destroying contributions to the shareholder value can be demonstrated in this manner which can lead to strategically meaningful reactions, not the least by appropriate ratio pyramids which support the analysis, planning and control of strategy identification, formulation and implementation.

In chapter V (pp. 91-109), the authors continue with the potential perspective. They focus on “intangible assets” and especially on the employees as “intellectual capital”. To begin with, some ambiguity remains in the use of the term “potential” (on page 53 it was still used in the sense of a commodity) and of the composition of potentials (in the illustration on page 92 the individual components of the balanced scorecard perspectives overlap). In addition to this, in this chapter the financial logic is applied to employees in order to calculate an employee contribution margin. For this purpose the quantification of costs and returns on the intellectual capital takes place by a set of indicators, such as wages/salaries and rates of absenteeism. Analogously to the customer perspective, an employee cash flow and a future-oriented potential value (suddenly labeled “human capital value”) are developed as the employee-based component of the shareholder value. Again, value-increasing or value-destroying contributions to the shareholder value can be shown.

In their concluding chapter VI (pp. 111-112), the authors summarize their results by particularly referring to the integrated calculability of the balanced scorecard perspectives and by pointing out the close relation to the shareholder value approach.

In the context of the thematic priority “HCM” of this issue of the *Zeitschrift für Personalforschung*, special attention lies, of course, on the potential perspective: What should be thought of the proposed “human capital value”? To anticipate the answer – nothing at all: If this potential value should suddenly be the human capital value, the meaning of the underlying term “capital” has to be questioned. The term capital as used in finance is clearly based on returns and refers to the sales market. This, however, leads to the (from a human resource management perspective completely absurd) phenomenon that during occurring fluctuations of returns – independent of the reasons – the value of the human capital also changes although the identical staff is employed in the enterprise. In the case of negative returns, the human capital value would even become negative as well, which remains elusive for the employees or the work council.

The self-targeted objective of the Berlin Balanced Scorecard Approach was to contrast with traditional performance measurements like the profit or the RoI which were characterized as “very partial and open to manipulation” (page 1). Particularly in the case of potential perspective, this claim fails completely, because especially any returns which are projected into the future and then are discounted are by no means free from manipulation – all the more so because for human resources a long-term (or even hypothetically infinite) right of disposition such as holds true for the material goods and properties of the enterprise cannot automatically be assumed.

It could become dangerous for investors if enterprises follow the logic on page 107 to 108, according to which the cash flows of the single balanced scorecard perspectives have to be summed up in order to determine the shareholder value. Adding up the employee cash flow and the customer cash flow, the impression is that the shareholder value is enlarged without any reason: The sales revenues which are generated by all employees correspond exactly to the sales revenues which account for all customers. Out of the latter, the employee-based parts of the revenues are, however, not deducted although the employees bear the customer relations. This results in a double recording which certainly cannot be intended.

By the way, the latter point above shows that the Berlin Balanced Scorecard Approach – against its promises – gives no answer in respect to a meaningful linkage, especially of the customer perspective and the potential perspective.

Considering the results of the review, the approach of Schmeisser et al. is in its finance-oriented logic predominantly reasonable. However, in regard to the potential perspective and the related human capital, the approach is unsuitable for the controlling of human resources due to the implicit surplus distribution logic, and is there also dysfunctional for enterprises. Strong doubts still remain as to whether or not the Berlin Balanced Scorecard Approach is altogether innovative and whether it adds central insights to the initially mentioned foregoing publications.

Siegen, June 2007

Volker Stein*

Wucknitz, Uwe D.

Personal-Rating und Personal-Risikomanagement

Schäffer-Poeschel, Stuttgart 2005, ca. 200 pp, € 39.95

Ratings of personnel and personnel management have gotten a big boost with the spread of “soft law” standards (from quality management to sustainability reports), the adoption of international standards for annual financial reporting in Europe (“International Financial Reporting Standards” IFRS 2005), and the changed legal situation in Germany (Kontroll- und Transparenzgesetz, Kon-TraG 1998). External rating agencies as well as internal ratings are increasingly being used. One key motor driving this process is the guideline known as “Basel II”. With the current implementation of this guideline on minimum capital requirements in EU and/or national law, risk management is taking on an increasing significance. One set of risks taken into account when allocating credit are personnel risks; their estimation can lead to the drop or rise in the cost of external financing.

The work of Uwe D. Wucknitz positions itself before this backdrop. The author addresses bank representatives on the one hand and, on the other hand, corporate representatives, especially from small to mid-sized companies, seeking to inform them about current rating practice for personnel and personnel management. In addition, the book sketches detailed possibilities for the implementation or operationalization of certain aspects of personnel rating – the latter is technically correct, even if not quite appropriate in this context. The work is divided into four chapters:

The introductory chapter briefly informs the reader about the regulations suggested by the Basel Committee on Banking Supervision and their consequences for companies and financial institutions. The reader also learns some fundamentals of internal and external ratings, rating agencies, and the legal foundations of risk management in Germany.

The second chapter is dedicated to the analysis and rating of personnel factors. The opening section of the chapter enumerates the rating criteria for personnel and personnel

* Prof. Dr. Volker Stein, Universität Siegen, FB 5, Lehrstuhl für Betriebswirtschaftslehre, insb. Personalmanagement und Organisation, D – 57068 Siegen.
E-mail: volker.stein@uni-siegen.de.

management and the significance of these criteria in the rating catalogues of German rating agencies. This part consists of two examples from practice, interesting both in terms of practical use and academic research. In the remaining chapter, the author briefly explores the analysis and evaluation of personnel-related organizational environment and the analysis of personnel-related corporate structure in some detail. Based on the rating practice discussed, the author here treats aspects such as personnel structure, key figures, personnel leadership, personnel costs, and corporate culture. The author sketches out some of the standard questions asked by ratings and uses tables to inform the reader about possible indicators, their desired normative form, and potential sources of information. The chapter closes with tips about preparing ratings for both the company being rated and/or the financial institution doing the rating.

In the third chapter, the reader is informed about aspects of personnel risk management. A checklist presents how personnel risk profiles are established, and the author also explores the evaluation and control of personnel risk management, risk controlling, and risk influence.

The concluding chapter (entitled "Informationen") treats various standards (SA8000, 3-I-Kompetenzmodell, Sustainability Reporting Guidelines, etc.) and provides various checklists for the competency of key figures or the evaluation of hirings. This includes lists for establishing the personality pattern of key figures such as the "entrepreneur" or "manager", as well as indications on how to ascertain the central values in the company.

Some of the indicators suggested are immediately plausible before the backdrop of the "common sense" of personnel and organization literature. Ever since Fayol's argument in favor of the unity of command, it has been general consensus that employees should have only one supervisor. Accordingly, one indicator – the number of employees with two supervisors should be as low as possible – is more or less self-evident. But how does the author justify his comparative value, suggesting that no more than 22 percent of the employees should have two supervisors? And what about types of structural organization other than the unilinear model? Why should the portion of "specialty leadership instruments available by information technology" be especially high (over 80 percent?) And why should the percentage of employees that are goal-motivated be as high as possible (over 80 percent?) Why is low-level management suggested as a source of information and not the employees themselves? Reported directly from the practice of corporate consulting, this is enlightening from the perspective of organization ethnography, but the checklists are only sobering when it comes to the evaluation of hirings after the ratings interview from the perspective of application-oriented personnel and organization research. Just to pick two of the ten evaluation criteria that are to be checked off by analysts in five level ratings after the rating interview, why is a typical entrepreneur only "suitably" (level 3) oriented towards the economic goals of the company with a "relatively weak" (level 2) awareness of costs, whereby the "manager" type is marked by a "rather high" (level 4) awareness of economic goals and a "strongly marked" (level 5) consciousness of efficiency?

There are books that raise more questions than they answer. This need not be a deficiency. But when the work at issue falls within the realm of advice literature, clearly some doubt is called for in terms of product quality. Nevertheless, many practitioners – firm management and personnel controllers as well as consultants and analysts – are likely to

find this work helpful, if for no other reason than due to the many tips on evaluating various facets of “soft” factors. For the very same reason, some theorists of personnel management are just as likely to dismiss this book, calling it an “unfounded recipe collection”. However, there is no cause for academic hubris here, since the questions raised by this book and similar works are directed at personnel and organization studies, among others. This is true in two senses: First of all, the work shows that there is a significant need for theoretically well-founded and empirically grounded orientation knowledge. For example, the internal and external relationships of companies to their stakeholders or the usefulness of specific constellations of personnel structure that analysts have been using recently only make sense on the basis of theoretical concepts. In addition, their significance for risk evaluation can only be estimated with an awareness of empirical connections. Of course, personnel and organization research has quite a bit to offer in these terms, even if more research needs to be done. It still remains justified to ask why so little basic knowledge makes its way into the standards of rating agencies and practically-oriented advice literature.

Second, there is clearly a great need for empirically tested measurement techniques and scalings that can be used for rating. Here as well, the extant research literature provides a great resource that has occasionally been used for scale collections. But the adaptation of extant measurement techniques and the construction of new ones demands a basic knowledge of empirical social research and measurement theory, i.e., realms of knowledge that are given too little attention in the standard curricula of economics programs. The one-sided emphasis on the evaluation of data using statistics and econometrics is of hardly any help in constructing reliable and valid indicators. A great deal would already be achieved if economists in general and controllers in particular would not use “numbers” as “hard” data in contrast to “soft” factors, but would also treat them as fallible measurements. In light of the dynamism that is developing in the rating of “soft” factors on the basis of the establishment of various standards, personnel and organization research is well advised in the future to direct their studies more toward rating target criteria. The field is too significant to leave in the hands of consultants and rating agencies. Also required is a broader presentation of research results - a field where an application-oriented academic approach could contribute. Only if empirical research generates understandable statements about the risks and benefits of personnel-relevant factors can better practical advice books be reasonably expected.

Flensburg, July 2007

Wenzel Matiaske*

* Wenzel Matiaske, Professor for Business Economics and Sociology, Universität Flensburg, Internat. Inst. f. Management, Munketoft 3, D – 24937 Flensburg. Research Professor, Deutsches Institut für Wirtschaftsforschung, Working Group Socio-Economic Panel, Berlin. E-mail: matiaske@uni-flensburg.de.

Bechtel, Roman

**Humankapitalberechnung zwischen Markt- und
Ressourcenorientierung. Eine axiomatische Integration**

Hampff, München, Mering, 377 pp, € 34.80

After following the author's great clarity of thought in an axiomatic outline on Human Capital Measurement (HCM) it is the reader's inevitable desire to discuss the theses with him. Since dealing with the reader's tension is a general characteristic of a good book, Roman Bechtel wrote a good book. If encouraging a discourse on a subject is a specific characteristic of a good book in social sciences, Roman Bechtel wrote a good book.

The author considers the need for thoughtful approaches in Human Capital Measurement, last but not least defined by the capital market, on the one hand and the fragmentation and contradictions of existing, almost isolated, approaches for measuring Human Capital on the other hand. His aim is to integrate not only different approaches in HCM but also to combine fundamental theoretical concepts – the market-based view and the resource-based view – for underpinning Human Capital Measurement. An integration allows the identification of a corridor for measuring human capital and increases convergence in theory and practice (chapter 1 and page 280). The book gives a good example for a deductive research approach.

In the second chapter, the author deals with the integrative potential of human capital theory, market-based view (MBV) and resource-based view (RBV). Moreover, he systematically subsumes existing approaches for measuring human capital which do not have an explicit theoretical basis, under these concepts. Bechtel's key argument is that a market-based view and a resource-based view should not necessarily be treated as paradigms. His identification of a solution space for HCM under market and resource perspectives is an early intellectual highlight of his book (page 86ff.). Further highlights will follow when explaining the axioms.

The specification of the solution space in chapter three is the main topic of the book. In a remarkable reflection of the MBV and RBV, Roman Bechtel thoroughly derives nine axioms of HCM that are summarized and further discussed from a general perspective in chapter four. Three axioms concern the resource definition. The main idea is that it is personnel in its collective meaning, contracted by an organization with all its intellectual, physical and social characteristics, that is the object of HCM. A fourth axiom concerns the value definition and pleads for a monetary evaluation of personnel. The considerations concerning the evaluation process are topic of the axioms five to seven. The combination of market-related and resource-related measurements is the pivotal element here. While prices of the labor market define the starting point, internal organizational activities of resource development (motivation, interaction, training) moderate the market price. Axiom eight and nine deal with an optimization of human capital with the strategic orientation of the Human Resource Management function.

The author establishes HCM on an integrative theoretical basis that has not been as systematically developed before. Regarding the presented ideas in an isolated view might lead to the impression that the considerations have already been formulated somewhere else, as the author well documents in his extended list of references. The added value provided by Roman Bechtel lies without any doubt in the recombination of already existing

thoughts and the formulation of an integrative axiomatic, in developing an order for a social theory of HCM (see p. 265). The clarity, systematic and discourse style in the author's argumentation is impressive.

Nevertheless, it should be mentioned that the explanation in chapter three is sometimes redundant – probably a limitation that can hardly be avoided. Another limitation could and should be improved in future. The author mentions two times that the developed axiomatic requires empirical testing but he does not provide any further idea how to realize this. At least an outline of the empirical design could have been expected.

At the beginning of this review I mentioned the reader's tension increasing while reading the book and the demand for discourse the book leaves. Due to the clear outline, one can follow the author's argumentation without necessarily sharing his viewpoints. From my point of view, the object of HCM could have been defined in a different way. By integrating the dynamic capability approach and the relational view into resource-based thinking, one would conclude that not personnel itself but capabilities, including relationships, should be the object of HCM. This theoretical integration could have been expected from an author who claims to integrate even theories with somehow more paradigmatic differences. A different definition of the object would lead to a redefinition of the subsequent axioms and so on. Other members of the readership who are familiar with the MBV might develop other perspectives for the evaluation process. A reduction of the produced tension depends on empirical evidence. This is the reason why empirical testing should be considered a little bit more seriously.

Bochum, July 2007

Uta Wilkens*

Moog, Petra

Humankapital des Gründers und Erfolg der Unternehmensgründung

Deutscher Universitäts Verlag, Gabler Edition Wissenschaft, Wiesbaden 2004, 154 pp, € 45.90

Petra Moog analyzes why some ventures are more successful than others. Her emphasis is on the antecedents of new venture performance with a special focus on the human capital of entrepreneurs. Moog aims to test the assumptions of human capital theory in an entrepreneurship context, which is particularly well suited for such a test: Characterized by high uncertainty and risk, the new venture context requires high-quality human capital (Aldrich/Auster 1986). Furthermore, traditional contracts, which govern interorganizational relationships such as alliances and new venture investments, cannot fully specify all contingencies that may arise (Williamson 1985). Consequently, new venture founders depend on their human capital to make quick decisions and to change short-term strategies in reaction to environmental contingencies.

* Prof. Dr. Uta Wilkens, Ruhr-Universität Bochum, Institute of Applied Work Science, Chair: Management of Work Processes and Personnel, D – 44780 Bochum.
E-mail: aup@rub.de.

Prior research has emphasized the role of human capital in the success of newly founded ventures. Nevertheless, very little is known about the influence of different dimensions of investments in human capital on new venture performance. Thus, Moog's primary aim is to examine the antecedents of new venture success from the human capital theory perspective by using survey data from 910 German ventures founded between 1992 and 1998. The main research question addressed by her study is: What is the role of founders' human capital in new venture growth? More specifically, Moog studies the partial and complementary effects of formal and informal human capital investments, as well as the diminishing returns of human capital investments. The results suggest that human capital theory has an explanatory value in the context of young firms. The findings also confirm that both formal and informal investments in human capital have a positive effect on new venture performance and growth. This study furthermore provides a response to the calls for research (e.g. Baron/Markman 2003) on the increased inclusion of person-centered variables in studies of entrepreneurial success, as well as for research on the growth of newly founded firms.

In chapter one, Moog clarifies her study's research question and research motivation. She first summarizes previous research on the relationship between human capital and new venture performance, and then identifies the research gaps in this field of study, which serve as the starting point of her investigation. Moog concludes that we know very little about why the majority of small firms do not grow or perform well. Chapter 2 presents a thorough and comprehensive review of selected and recent new venture performance literature, examining a variety of theories, including social and behavioral psychology, general economic theory, and economic theories of human capital.

In chapter 3, Moog reflects on previous studies' findings on the relationship between investments in human capital, productivity, and return of investment in the context of entrepreneurship in order to develop a theoretical model of human capital and new venture performance. To date, different types of entrepreneurship research indicate that both formal and informal human capital, continuous investments in human capital, and founders' professional and industrial experience may help to explain start-ups' different levels of success. Moog focuses primarily on the original (Becker 1962) definitions of human capital, either as the entrepreneur's own education or his professional experience. She utilizes human capital theory assumptions to elaborate a conceptual model that serves as a basis for her empirical investigation.

The basic model is further elaborated to include the human capital effects and return of investments of different levels of education, types of schooling, and work experience on entrepreneurship entry and performance. From the review of the previous literature on entrepreneurs' individual success factors and from her theoretical model, Moog formulates four hypotheses. The results of the empirical testing of the model are presented in chapter 4. As the number of secondary databases of German entrepreneurs was not inclusive enough to test the model developed by Moog, she describes the process of creating her own database and collecting human capital data on entrepreneurs and start-up performance indicators through a survey instrument. In order to test her hypotheses, Moog undertakes a methodical quantitative survey of 910 active German start-ups founded between 1992 to 1998.

The regression results indicate differences in formal and informal human capital's predictive power in respect to several of the dependent variables such as the general growth of the numbers of employees, the growth of the number of qualified and well-educated employees, and the ventures' total turnover. It proved difficult to confirm her hypotheses on the effects of human capital divestment on entrepreneurs if the entrepreneurs had been unemployed before their entrepreneurial activity. However, other hypotheses to the effect that the combination of different types of human capital, such as practical expertise combined with academic education had a positive effect on start-ups' success were fully confirmed. Moreover, more than 50% of entrepreneurs in the sample had this particular combination of human capital and expertise.

The value of this study's theoretical contribution is revealed by the multiple regression analyses that the author also presents. Founders' human capital variables obviously influence start-ups' positive growth and success in a specific way. Consequently, the study teaches us that a combination of analytical and academic knowledge and practical competences forms a very important bundle of competences that is critical for successful start-up management. In the last chapter (chapter 5), and based on her main empirical results, Moog summarizes the significance of human capital theory in identifying value-adding determinants and gaining a better understanding of entrepreneurial growth and success. It should be noted that the findings of the study might not only be of value for individual entrepreneurs but also for entrepreneurial teams.

Moog's findings have implications for, and raise intriguing questions about, the role that individuals play in the creation and sustainability of entrepreneurial firms. Although there has been some empirical research on human capital and entrepreneurship (e. g. Bates 1990; Gimeno et al. 1997; Iyigun 1998; Davidsson/Honig 2003; Rauch et al. 2005; Unger 2006), Moog's study of the influence of different kinds of investments in formal and informal human capital presents a further and distinct line of inquiry.

From a theoretical perspective, this study makes a number of contributions. First, it contributes to the discussion of the antecedents of new venture performance from a human capital theory perspective. Second, it is one of the first studies to empirically examine the partial and complimentary, and also the single and combined effects of investments in formal and informal human capital, diminishing returns of investment in human capital, and human capital divestment in an entrepreneurship context. Moog consequently presents one of the most complete empirical analyses of the different components of founders' human capital. This is particularly important as the effects of different types of investments in human capital can only be made if *all* possible investments are included in the analyses, as is the case in Moog's study. The study also measures human capital investments precisely. Her results confirm human capital theory assumptions and thus provide empirical evidence of the usefulness of this theory for entrepreneurship research.

Third, the study extends earlier research on human capital in technology ventures (Batjargal 2007), economic development (Siqueira 2007), and gender effects in entrepreneurship (Manolova et al. 2007) by differentiating different human capital dimensions, which many previous studies have failed to do. Moreover, Moog's results are supported by Unger (2006), who also finds that education has a positive impact on success. Further, by studying the different dimensions of founders' human capital and their effects on new venture performance, Moog also addresses the gap in the literature regarding research on

the influence of individuals on new venture development, as recently highlighted, for example, by Baron/Markman (2003) and Shane (2003).

Finally, the results obtained in this study have theoretical and practical implications for new venture performance in general and for the influence of individuals in the entrepreneurial process in particular. The results show that the human capital investment variables together with the control variables explain between 23% and 40% of the variance in the dependent variables. While the results indicate that the assumptions derived from human capital theory and tested in this study are relevant with regard to explaining the variance of new venture performance, they furthermore indicate that the human capital variables included are *not the only* relevant variables that can explain variance in the dependent variables. Consequently, future studies building on Moog's investigation might want to include additional aspects of human capital. Following Smart (2003), who regards human capital as individuals' propensity to do productive work, other potential variables come to mind that might be included in a future analysis, such as communication and social skills, cognitive appraisal styles, and achievement motivation. Future studies might moreover want to investigate whether the human capital dimensions that Moog examines influence the discovery and evaluation of entrepreneurial opportunities and the decision to become an entrepreneur.

Moog's study also has implications for practice. First, entrepreneurs and their stakeholders, such as venture capital firms, should be aware of the importance of previous human capital investments and their subsequent development. Second, the study's results can be transferred to the team level. They show that entrepreneurial teams can benefit from their entrepreneurial team members' combined and complementary human capital. Third, for students wanting to become entrepreneurs, the results show that investments in formal and informal human capital pay off in subsequent venture developments and should therefore be encouraged.

Overall, this is a valuable study, that provides an interesting insight into the role of human capital in new venture performance. By introducing human capital theory and human capital indicators of venture success, Moog's study contributes to the consolidation and development of entrepreneurship research and to the literature on new venture performance predictors.

References

- Aldrich, H./Auster, E.R. (1986): Even dwarfs started small: liabilities of age and size and their strategic implications. In: L.L. Cummings/B.M. Staw (Eds.): *Research in Organizational Behavior*, 8. Greenwich, CT: JAI Press, 165-198.
- Baron, R.A./Markman, G.D. (2003): Beyond social capital: the role of entrepreneurs' social competence in their financial success. In: *Journal of Business Venturing*, 18(1), 41-60.
- Bates, T. (1990): Entrepreneur human capital inputs and small business longevity. In: *Review of Economics & Statistics*, 72(4), 551-559.
- Batjargal, B. (2007): Internet entrepreneurship: Social capital, human capital, and performance of Internet ventures in China. In: *Research Policy*, 36(5), 605-618.
- Becker, G. (1962): Investment in human capital: A theoretical analysis. In: *Journal of Political Economy*, 70(5), 9-49.
- Davidsson, P./Honig, B. (2003): The role of social and human capital among nascent entrepreneurs. In: *Journal of Business Venturing*, 18(3), 301-332.

- Gimeno, J./Folta, T./Cooper, A./Woo, C. (1997): Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. In: *Administrative Science Quarterly*, 42(4), 750-783.
- Iyigun, M./Owen, A. (1998): Risk, entrepreneurship, and human-capital accumulation. In: *American Economic Review*, 88(2), 454-457.
- Manolova, T.S./Carter, N.M./Manev, I.M./Gyoshev, B. (2007): The differential effect of men and women entrepreneurs' human capital and networking on growth expectancies in Bulgaria. In: *Entrepreneurship: Theory & Practice*, 31(3), 407-426.
- Rauch, A./Frese, M./Utsch, A. (2005): Effects of human capital and long-term human resources development and utilization on employment growth of small-scale businesses: A causal analysis. In: *Entrepreneurship: Theory & Practice*, 29(6), 681-698.
- Shane, S. (2003): *A general theory of entrepreneurship. The individual-opportunity nexus*. Cheltenham, UK: Edward Elgar.
- Siqueira, A.C. (2007): Entrepreneurship and ethnicity: the role of human capital and family social entrepreneurship. In: *Journal of Developmental Entrepreneurship*, 12(1), 31-46.
- Unger, J. (2006): *Entrepreneurial success: The role of human capital and learning*. Gießen. Doctoral Dissertation.
- Williamson, O.E. (1985): *The economic institutions of capitalism*. New York: The Free Press.

München, July 2007

Isabell Welppe*

* Dr. Isabell Welppe, Institut für Information, Organisation und Management, Ludwig-Maximilians-Universität München, Ludwigstraße 28, D – 80539 München, Tel. +49 89 2023 8774. E-mail: welppe@lmu.de.