

Risk Behavior of East and West Germans in Handling Personal Finances

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When “Homo Economicus” stands for rationality of financial decision-making, then this is clearly an ideal state not found in real life. Instead, everyday financial decisions are made by using a number of risk-oriented behaviors, both positive and negative. We investigate the relationships between such personality traits and financial decisions following the theory of Brengelmann.

We compare financial risk behavior between East and West German citizens using two kinds of samples. One type of sample is drawn from the general East and West German populations. The other is drawn from the readers of the leading business magazine in East and West Germany. It is assumed that West Germans are more risk-oriented than East Germans and that readers of the business magazine are more risk-oriented than the non-readers.

The expectations were confirmed. In the general population, West Germans show higher risk excitement, but also a higher degree of strain than East Germans. East Germans are more likely to strive for property. Beyond that, business magazine readers differ from the average population. They show higher degrees of almost all relevant factors. In this subgroup, East Germans remind one of “Musterschüler” as far as handling finances is concerned: They show greater drive, control, and responsibility in financial matters, but feel less distracted than West Germans. These results may be explained by differences in socialization in the former FRG and GDR, where “capitalistic” and “socialistic” values, respectively, are supposed to have dominated theory and practice over long periods of time.

Psychological research shows that the idea of a primarily rational “homo economicus” does not satisfy the demands of predicting human behavior. “Ten percent of stock market reactions are based on facts, 90 percent on psychology” (see Kostolany [1997]). Kostolany’s view of the financial market illustrates the importance of psychological research in this field. To understand human behavior in a financial context,

as well as in other psychological contexts, drives and needs have to be considered.

The “psychology of money” was a neglected field of empirical research for a long time. During the 1960s, Schmölder [1966] and Katona [1960] were the first to explore the relevant issues. Their research focused on the relationship between personality and aspects of behavior related to saving, inflation, and consumption. Katona [1975] developed a consumption-based emotional index predicting trends of economic development.

A more practical device in this field is the money ethics scale (MES), developed by Tang [1992]. However, it deals more with the ethics of money than with actual behaviors. Furnham’s [1984] contribution was the money attitude scale (MAS). It includes socioeconomic control variables such as income, voting trends, and religious behavior. The factors measured by the MAS correspond with Brengelmann’s concept of risk-taking, excitement, and control (REC).

Brengelmann [1988, 1989a, 1989b, 1991] examined the relationship between personality and behavior in risk-taking, gaming, and gambling. His comprehensive studies show that certain personality traits influ-

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ence financial activities. The development of the REC scale essentially includes these variables.

REC measures the main dimensions of a risk personality. It includes positive as well as negative aspects, namely risk-taking (R+) and risk avoidance (R-), positive excitement (E+) and negative excitement (E-), and positive control (C+) and negative control (C-).

Brengelmann's REC refers back to Hebb's [1962] theory of drives (R), needs (E), and controls (C). Brengelmann introduced a differentiation of the positive and negative aspects of each dimension, reaching back to their origins from the theories of the Graz-Göttingen Gestalt School of v. Ehrenfels, Meinong, Benussi, and others (see v. Ehrenfels [1890] and Meinong [1891]). These authors postulated a holistic perception of the environment by means of cortical productive processes. These so-called "Gestalten" are an aggregation of individually perceived stimuli that differ from the individual perception of these stimuli itself, illustrated by v. Ehrenfels' statement: "The whole is more than the sum of its parts" (v. Ehrenfels [1890]). Brengelmann applied the "Gestalt" concept to the psychology of money and investigated the perception of positive and negative aspects, i.e., the stimuli that come into play when dealing with personal finances.

Brengelmann's REC enabled the exact measurement of psychological variables and provides an empirical basis for the psychology of money. His results also make it possible to identify five psychological types of investors, therefore enabling investment counseling based on empirical data. By focusing on the main dimensions of "drives" and "needs," each type reveals characteristic financial risk behavior determined by the risk personality, which would require special consideration in financial decisions.

For example, the "profit-oriented" type is guided by a high inclination to take risks and to control possible problems. His counterpart is the "indifferent" type, who doesn't need to control each step, and, at the same time, isn't likely to take great risks. The "risk-avoiding" type avoids all dangerous financial situations; he is guided by the fear of losing earned profits, and keeps his finances under total control. The risk-avoiding type is contrasted with the "daring" type, who is attracted to taking high risks to gain high returns. He essentially neglects any controlling aspects. An average inclination to take risks and to control financial decisions is characteristic of the "prudent" type.

Following the general concept of Brengelmann, Fank [1992, 1994] finds a significant correlation between low risk-taking and behavior patterns such as saving, strict financial control, and avoiding speculation.

There is additional evidence for correlation between risk personality and financial behavior. Wong and Carducci [1991] revealed that the relationship between

thrill-seeking and risk-taking that is often associated with gambling can also be extended to financial matters. A greater propensity to take risks in gambling corresponds to higher risk-taking in everyday financial decisions.

The handling of money can have elements of thrill-seeking as well, as it concerns the propensity for saving money or for having debts. Dahlbäck [1991] demonstrated that subjects with a lower propensity to take risks tend to have a lower burden of debt and more money in the bank than less cautious and more risk-oriented subjects.

Beyond the investor typology gained through Brengelmann's REC, there are other approaches to define different types of investors. Sullivan and Miller [1996] described three benefit-based investor types ("economic," "hedonistic," and "altruistic").

In an exploratory study, Gunnarsson and Wahlund [1997] identified different types of financial strategies concerning assets and debts. Their results show that savings strategies correspond with several psychological aspects of risk behavior, e.g., degree of financial planning and control, interest in financial matters, activity and innovation, attitudes toward financial risk-taking, and the propensity to save.

The major difference in favor of the Brengelmann and Fank studies, however, is that they are solidly based on a personality framework. The remainder of the studies is of incidental nature. Most impressive is the difference between risky and risk-avoiding behaviors, where the latter receives more emphasis.

Special Situation in Germany—East and West

The former separation of Germany into the Federal Republic of Germany (FRG) and the German Democratic Republic (GDR) had various socialization effects in both countries. The stable integration into conceptual diametral political systems led to different ideologies concerning the purpose and use of money and the meaning of property.

After the reunification of Germany in 1989, the economic situation in East Germany changed drastically. Over the past eleven years, new structures were established to correspond with West European standards. These demanded high adaptation efforts from the East German people.

Regarding financial risk behavior, cultural differences, i.e., different "mental programs," in East and West Germany were assumed, in the sense of Hofstede [1984], to be a result of early socialization although the members of a culture may not be aware of it. These differences may be revealed in both the actual populations and in their "subcultures." As far as finances are concerned, a subculture is formed by a subgroup of

people especially interested in economic and financial matters, either for private or professional reasons. This subgroup collects economic information more extensively than the general population, for example, by reading business magazines.

It is interesting to examine whether financial risk behavior does reflect differences between the cultures of East and West Germans. Beyond that, we expect differences between the culture of the general population and the subculture of business magazine readers and we investigate whether there are special differences between East and West Germans within this subgroup.

Methodology

Two samples of subjects are compared in this study. The first was drawn from the FMDS survey of June 1997. This finance market data survey is financed by several German institutions in the financial market, such as Allianz Asset Management GmbH which enabled the implementation of REC in June 1997. The FMDS survey examines a representative sample of the average population of Germany as far as sociodemographic variables are concerned. It focuses especially on the status of the subjects concerning the financial market. $N = 2,540$ subjects participated, of which 517 live in East Germany (20%) and 2,023 in West Germany (80%), which indicates similar distributions between East and West in this sample as well as in the average population of Germany.

The second sample consisted of readers of *CAPITAL*, the leading German business magazine. This sample numbered 5,216 subjects who completed the same questionnaire. 834 subjects live in East Germany (16% of the sample), 4,382 subjects live in West Germany (84% of the sample). This percentile distribution is assumed to be representative for the average German population, too. The subjects were recruited by a reader campaign of *CAPITAL*, which is published in two different versions specific to East and West Germany. The REC questionnaire was presented identically in the West (January) and East Germany editions (April) in 1998.¹ The subjects participated voluntarily and received a no-cost analysis of their personal disposition in handling money as a reward, including a general recommendation for asset allocation.

The present short version of the REC aims at representing the main characteristics of risk personality according to the theory of Brengelmann, where risk behavior in handling money is essentially determined by the inclination to take risks and to control them. The purpose of the survey is to assess these two dimensions and the subfactors that constitute them. The REC consists of thirty-two items concerning the handling of financial matters. For every item, the scale

ranges from 1 ("does not apply at all") to 4 ("applies entirely").

The REC is based on a factor structure. The lowest level is formed by sixteen primary factors (PF), each of which represents two items. For example, the primary factor "speculation" (investments) is derived from item 3 ("My speculations are guided by clear strategic objectives") and item 19 ("I realize my speculation by applying clever tactics").

On the next level, the sixteen primary factors are reduced to seven secondary factors (SF), e.g., "speculation," "readiness for risk-taking," and "thrill in risk-taking" create "risk excitement." The secondary factors represent the positive and negative aspects of the tertiary factors (TF). These are obtained by subtracting the negative part from the positive part. For example, the tertiary factor "risk-taking" is the difference between the positive factor "risk excitement" and the negative factor "risk avoidance."

Finally, the two main dimensions "drives" and "needs" are derived from the tertiary factors. "Risk-taking" and "striving" belong to the dimension of "needs," while "drive" and "control" belong to the dimension of "drives."

Additionally, for reasons of retest reliability, we examined a part of the sample of magazine readers in a second study not yet published. Eight months after the initial reader campaign, 831 subjects completed the REC for a second time. The study revealed retest reliability coefficients of at least 0.7 for the general factors, which is considered very high for an emotion-loaded personality test. Our retest study confirms that the REC is an appropriate device to measure the main and, over time, stable characteristics of risk personality.

Our actual study focuses on the comparison of the subgroups "East Germans" and "West Germans." According to the factor structure of the REC, *t*-tests for independent samples were applied on each factor level (tertiary, secondary, and primary) in order to assess specific results. We also examined the interaction between the "regional" variable (East versus West) on the one hand and the "sample" variable (FMDS versus magazine readers) on the other by means of analysis of variance (ANOVA).

Results

General Population

A significant difference is observed in two of the four tertiary factors, "risk-taking" and "striving," which constitute the dimension of "needs." The West Germans reveal a higher degree of "risk-taking," while the East Germans scored higher on "striving." West Germans show significantly more "risk excitement" (SF), which results from the significant differences in the primary

factors “readiness for risk-taking,” “thrill in risk-taking,” and “speculation.” East Germans show significantly more “ambivalence” (PF) than West Germans. Also, their “profit orientation” (TF) and “striving for property” (SF) are significantly greater.

In the subfactors of “drives,” no significant differences were observed, except for “strain,” which emerges as a secondary as well as a tertiary factor. West Germans show a significantly greater degree of “strain” than East Germans. (See Table 1.)

Business Magazine Readers

The sample of the magazine readers reveals the following differences between East and West. Only one significant difference in the “needs” factors was observed: East Germans again show a greater degree of “ambivalence” (PF) than West Germans. The lower half of Table 2 thus shows equality of East with West, with the exception of ambivalence.

With respect to “drives,” the upper part of Table 2 shows that East Germans produce superior scores. They differ significantly in “drives” itself, in the tertiary factor “drive,” in the secondary factors “controlling” and “responsibility,” and in the primary factors “perfection,” “power of decisions,” and “responsibility.” On the other hand, the West Germans show significantly more “distraction” (SF), i.e., the negative part of “drives,”

on account of their higher scores in “miscalculation” (PF) and “carelessness” (PF).

Comparing both samples, we observe that the significant differences often point in opposite directions. To evaluate this effect, an ANOVA was calculated. Significant interactions of “region” (East versus West) by “sample” (FMDS versus CAPITAL) were observed in the following factors concerning “drives”: the tertiary factor “drive” itself, the secondary factor “controlling,” and the primary factors “perfection” and “miscalculation.” Furthermore, the secondary factor “responsibility” [the positive aspect of “control” (TF)] shows a significant interaction. (See Table 3.)

Regarding the dimension of “needs,” both tertiary factors (“risk-taking” and “striving”) show significant interactions of “region” by “sample.” On the level of the secondary factors, there are significant interactions in “risk excitement” (the positive aspect of “risk-taking”), as well as in “thrill in risk-taking” (PF) and “speculation” (PF). There is also an interaction in “striving” (TF), “profit orientation” (SF), and “striving for property” (PF).

Discussion

In general, our study shows an obvious relationship between risk personality and behavior when dealing with money. The comparison of East and West Ger-

Table 1. General Population (FMDS) East/West ($n = 2,540$)

		West Mean (SD)	East Mean (SD)	t-Value	$p \leq$ (two-tailed)
Drives	Drive (TF)	0.59 (0.90)	0.56 (0.85)	-0.650	0.516
	Controlling (SF)	2.44 (0.70)	2.41 (0.65)	-0.837	0.403
	Perfection (PF)	2.40 (0.90)	2.36 (0.89)	-0.833	0.405
	Confidence (PF)	2.66 (0.89)	2.59 (0.87)	-1.415	0.157
	Power of Decision (PF)	2.23 (0.86)	2.27 (0.82)	0.974	0.331
	Distraction (SF)	1.84 (0.59)	1.84 (0.56)	-0.047	0.962
	Miscalculation (PF)	1.89 (0.70)	1.95 (0.72)	1.617	0.106
	Carelessness (PF)	1.81 (0.79)	1.77 (0.74)	-1.073	0.283
	Impulsiveness (PF)	1.82 (0.71)	1.81 (0.65)	-0.380	0.704
	Control (TF)	1.02 (1.37)	1.10 (1.28)	1.158	0.247
	Responsibility (SF/PF)	3.03 (0.87)	2.99 (0.92)	-0.992	0.321
	Strain (SF/PF)	2.01 (0.88)	1.89 (0.82)	-2.751	0.006***
Needs	Risk-Taking (TF)	-0.42 (0.81)	-0.58 (0.69)	-4.375	0.001***
	Risk Excitement (SF)	1.53 (0.63)	1.42 (0.51)	-4.195	0.001***
	Readiness for Risk-Taking (PF)	1.51 (0.73)	1.43 (0.63)	-2.376	0.018**
	Thrill in Risk-Taking (PF)	1.38 (0.64)	1.25 (0.50)	-4.640	0.001***
	Speculation (PF)	1.71 (0.86)	1.57 (0.76)	-3.522	0.001***
	Risk Avoidance (SF)	1.95 (0.63)	2.00 (0.64)	1.687	0.090
	Risk Aversion (PF)	2.13 (0.80)	2.14 (0.86)	0.172	0.863
	Unsteadiness (PF)	1.75 (0.77)	1.79 (0.78)	1.031	0.303
	Ambivalence (PF)	1.97 (0.75)	2.08 (0.73)	2.918	0.004**
	Striving (TF)	-0.01 (0.68)	0.05 (0.69)	2.004	0.045*
	Profit Orientation (SF)	1.79 (0.68)	1.86 (0.69)	2.004	0.045*
	Striving for Property (PF)	1.85 (0.83)	2.02 (0.86)	3.950	0.001***
	Striving for Profit (PF)	1.74 (0.71)	1.71 (0.71)	-0.728	0.467

Note: PF = primary factor; SF = secondary factory; TF = tertiary factor. Legend: Range 1 to 4 for primary and secondary factors; Range -3 to 3 for tertiary factors (each as the difference between two secondary factors); Levels of significance: (*) $p \leq 0.05$; (**) $p \leq 0.01$; (***) $p \leq 0.001$.

Table 2. *Business Magazine Readers East/West (n = 5,216)*

		West Mean (SD)	East Mean (SD)	t-value	p ≤ (two-tailed)
Drives	Drive (TF)	1.08 (0.77)	1.20 (0.80)	3.892	0.001***
	Controlling (SF)	2.92 (0.44)	2.99 (0.45)	3.958	0.001***
	Perfection (PF)	2.87 (0.62)	3.06 (0.61)	7.841	0.001***
	Confidence (PF)	2.97 (0.61)	2.93 (0.64)	-1.504	0.133
	Power of Decision (PF)	2.93 (0.58)	2.97 (0.60)	2.227	0.026*
	Distraction (SF)	1.84 (0.49)	1.79 (0.52)	-2.549	0.011*
	Miscalculation (PF)	1.89 (0.55)	1.83 (0.57)	-2.818	0.005***
	Carelessness (PF)	1.98 (0.75)	1.90 (0.73)	-2.783	0.005***
	Impulsiveness (PF)	1.65 (0.60)	1.64 (0.62)	-0.211	0.833
	Control (TF)	1.79 (1.01)	1.86 (1.00)	1.943	0.052
	Responsibility (SF/PF)	3.46 (0.55)	3.51 (0.55)	2.238	0.025*
	Strain (SF/PF)	1.67 (0.67)	1.65 (0.64)	-1.084	0.278
Needs	Risk-Taking (TF)	0.52 (0.94)	0.48 (0.97)	-0.890	0.374
	Risk Excitement (SF)	2.43 (0.55)	2.42 (0.57)	-0.373	0.709
	Readiness for Risk-Taking (PF)	2.52 (0.72)	2.50 (0.74)	-0.572	0.567
	Thrill in Risk-Taking (PF)	2.03 (0.75)	1.99 (0.74)	-1.633	0.102
	Speculation (PF)	2.75 (0.66)	2.79 (0.73)	1.429	0.153
	Risk Avoidance (SF)	1.92 (0.56)	1.94 (0.57)	1.129	0.259
	Risk Aversion (PF)	2.04 (0.70)	2.05 (0.73)	0.429	0.668
	Unsteadiness (PF)	1.75 (0.63)	1.75 (0.64)	-0.256	0.798
	Ambivalence (PF)	1.95 (0.65)	2.02 (0.67)	2.716	0.007**
	Striving (TF)	0.88 (0.53)	0.86 (0.54)	-0.770	0.441
	Profit Orientation (SF)	2.71 (0.53)	2.69 (0.54)	-0.770	0.441
	Striving for Property (PF)	2.89 (0.76)	2.89 (0.76)	-0.188	0.851
	Striving for Profit (PF)	2.57 (0.63)	2.56 (0.64)	-0.547	0.584

Note: Legend: Range 1 to 4 for primary and secondary factors; Range -3 to 3 for tertiary factors (each as the difference between two secondary factors); Levels of significance: (*) $p \leq 0.05$; (**) $p \leq 0.01$; (***) $p \leq 0.001$.

Table 3. *Interaction FMDS/Magazine Readers versus East/West (n = 7,756)*

		F	p ≤ (two-tailed)
Drives	Drive (TF)	6.781	0.009**
	Controlling (SF)	6.492	0.011*
	Perfection (PF)	21.164	0.001***
	Confidence (PF)	0.048	0.826
	Power of Decision (PF)	0.069	0.793
	Distraction (SF)	2.081	0.149
	Miscalculation (PF)	9.478	0.002**
	Carelessness (PF)	0.426	0.514
	Impulsiveness (PF)	0.062	0.804
	Control (TF)	0.001	0.971
	Responsibility (SF/PF)	4.162	0.041*
	Strain (SF/PF)	3.240	0.072
Needs	Risk-Taking (TF)	5.145	0.023*
	Risk Excitement (SF)	8.180	0.004**
	Readiness for Risk-Taking (PF)	2.216	0.137
	Thrill in Risk-Taking (PF)	3.954	0.047*
	Speculation (PF)	14.449	0.001***
	Risk Avoidance (SF)	0.477	0.490
	Risk Aversion (PF)	0.000	0.999
	Unsteadiness (PF)	1.026	0.311
	Ambivalence (PF)	1.340	0.247
	Striving (TF)	5.765	0.016*
	Profit Orientation (SF)	5.765	0.016*
	Striving for Property (PF)	12.836	0.001***
	Striving for Profit (PF)	0.048	0.826

Note: Legend: Levels of significance: (*) $p \leq 0.05$; (**) $p \leq 0.01$; (***) $p \leq 0.001$.

many in general and in the subgroup of the magazine readers confirms both of our hypotheses.

First, risk behavior in handling personal finances shows different patterns in East and West Germany. Significant differences between East and West Germans are identified concerning the “needs” dimension, which is based on “risk-taking” and “striving.”

Second, business magazine readers form a special subgroup and therefore a special subculture of the German population. The ANOVA showed that differences in this subgroup point in opposite directions than differences in the average population.

As far as the patterns in financial risk behavior are concerned, the average population of Germany represented by the FMDS sample reveals significant differences concerning “needs” between East and West Germans. In West Germany, risk-taking seems to be connected with excitement and pleasure in general. In all three relevant primary factors (“readiness for risk-taking,” “thrill in risk-taking,” and “speculation”), West Germans show a significantly higher degree of risk orientation than East Germans. They are more ready to take risks in their financial matters, they experience more positive feelings about financial risk-taking, and they rate their speculations more positively.

The negative aspects of risk-taking, summarized in the secondary factor “risk avoidance,” tend to be experienced more by the East Germans, but apart from “ambivalence” the differences are not significant. This tendency may be explained by the different economic situations in both former Germanys. In the former GDR, people were unused to being responsible for the “full risk” of investments that prevails in free enterprise economies. It seems plausible that this is illustrated by the greater hesitation of East Germans to make risky decisions concerning their own finances.

Another remarkable result for the average population is the greater degree of “striving” in East Germany. The higher score in “striving for property” demonstrates that East Germans are more profit-oriented than West Germans. This difference may result from the limited possibilities for satisfying material needs in the former GDR.

The only significant difference in the “drives” dimension between East and West can be observed in the secondary factor “strain.” East Germans seem to want to avoid stressful financial situations more than West Germans. This may be explained by the higher risk orientation of West Germans, and the higher possibility of confrontations with potentially stressful high-risk financial situations in the FRG. Another explanation may be that East Germans are more used to handling their own matters, especially in emergency situations, while West Germans are accustomed to relying on help from service and counseling agencies.

Focusing on the sample of the magazine readers, our study reveals a remarkable difference compared with

the general population. Although the average population shows significant differences between East and West essentially in the “needs” dimension, the East and West magazine readers differ more in the “drives” dimension, representing the efforts for optimization of financial matters. The tertiary factor “drive” differs significantly between East and West German magazine readers according to the gap between the positive drive “controlling” and the negative drive “distraction.”

On the one hand, East Germans tend to handle their own financial matters more often than West Germans. On the other hand, West German magazine readers more often claim that handling their financial matters causes distraction, the negative aspect of “drive.” Distraction corresponds with a higher degree of carelessness and the tendency to miscalculate, which may be due to a “wealth effect.” A higher level of wealth in the FRG seems to be “standard” to the West German magazine readers, whereas the East German magazine readers are used to the limited conditions in the former GDR, which makes them eager to achieve and to maintain their personal level of wealth by minimizing their risks.

Focusing on the other tertiary factor, “control” of the “drives” dimension, the magazine readers in East Germany demonstrate significantly more responsibility for financial risk decisions than West Germans, although they show no difference in the tendency to feel stressed or overloaded in risky financial situations.

In the “needs” dimension, magazine readers reveal equally high scores. The only significant difference was found for ambivalent feelings, which are more often experienced by East Germans.

The hypothesis that the magazine readers represent a subculture of the German population may be confirmed by the following results: The magazine readers and the average population differ in almost every relevant characteristic of risk behavior. Focusing on the level of secondary factors, we see that all the positive aspects (“controlling,” “responsibility,” “risk excitement,” and “profit orientation”) score significantly higher in the subgroup of magazine readers than in the average population. On the other hand, the average population shows the negative aspects “strain” and “risk avoidance” with a greater extent than the magazine readers.

Generally, the subgroup of magazine readers demonstrates superiority in the positive characteristics and less impairment through the negative characteristics of handling personal finances. It is obvious that this pattern reflects a special inclination of the magazine readers to deal with finances. Apart from that, it may be interpreted as an excellent capacity for handling money.

The region by sample interaction identifies the East German business magazine readers as “Musterschüler” in handling personal finances (a German term describing pupils who are very eager to please their teacher and to be successful). The ANOVA showed that the pattern

of risk behavior of the East German magazine readers differs from West German magazine readers and from the East Germans in general. On the one hand, they show pronounced positive aspects of risk behavior: They are controlling their financial matters, they feel responsible, they like to take risks, and they strive for profit. On the other hand, they are less handicapped by the negative aspects of risky behavior. They do not feel distracted or overstressed in making risky decisions and they do not avoid risky financial situations.

This pattern of behavior reminds one of highly engaged West German profit-seekers, which is even more pronounced among the East German magazine readers. In this context, the metaphor of "Musterschüler" seems especially apt. Considering our hypothesis, it seems that the East German magazine readers not only approach the Western "capitalistic" way of handling finances in a successful manner, but they also exceed the West German magazine readers. The old values were completely replaced by the new values.

It is possible, however, that this group of readers was always more oriented to Western capitalistic values. Many people in East Germany were eager to leave behind the conditions of the former GDR. In this context, a certain "backlog demand" may be postulated, due to the fact that this need wasn't sufficiently satisfied in the GDR. The image of the "Golden West" represented by the former FRG reflected the essence of the Western world, an image that was severely blurred by the reunification in 1989.

Conclusion

This study offers further proof of the tenet that a variety of financial risk behaviors constitute a well-structured system of risk personality (the REC, risk-taking, excitement, and control). The REC is appropriate for measuring the stable and opposing aspects of risk behavior in handling finances, which is also confirmed by the high retest reliability ($r = 0.7$). It is obvious that the results of REC deliver an empirical basis for individual counseling in financial decisions. For operational purposes of financial service institutions, patterns of risk behavior can be used to gain a typology of investors. By using these patterns, investments can be better tailored to individual investors according to their risk profile.

Our assumptions are supported by Wong and Carducci [1991], who showed that risk-taking in gambling corresponds with risk-taking in financial decisions. Beyond that, the results of Dahlbäck [1991] may be integrated into the concept of REC without contradiction, insofar as Dahlbäck focuses on the relationship between saving and risk behavior. His results correspond with the "risk-avoiding" type found in the REC typology.

Our study also provides evidence that the REC personality inventory can be used for social and cultural research purposes. Our results reveal differences in financial risk behavior across different social and cultural groups. According to Hofstede [1984], the different patterns of financial risk behavior in East and West Germany may be interpreted as "mental programs" that result from different cultural socialization.

Within the "subculture" of business magazine readers, our study reveals a significantly greater degree of correlation with almost all the relevant aspects of financial risk behavior compared to the general population. We also found significant differences between East and West Germans in the average population and in the subgroup of magazine readers.

Our results show that cultural and subcultural or subgroup differences should generally be taken into consideration to adapt counseling to the specific drives and needs of the investor. Beyond that, investigating the relationship between risk behavior and financial profit would be an interesting topic for future research.

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Note

1. The articles including the questionnaire were published by CAPITAL, Eupener Str. 70, 50933 Köln. E-mail: capital@guj-koeln.de; <http://www.capital.de>.

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