

Cultural Entrepreneurship and Money: Start-Up Financing Structures in the Creative Industries

Submitted: 20.06.15 | Accepted: 10.09.15

Elmar D. Konrad*

Cultural and creative industries belong to the fastest growing sectors. About two-thirds of all new businesses in the creative and cultural industries need financial resources, but currently there are no findings regarding the financial structure and the very complex structure of this sector. For the first time this paper combines specifically the research on cultural and creative industries and start-up financing to examine the entrepreneurial factors inhibiting or stimulating the influence on capital acquisition. Based on a large empirical study, the funding structure for start-ups involving factors of orientation at the individual, corporate and social level is described by means of a multivariate regression model. Individual and entrepreneurial orientation of the actors plays a significant decisive role in the choice of forms of financing and the degree of diversification of financial structures. Start-up-related characteristics such as size and counseling or support inclination give also information on the structure of start-up financing. The ascertained findings thus identified important decision-making tools for the financing and funding practices in and for cultural and creative industries.

Keywords: cultural entrepreneurship, entrepreneurial finance, start-ups in creative and cultural industries.

Przedsiębiorczość w sektorze kultury a środki finansowe – struktury finansowania nowych przedsiębiorstw w sektorach kreatywnych

Nadesłany: 20.06.15 | Zaakceptowany do druku: 10.09.15

Sektor kultury i sektor kreatywny należą do najszybciej rozwijających się branż. Około 1/3 wszystkich nowych przedsiębiorstw w tych branżach potrzebuje środków finansowych, lecz aktualnie brakuje informacji na temat struktury finansowej i złożonej konstrukcji tego sektora. W opracowaniu po raz pierwszy konkretnie powiązано badania nad sektorem kultury i sektorem kreatywnym oraz finansowaniem nowych przedsiębiorstw z myślą o dokonaniu analizy związanych z przedsiębiorczością czynników hamujących lub stymulujących pozyskiwanie kapitału. Na podstawie obszernego badania empirycznego przeprowadzanego w 2013 r. opisano strukturę finansowania przedsiębiorstw rozpoczynających działalność gospodarczą z uwzględnieniem czynników orientacji na poziomie indywidualnym, przedsiębiorstwa i społecznym. Indywidualne i przedsiębiorcze ukierunkowanie podmiotów ma duże, a wręcz decydujące znaczenie dla wyboru form finansowania oraz stopnia zróżnicowania struktur finansowych. Informacji o strukturze finansowania nowych przedsiębiorstw dostarczają takie ich cechy jak wielkość i chęć skorzystania z poradnictwa czy wsparcia. W ten sposób ustalono, jakie są istotne narzędzia decyzyjne umożliwiające stosowanie praktyk w zakresie finansowania w sektorze kultury i sektorze kreatywnym.

Słowa kluczowe: przedsiębiorczość w sektorze kultury, finansowanie przedsiębiorstw, nowe przedsiębiorstwa w sektorze kultury i sektorze kreatywnym.

JEL: L26, G23

* **Elmar D. Konrad** – Prof. Dr., Institut für unternehmerisches Handeln, Hochschule Mainz.

Address: Institut für unternehmerisches Handeln, Hochschule Mainz | University of Applied Science,
Lucy-Hillebrand-Str. 2, D-55128 Mainz; e-mail: elmar.konrad@hs-mainz.de.

1. Introduction

In Europe, the scientific interest in the field of creative industries is relatively new and also primarily driven by institutions (Flew/Cunningham, 2010). Here, in addition to numerous conference papers, discussion papers and country reports, qualitative and quantitative research was conducted (United Nations, 2010; European Commission, 2012). Especially in Germany most articles refer to definitional, characterizing and economic issues, in particular based on already established companies in the eleven sub-sectors of the creative industries (Fesel/Söndermann, 2007). Especially research on the funding issue in view of the specific characteristics of actors and enterprises of the creative industries is scarce. In addition, data on specific factors on critical resources such as financial means in the start-up phase but also growth and expansion phase is missing (Denis, 2004). But it is precisely these areas where differences occur in the creative industries in comparison to other economic sectors. So, contributions to existing financial theories, which are applied to actors in the formation and post-formation phase, especially with regard to industry, regional and specific personal characteristics, are lacking (Kebir/Crevoisier, 2008). The consequence is latent underfunding, which causes founding obstacles and barriers to growth (Myers/Majluf, 1984).

The present article unites the research areas of creative industries and start-up financing in a targeted manner. The object of the present paper is to get first substantiated theoretical frameworks and models of the financing structure of start-ups in the cultural and creative industries. In this context an extended base-model was developed for identification and evaluation from

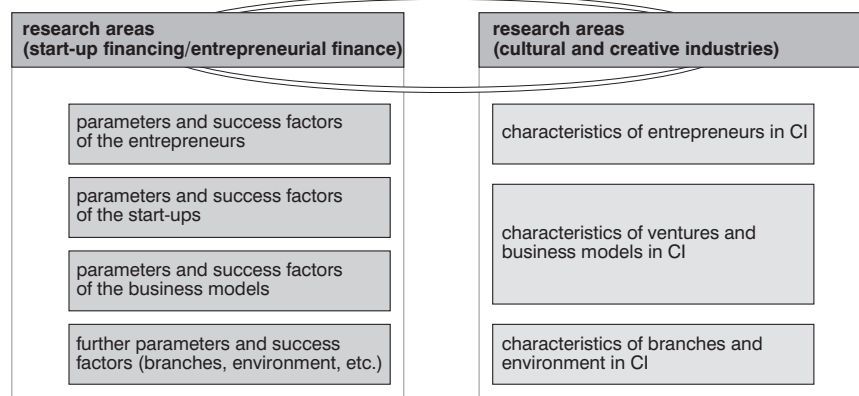


Fig. 1. Combination of the research areas entrepreneurial finance and CI after Frenz/Konrad (2013).

fundamental characteristics of the entrepreneurial actors (Asterbo/Bernhardt, 2003), the start-up enterprises and the environment, the research of capital and financing structures according to the findings from research areas of start-up financing and entrepreneurial finance (see fig. 1). Adapted model specifies first parameters and success factors. The outcome of this is the resultant hypotheses which would be tested. The evaluated results will be discussed at the end and will be integrated into the implications for further research approaches and recommendations.

2. Theoretical Basis and Literature Review

2.1. Characteristics of the Creative Industries

The creative industries have eleven sub-areas which are characterized by a high level of fragmented nature, heterogeneity and economic value added division (Fraser/Lomax, 2011). In Germany the so-called “Kultur- und Kreativwirtschaft” (cultural and creative industries) contains also eleven sub-sections according to the standard guidelines of the Minister of Economic Affairs State Conference of 2009 based on the Committee of Enquiry “Kultur in Deutschland” (Culture in Germany) of 2008 (Deutscher Bundestag, 2008). These sub-areas include preponderant profit orientated enterprises with the focus on creation, production, distribution and/or medial extension of cultural/creative commodities or services (Deutscher Bundestag, 2008).

The definitions of the 11 sub-areas in the cultural and creative industries at the German federal and Federal State levels are as follows (Söndermann et al., 2009):

- (1) music industries
- (2) literature and book market
- (3) art market
- (4) film industry
- (5) radio and television broadcasting market
- (6) performing arts market
- (7) design market
- (8) market for architecture
- (9) press market
- (10) advertising market
- (11) software and games industry

In the framework of these definitions, sub-areas 1 to 9 are related to the branches of arts and culture trade. According to this, the sector of creative industries contains sub-areas 10 and 11. Founding actors in the creative industries in Germany, compared to other economic sectors, are younger, more likely to be university graduates, found mainly in the

field of freelance professions and mostly begin as a solo start-up. In the foundation phase, financial means are a critical resource (Söndermann, 2012).

2.2. Aspects of Financial Structures

However, contributions to capital or financing structure usually go back to considerations of large national and international companies (Rajan/Zingales, 1995). Obstacles and barriers in corporate finance may also arise out of information asymmetries and moral hazard as well as resulting transaction costs and diversified taxes. These primary factors affect the use (agency view) and the provision (principal view) of capital (Shyam-Sunder/Myers, 1999). The Pecking-Order Theory by Myers (1984) may be mentioned here as a fundamental approach. Further colliding profitability, liquidity, independence and security objectives influence the merger of financial flows. The primary goal of the entrepreneurs after internal financing is to raise formal and informal funds while minimizing risk and costs inside their financing structure (see figure 2). The more aligned the diversified funding (internal and external financing) of the enterprise is, the less specific and systemic risk exists (Bekaert/Hodrick, 2009). In the area of financing of start-ups seen from the agency point of view, a lack of business know-how, inadequate relationships (networks) with financiers as well as deficits in economic qualifications of information asymmetries influence a diversified and thus broader financing structure (Nofsinger/Wang, 2011). Information asymmetries increase the probability of underfunding of start-ups and even of non-funding due to the lack of financial resources (Binks/Ennew, 1996). A pro-active entrepreneurial attitude, a market-oriented goal orientation and a certain degree of risk affinity and pro-active behavior counteract information asymmetries theoretically (Chaston/Sadler-Smith, 2012).

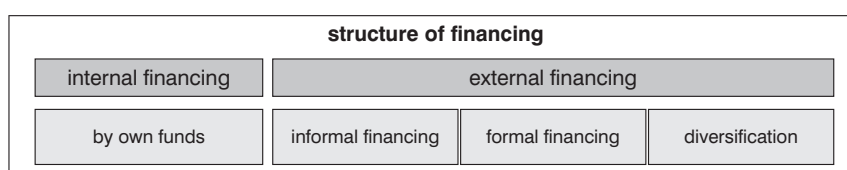


Fig. 2. Definition of the structure of financing.

3. Hypotheses

Based on the theoretical analysis, hypotheses to explain the entrepreneurial influences on the financing structure for start-ups in the creative industries are presented. Actors in the creative industries with a strong

entrepreneurial motivation or aim overcome information asymmetries and use a diversified form of funding (liquidity) to achieve economic objectives (profitability). Moreover, these actors revert to “formal forms of financing”, such as bank loans, subsidized loans or formal financial grants, rather than “informal forms of financing”, such as funds of family members, acquaintances or other corporate actors, to remain self-sufficient in their decisions (independence).

H1a: The degree of entrepreneurial motivation has a positive influence on the use of formal financial resources and a high degree of diversification of the financing structure.

It is assumed that actors with a strong individual personal motivation are less profitability driven and have a greater understanding of security. The focus on the creative act is more pronounced. Fewer financial resources are required, which are also acquired rather from informal sources of funding (liquidity).

H1b: The degree of individual personal orientation has a negative impact on the diversification of the financing structure.

Also a strong community orientation inside the creative and arts sectors is typical (Konrad et al., 2010). Particularly with regard to networks in the sub-branches, more and more interdisciplinary networks in the regions and urban quarters can be often identified (Konrad, 2013). Personal ties and business relationships are obligatory, which can increase again the actors interconnectedness with potential informal supporters and money lenders (Chapain/De Propris, 2009). It is expectable that actors with a strong community or collective motivation use more informal financing structures.

H1c: The level of community orientation and collective motivation increases the probability of using informal financing instruments.

An additional explanation is provided by the theory of Entrepreneurial Orientation (EO) by Miller (1983). The EO is interpreted by several factors. In this paper the EO has the focus on the factors: innovation, pro-active orientation and risk orientation (Lumpkin/Dess, 1996). It is argued that with increasing the respective sub-factors, the focus on a diversified form of financing grows (Lee/Lim, 2009).

H1d: Factors of Entrepreneurial Orientation have a positive influence on the use of formal resources and diversification of the financing structure.

Furthermore, it is assumed that age has an influence on the choice of capital (Denis, 2004). The predictor age is a component of human capital, which in addition also reflects the education and the professional and partly the founding experience as well (Cassar, 2004). The present investigation will be limited to the predictor age. As a result of information asymmetries and more difficult access to informal capital due to lower human capital, the use of formal resources in recent years is lower (Coleman/Cohn, 2000).

H2a: There is a significantly high probability that young founders mostly just use their own resources and informal resources in comparison to older founders.

The characteristics of the enterprise may also influence the structure of financial resources supply. This allows interpreting the granularity of the start-ups in the volume of required financial resources (Fleming, 2007). The larger the required volume is, the more likely informal capital is to be acquired first; in the next stages additional formal capital follows. The smaller a company is, the more financing problems occur (transaction cost theory).

H2b: The size of the enterprise measured by the volume of capital needed in the start-up phase has a significant effect on the financing structure.

But the use of foundation or orientation counseling, and the application for funding as non-financial or one-off financial subsidies imply an economic orientation of the actors. Furthermore, it is assumed that these consultations promote an entrepreneurial tendency (Vincenti/Winters, 2008).

H3a: The use of counseling services has a positive impact on the diversification of financing structures.

H3b: The application of support services has a positive impact on the financing through formal resources.

Inside the model, the gender variable is integrated as the control variable because of the specific distribution between the sexes in the creative industries (Swedberg, 2006). Based on the research structure of the study, hypotheses groups 1 to 3 will occur within the framework model of the structure of financing of start-ups in the cultural and creative industries (see figure 3).

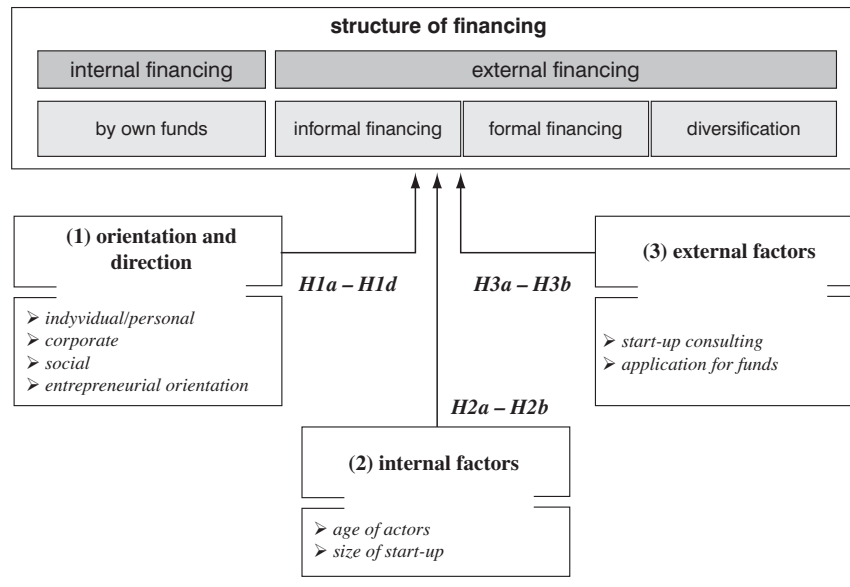


Fig. 3. Framework model of the structure of financing of start-ups in CI (Konrad/Fronz 2013).

4. Methodology

4.1. Sample

At the beginning of 2013, a large-scale primary data collection using standardized online questionnaire for stakeholders of the creative industries in Germany was made (N = 1014). The complete data set includes information on promotion, financing and qualification realities of both start-ups and existing companies in the eleven sections of the creative industries as well as arts and crafts and the visual media arts (Konrad, 2014).

For the present article, the data sets for start-ups were selected. These reveal a sample of n = 414. The distribution of the sample over the eleven sub-sectors of cultural and creative industries is very representative of the situation in Germany (Dapp/Ehmer, 2011). Only the press market segment is not included in the sample (see figure 4). Therefore, the very affine branches of decorative art and handicraft, which are by definition not part of the creative industry in Germany (Müller/Markworth, 2011), could be registered.

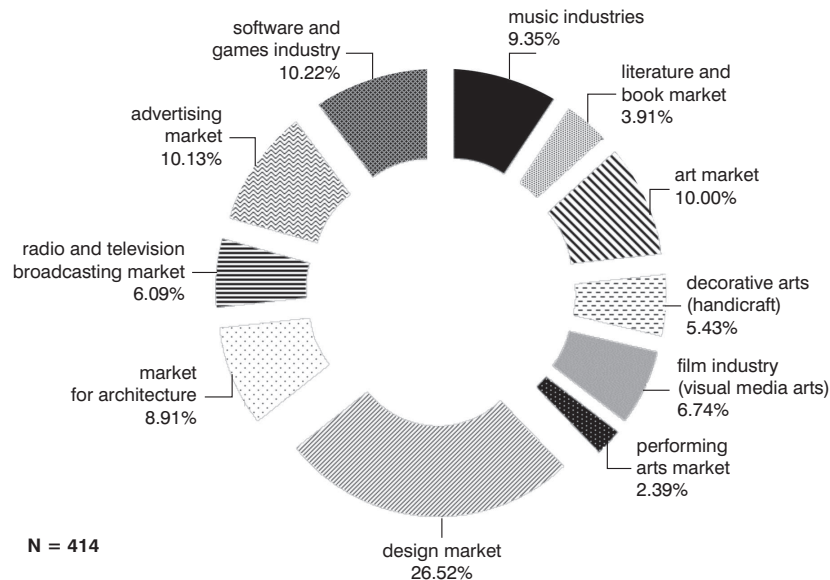


Fig. 4. Distribution of the sample over the eleven CI sub-sectors (Fronz/Konrad, 2013).

4.2. Operationalization of Variables

In the framework of the present study, the entrepreneurial actors would be standardized amongst others through questioning about the topics of financing behavior in the start-up phase. The respondents would be asked about the size of the total capital needed in the start-up phase as well as about the funding sources. The outcome of this financing structure of the entrepreneurial actors is the measurement dependent variable for the theoretical model framework. It contains four categories (see also figure 2):

- (1) internal financing: financing by own funds with exclusively personally owned financial resources;
- (2) informal financing (external financing): financing by own funds with personally owned financial resources and additional informal capital from family and friends;
- (3) formal financing (external financing): financing by own funds with personally owned financial resources and additional formal capital from finance institutions;
- (4) diversification (external financing): financing by own funds with personally owned financial resources and additional informal as well as formal capital.

In the present study, 41.4% of the sample use structures of external financing, of which 61.7% use again informal financing structures (see figure 5).

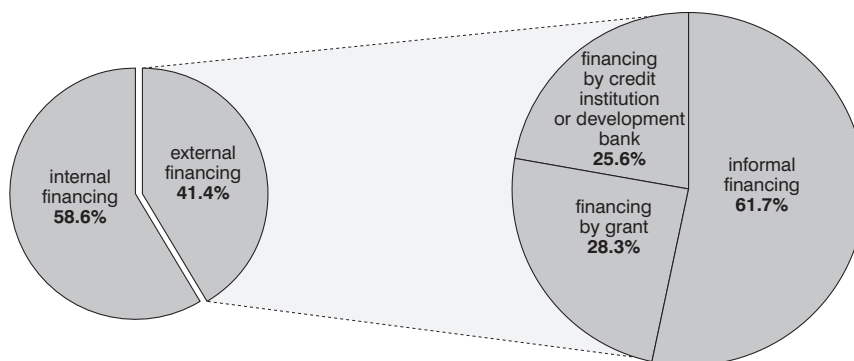


Fig. 5. Sample distribution of the structure of financing (Fronz, 2015).

The variables of entrepreneurial orientation (EO): degree of innovation, pro-active motivation and risk orientation were measured by a 5-level Likert Scale based on explanations of Lumpkin and Dess (1996; 2001). The factors were identified by explorative factor analysis, according to the quality criteria (Cronbach's Alpha (α), Item-to-Total Relation and KMO/Bartlett Test). The variables: need for achievement, entrepreneurial motivation and social motivation were also measured by a 5-level Likert Scale based on explanations by Bitz (2002) and Jacobsen (2006). These factors are also tested by an explorative factor analysis. The validation of indicators is clearly represented in tables 1 and 2.

		Item-to-Scale	Cronbach's α	KMO/Bartlett
IND (individual/ personal)	individual/personal 1	.549	.661	.665 / ***
	individual/personal 2	.511		
	individual/personal 3	.344*		
	individual/personal 4	.387*		
ENT (entrepreneurial)	entrepreneurial 1	.335*	.655	.702 / ***
	entrepreneurial 2	.318*		
	entrepreneurial 3	.539		
	entrepreneurial 4	.486		
	entrepreneurial 5	.412		
SOC (social)	social 1	.538	.699	.500 / ***
	social 2	.538		

* no improvement of Cronbach's Alpha by item-reduction

Tab. 1. Motivation of actors in cultural and creative industries (indicator validation).

		Item-to-Scale	Cronbach's α	KMO/Bartlett
INNOV (innovation orientation)	innovation 1	.508	.730	.676 / ***
	innovation 2	.570		
	innovation 3	.583		
PROAC (pro-active orientation)	pro-active 1	.505	.672	.627 / ***
	pro-active 2	.562		
	pro-active 3	.393*		
RISK (risk behavior)	risk 1	.580	.764	.695 / ***
	risk 2	.590		
	risk 3	.626		

* no improvement of Cronbach's Alpha by item-reduction

Tab. 2. Entrepreneurial orientation of actors in cultural and creative industries (indicator validation).

CODE	DESCRIPTION	VALUES/UNITS
IND	scale of individual/personal motivation	metric
ENT	scale of entrepreneurial-economic motivation	metric
SOC	scale of social motivation	metric
INNO	scale of innovation orientation	metric
PROAC	scale of pro-active orientation	metric
RISK	scale of risk behavior	metric
CONS	using at least 1 start-up consulting	= yes
FUND	application for at least 1 fund	= yes
VOL	collected total capital in phase of start-up = (ref.) 1 euros – 5,000 euros (ref.)	= (1) 5,001 – 15,000 euros
		= (2) 15,001 – 50,000 euros
		= (3) more than 50,000 euros
AGE	age of resp. actors (average)	= (1) to 24 years
	in phase of start-up	= (2) 25–34 years
	= (ref.) from 55 years	= (3) 35–44 years
		= (4) 45–54 years
GEN	actor resp. at least one actor (team) is female	= female

Tab. 3. Predictors of research model.

The financing structure of the founding actors in the creative industries in Germany stands as a target measure or dependent variable for the methodological model construction. As independent variables, the following metric predictors were included in the model, i.e. the three factors of EO: degree of innovation, proactive orientation and risk affinity. For the method of confirmatory factor analysis, these factors were created and tested. The predictors: personal/individual orientation, entrepreneurial orientation and social orientation were also formed on the data reduction. The quality of all factors was determined by Cronbach's Alpha and was always at $\alpha \geq 0.6$. The scales were compiled individually through various literature on entrepreneurship research. Furthermore, categorical and ordinal independent variables were taken into account. The size of the start-ups was defined by the required total volume of capital in the start-up phase (start-up phase to max. twelve months after the foundation) in 5 categories. Gender, promotion and consulting were integrated as dichotomous dummy variables (0/1). The age of the entrepreneurial actors is integrated over an ordinal variable with 5 categories. The predictors of the research model with their codification, descriptions and values/units are shown in table 3.

5. Results

The influence of the predictors on the financing structure categorical variable was measured over a multi-nominal logistic regression. This was done through a three-stage model building. For all model levels, the model's validity and goodness of fit (likelihood ratio test or Pearson goodness-of-fit test – goodness of fit) are each significant. Due to the Pseudo- R^2 of 28 percent of the total, the variance can be explained by the complete model (Hosmer/Lemeshow, 2000; Janssen/Laatz, 2013). Overall 414 entrepreneurial actors could be asked as respondents about their categories of financing. 44.4% of respondents – solo founder or member of a founding team – are female and 55.6% male. The average age of the entrepreneurial actors at the time of the start-up phase was 36. The needed total capital during the start-up phase is ca. 14,300 euros. Three models (I to III) are measured and evaluated incrementally based on the defined research approach. As the basis for the category of reference for the logistic regression of all three models, the internal financing category (financing by own funds with exclusively personally owned financial resources) was adopted. Relative to the reference category, all categories of external financing (informal, formal and diversified financing) are measured additionally. The measurement results of the research model levels are shown in detail in table 4 and explained in the following chapters.

5.1. Model I. Individual/personal and entrepreneurial motivation

Initially, in model (I) the influence of the actors' individual/personal as well as entrepreneurial motivation is significant for financing with formal funds relative to financing by own funds with exclusively personally owned financial resources. The probability of utilization of formal financing instruments by entrepreneurial actors in the cultural and creative industries rises with increasing entrepreneurial motivation ($\beta = 0.543$) by a factor of 1.7 per unit. On the other hand, the probability declines ($\beta = -0.431$) by a factor of 0.7 per unit with increasing individual/personal motivation. In turn, in the framework of these motivations the probability of diversified financing increases by 78% per unit compared to financing by own funds with exclusively personally owned financial resources. Besides them, the choice of informal financing will be supported by distinctive social motivations ($\beta = 0.405$; $\text{Exp}(b) = 1.5$). The declared variance of the regression (in present model I) on financing structure is 9% (Pseudo R^2).

Category of reference:		Model (I)		Model (II)		Model (III)	
<i>financing by own funds</i>		β	Exp ^b	β	Exp ^b	β	Exp ^b
Informal	IND	.023 (.169)	1.023	.020 (.173)	1.020	.031 (.183)	1.031
	VENT	-.006 (.147)	0.994	.016 (.159)	1.017	-.222 (.182)	.801
	COM	.405** (.164)	1.500	.401** (.165)	1.494	.449** (.177)	1.567
	INNOV			.107 (.177)	1.113	.125 (.181)	1.133
	PROAC			-.154 (.178)	0.857	-.173 (.186)	.841
	RISK			.038 (.159)	1.039	-.005 (.168)	.995
	FUND (=1)					.022 (.395)	1.022
	CONS (=1)					.193 (.312)	1.213
	VOL_1 (5,000–15,000)					.493 (.321)	1.637
	VOL_2 (to 50,000)					.075 (.477)	1.077
	VOL_3 (over 50,000)					1.335* (.762)	3.799
	AGE_1 (to 24)					1.588 (1.200)	4.893
	AGE_2 (25–34)					2.470** (1.087)	11.825
	AGE_3 (35–44)					1.784 (1.094)	5.955
	AGE_4 (45–54)					1.952* (1.109)	7.045
	GEN (=female)					.130 (.304)	1.139
constant		-1.5164***		-1.515***		-3.883***	
Formal	IND	-.431*** (.158)	0.650	-.398** (.162)	.672	-.337* (.173)	.714
	VENT	.543*** (.186)	1.722	.566*** (.205)	1.760	.473** (.221)	1.605

Tab. 4. cont.

Category of reference:		Model (I)		Model (II)		Model (III)	
<i>financing by own funds</i>		β	Exp ^b	β	Exp ^b	β	Exp ^b
Formal	COM	-.175 (.173)	0.839	-.153 (.176)	.858	-.188 (.188)	.829
	INNOV			-.335* (.201)	.716	-.330 (.212)	.719
	PROAC			.155 (.211)	1.168	.224 (.225)	1.251
	RISK			.064 (.179)	1.066	-.040 (.835)	.961
	FUND (=1)					1.267*** (.393)	3.552
	CONS (=1)					.159 (.359)	1.173
	VOL_1 (5,000–15,000)					.375 (.352)	1.455
	VOL_2 (to 50,000)					.972** (.451)	2.642
	VOL_3 (over 50,000)					1.386* (.749)	4.000
	AGE_1 (to 24)					-1.525 (1.171)	.218
	AGE_2 (25–34)					-.543 (.618)	.581
	AGE_3 (35–44)					-.481 (.638)	.618
	AGE_4 (45–54)					-.373 (.672)	.689
	GEN (=female)					-.0281 (.352)	.972
	<i>constant</i>		-1.704***		-1.777***		-2.079***
Diversi.	IND	.577* (.344)	1.780	.529 (.351)	1.696	.349 (.406)	1.417
	VENT	.184 (.257)	1.202	.116 (.283)	1.123	-.125 (.331)	.882
	COM	.118 (.260)	1.125	.105 (.266)	1.111	.254 (.294)	1.289
	INNOV			.084 (.286)	1.088	.063 (.312)	1.065
	PROAC			-.332 (.296)	.717	-.206 (.319)	.814
	RISK			.537** (.252)	1.710	.393 (.282)	1.482
	FUND (=1)					.775 (.599)	2.171
	CONS (=1)					1.284** (.523)	3.611
	VOL_1 (5,000–15,000)					2.549** (1.7073)	12.798
	VOL_2 (to 50,000)					3.169*** (1.112)	23.795
	VOL_3 (over 50,000)					2.781* (1.603)	16.147
	AGE_1 (to 24)					.886 (1.588)	2.426
	AGE_2 (25–34)					.683 (1.238)	1.979
	AGE_3 (35–44)					1.649 (1.210)	5.205
	AGE_4 (45–54)					-.269 (1.570)	.765
GEN (=female)					-.391 (.527)	.676	
<i>constant</i>		-2.674***		-2.791***		-6.457***	

Tab. 4. cont.

Category of reference:		Model (I)		Model (II)		Model (III)	
<i>financing by own funds</i>		β	Exp ^b	β	Exp ^b	β	Exp ^b
	monitoring cases	414		414		414	
	-2 log Likelihood	788.074		787.937		719.552	
	X ²	23.234***		42.135***		100.319***	
	Pseudo-R ²	0.089		0.112		0.270	

level of significance (Wald-Test) 1%, 5% and 10% ***, ** and *; parenthesis = standard error; Ref.-Kat._VOL: 1€ – 5,000 €; Ref.-Kat._Age: from 55 years

Tab. 4. Results of multinomial logistic regression.

5.2. Model II. Innovation/pro-active orientation and risk behavior

By adding the factors of innovation orientation, pro-active orientation and risk behavior to model (II), within the formal financing spectrum there are no visible changes of a significant influence on individual/personal motivations ($\beta = -0.467$; Exp(b) = 0.6) or entrepreneurial motivations ($\beta = 0.514$; Exp(b) = 1.7). Also the social orientation sees no changes of a significant influence. However, the significant probability of diversified financing trails away with increasing individual/personal motivations. For this level, it could be confirmed that the factors of entrepreneurial orientation can be used as expressly declarative predictors inside the model. In this context, an increasing innovation orientation and also risk behavior show a significant influence on the financing structure. The probability of diversified financing increases by 71% per cumulative unit of risk behavior. Contrary to that, the chance of formal financing relative to financing with exclusively personally owned financial resources declines with adopting a stronger innovation orientation ($\beta = -0.335$; Exp(b) = 0.6). The pro-active orientation determines no significant probabilities of using formal, informal or diversified financing instruments. Model (II) shows 11% of variance in comparison with 9% in model (I).

5.3. Model III. Influences of internal and external start-up factors

In the last model, the predictors of internal and external start-up factors (human capital, size of enterprise, consulting, promotion and the control variable) influence the evaluation. The final model (III) registers significant positions in all financing categories. The influence of entrepreneurial, individual/personal and social motivations is also significant particularly with regard to financing with formal instruments ($\beta = 0.473$; Exp(b) = 1.6), ($\beta = -0.337$; Exp(b) = 0.714) compared to informal funds ($\beta = 0.449$; Exp(b) = 1.567). The innovation orientation and the risk behavior have, in model (III), no more significant influence on formal versus diversified financing. An application for at least one promoting fund by

the entrepreneurial actors increases the chance of using formal financing resources about 3.6-fold compared to financing with exclusively personally owned financial resources. The utilization of start-up consulting services raises the probability of diversified financing. According to that, the actors who avail themselves of at least one consulting service – and are liable to pay costs or a fee – probably use more different financing instruments and structures in a mix relative to financing with exclusively personally owned financial resources ($\beta = 1.284$; $\text{Exp}(b) = 3.6$). The regression model (III) has a financing structure variance of 27%. As expected, the gender control variable has no influence on the financing structure in the start-up phase.

6. Conclusion: Discussion and Implications

Both entrepreneurial influences of orientation and motivation as well as start-up-related characteristics such as size and counseling or promotion inclination give information on the structure of start-up financing in the creative industries. Across all models, the individual/personal and entrepreneurial orientation of the actors plays a crucial role in the choice of forms of financing and the degree of diversification of financing structures. The likely use of funding from the network of actors but also through diversified forms grows with an increasing degree of individual orientation. The degree of entrepreneurial orientation has, across all models, a significant impact on the use of formal but not diversified forms of financing compared to exclusive personal financing.

With adding the three-scale EO predictors in model 2, no changes in the statements of model 1 are observed. In the final model 3, all predictors have an explanatory influence on the financing structure. In particular, the individual personal orientation loses its significance with regard to the likelihood of own, formal and diversified funding. However, the additional explanatory variables have the effect that actors with a social orientation can be significantly more likely associated with financing through informal means than formal means now.

The present study is a first step in understanding cultural entrepreneurship in terms of individualized financing structure and its critical factors. So the informal financing occurs indeed at individual orientations and low volumes, but this effect was due to the strong network of creative industries being assessed higher (Chapain/De Propriis, 2009). Therefore, the influence of the networking of actors through the involvement of urban factors and predictors with respect to the information in the initial phase should be investigated further. In this context, the present study can give an important suggestion and helpful proposal for further research about cultural and creative industries (Georgieff/Kimpeler, 2009), entrepreneurial actors in arts sector (Hausmann, 2010), success factors in cultural entrepreneurship (Konrad 2013) and recommendations for activities or guidelines to promote the creative industries sector (Lange et al., 2011).

References

- Astebro, T. and Bernhardt, I. (2003). Start-up financing, owner characteristics, and survival. *Journal of Economics and Business*, 55 (4), pp. 303–319.
- Bekaert, G. and Hodrick, R. J. (2009). *International financial management*. Pearson international ed. Upper Saddle River, N.J, London: Pearson Prentice Hall (Prentice Hall series in finance).
- Binks, M. and Ennew, C. (1996). Growing Firms and the Credit Constraint. *Small Business Economics*, 8 (1), pp. 17–25.
- Bitz, M. (2002). Theoretische Grundlagen der Gründungsfinanzierung. *Diskussionsbeitrag Nr. 331*. Fernuni Hagen.
- Cassar, G. (2004). The financing of business start-ups. *Journal of Business Venturing*, 19 (2), pp. 261–283.
- Chapain, C. and De Propriis, L. (2009). Drivers and Processes of Creative Industries in Cities and Regions. *Creative Industries Journal*, 2 (1), pp. 9–18.
- Chaston, I. and Sadler-Smith, E. (2012). Entrepreneurial Cognition, Entrepreneurial Orientation and Firm Capability in the Creative Industries. *British Journal of Management*, 23 (3), pp. 415–432.
- Coleman, S. and Cohn, R. (2000). Small Firms` use of Financial Leverage: Evidence from the 1993 National Survey of Small Business Finance. *Journal of Business and Entrepreneurship*, 20 (3), pp. 81–98.
- Dapp, T.F. and Ehmer, P. (2011). *Kultur- und Kreativwirtschaft: Wachstumspotential in Teilbereichen*. *Deutsche Bank Research (Hrsg.)*. Frankfurt am Main (Aktuelle Themen 508).
- Denis, D.J. (2004). Entrepreneurial finance: an overview of the issues and evidence. *Journal of Corporate Finance*, 10 (2), pp. 301–326.
- Deutscher Bundestag (2007). Schlussbericht der Enquete-Kommission “Kultur in Deutschland.” Deutscher Bundestag 16. Wahlperiode. Berlin (Drucksache 16/7000).
- European Commission (2012). Promoting cultural and creative sectors for growth and jobs in the EU. European Commission. Brussels (COM (2012)537 final).
- Fesel, B. and Söndermann, M. (2007). *Culture and Creative Industries in Germany*. UNESCO Commission German Section Bonn (ed.).
- Fleming, T. (2007). Investment and funding for creative enterprises in the UK. In: C. Henry (ed.): *Entrepreneurship in the creative industries. An international perspective*. Cheltenham, UK; Northampton, MA: Edward Elgar, pp. 107–125.
- Flew, T. and Cunningham, S. (2010). Creative Industries after the First Decade of Debate. *Information Society*, 26 (2), pp. 113–123.
- Fraser, S. and Lomax, S. (2011). *Access to Finance for Creative Industry Businesses*. Department for Business and Innovation & Skills (BIS) and Media and Sport (dcms) and Department for Culture (Final Report May 2011).
- Fronz, C. and Konrad, E.D. (2013). *Cultural and Creative Start-ups – Eine Analyse der unternehmerischen Einflüsse auf die Finanzierungsstruktur in der Kultur- und Kreativwirtschaft*. Vortrag G-Forum – Forum Gründungsforschung – 17th Annual Interdisciplinary Entrepreneurship Conference, Koblenz (2013) – prämiert mit dem “Cultural Entrepreneurship Award 2013” in der Kategorie “Best Scientific Paper”.
- Fronz, C. (2015). *Finanzierung in den Creative Industries – Bestimmung und Bewertung der kritischen Einflussfaktoren auf die Finanzierungsstruktur von Gründungen*. Verlag Dr. Kovacz: Hamburg (in press).
- Georgieff, P. and Kimpeler, S. (2009). Die Bedeutung der Kultur- und Kreativwirtschaft im regionalen Innovations- und Wissenstransfer. In: W. George and M. Bonow (eds): *Regionales Zukunftsmanagement*. Lengerich: Pabst Science, pp. 35–45.
- Hausmann, A. (2010). German artists between bohemian idealism and entrepreneurial dynamics: reflections on cultural entrepreneurship and the need for start-up management. *International Journal of Arts Management*, 12 (2), pp. 17–29.

- Hosmer, D. W. and Lemeshow, S. (2000). *Applied logistic regression*. 2nd ed. New York: Wiley.
- Jacobsen, L.K. 2006. *Erfolgsfaktoren bei der Unternehmensgründung. Entrepreneurship in Theorie und Praxis*. Wiesbaden: Deutscher Universitätsverlag.
- Janssen, J. and Laatz, W. (2013). *Statistische Datenanalyse mit SPSS. Eine anwendungsorientierte Einführung in das Basissystem und das Modul exakte Tests*. 8th ed. 2013. Berlin: Springer.
- Kebir, L. and Crevoisier, O. (2008). Cultural resources and regional development: the case of the cultural legacy of watchmaking. In: P. Cooke and L. Lazzeretti (eds): *Creative cities, cultural clusters and local economic development*. Cheltenham, UK; Northampton, MA: Edward Elgar, pp. 48–92.
- Konrad, E.D. (2013). Cultural Entrepreneurship – The Impact of Social Networking on Success. *Creativity and Innovation Management*, 22 (3), pp. 307–319.
- Konrad, E.D. (2014). *Nachhaltige Förderungs- und Finanzierungsmaßnahmen für die Kultur- und Kreativwirtschaft in Rheinland-Pfalz*. Abschlussbericht eines Forschungsprojekts zum Unterstützungs-, Förderungs- und Finanzierungsbedarfen sowie zu den Förderungs- und Finanzierungsverhalten im Auftrag des Ministeriums für Wirtschaft, Klimaschutz, Energie und Landesplanung des Landes Rheinland-Pfalz. iuh – Hochschule Mainz (Final Report April 2014).
- Konrad, E.D., Walter, A. and Gemünden, H.G. (2010). Einfluss des Beziehungspromotors auf die Etablierung von Kulturunternehmen – Eine empirische Untersuchung von Möglichkeiten. *Zeitschrift für Betriebswirtschaftliche Forschung*, 5 (3), pp. 289–313.
- Lange, B., Streit, A. and Hesse, M. (2011). Kultur- und Kreativwirtschaft in Stadt und Region. Voraussetzungen, Handlungsstrategien und Governance. Bau und Stadtentwicklung. BMVBS (ed.), Bundesministerium für Verkehr: Bonn.
- Lee, S. and Lim, S. (2009). Entrepreneurial Orientation and the Performance of Service Business. *Service Business*, 3 (1), pp. 1–13.
- Lumpkin, G. T., Dess and Gregory G. (1996). Clarifying the Entrepreneurial Orientation Construct and linking it to Performance. *Academy of Management Review*. 21 (1), pp. 135–172.
- Lumpkin, G.T. and Dess, G.G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16 (5), pp. 429–451.
- Miller, D. (1983). The Correlates of Entrepreneurship in Three Types of Firms. *Management Science*. 29 (7), pp. 770–791.
- Müller, K. and Sebastian Markworth, S. (2011). *Das Handwerk in der Kultur- und Kreativwirtschaft. Studie Auftrag des Bundesministeriums für Wirtschaft und Technologie*. Volkswirtschaftliches Institut für Mittelstand und Handwerk an der Universität Göttingen e.V. (ifh Göttingen), Göttingen.
- Myers, S.C. and Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13 (2), pp. 187–221.
- Nofsinger, J. R. and Wang, W. (2011). Determinants of start-up firm external financing worldwide. *Journal of Banking & Finance*, 35 (9), pp. 2282–2294.
- Rajan, R.G. and Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *The Journal of Finance*, 50 (5), pp. 1421–1460.
- Shyam-Sunder, L. and Myers, S.C. (1999). Testing static tradeoff against pecking order models of capital structure. *Journal of Financial Economics*, 51 (2), pp. 219–244.
- Söndermann, M. (2012). *Monitoring zu ausgewählten wirtschaftlichen Eckdaten der Kultur- und Kreativwirtschaft 2011*. Bundesministerium für Wirtschaft und Technologie, Berlin.

- Söndermann, M., Backes, C., Arndt, O. and Brünink, D. 2009. *Gesamtwirtschaftliche Perspektiven der Kultur- und Kreativwirtschaft in Deutschland*. Kurzfassung eines Forschungsgutachtens im Auftrag des Bundesministeriums für Wirtschaft und Technologie. Bundesministerium für Wirtschaft und Technologie, (Forschungsbericht Nr. 577).
- Swedberg, R. (2006). The cultural entrepreneur and the creative industries: beginning in Vienna. *J Cult Econ*, 30 (4), pp. 243-261.
- United Nations (2010). Creative Economy: A Feasible Development Option. Report 2010. United Nations (ed.).
- Vincenti, A.J.F. and Winters, S. (2008). Öffentliche Gründungsförderung – Finanzielle Förderprogramme in den USA und in Deutschland. *Finanz Betrieb Aufsätze* (11), pp. 762–768.