

Perceptions of Successful Traders by Foreign Exchange Professionals

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This exploratory study examines which characteristics are perceived to be important for a successful foreign exchange trader. The findings are based on ratings by 291 professional traders at leading European banks. A factor analysis of ratings results in eight primary factors: disciplined cooperation, tackling decisions, market meaning making, emotional stability, information processing, interested integrity, autonomous organization, and handling information. Differing work location, type of foreign exchange instrument, and trading area resulted in significant differences regarding the perceived importance of these factors. Contributing to a differentiated understanding of market participants, results suggest the need for systematic job analyses of traders and may lead to more valid methods of hiring.

This article examines which characteristics and individual decision-making factors are perceived to be most important for a successful foreign exchange trader. This research differs from approaches to financial markets that focus on investment strategies, trading rules, and market prediction models because it focuses on characteristics of individuals and on the opinions of market practitioners. We define trader characteristics as a set of cognitive abilities, skills, and, perhaps most importantly, personality characteristics, i.e. lasting styles of thinking, feeling, and acting (Costa [1996]).

Until recently, the role of personality in employment contexts, once at the heart of the selection process, had fallen out of favor in academic research. Personality was thought to be of low validity in professional performance (Ghiselli [1973]), and the meaningfulness of the connection was questioned (Guion and Gottier [1965]).

However, the last two decades have brought renewed interest in the link between personality and work performance in such fields as organizational psychology and human resource management (Tokar, Fischer, and Subich [1998]). Today, many studies show that personality helps explain and predict performance in a wide variety of work settings, such as nursing (McCloskey and McCain [1988]; Riggio and Taylor [2000]), government security (Inwald and Brockwell [1991]), and air traffic control (Oakes et al. [2001]). Personality traits correlate significantly both with job performance and with job-related learning, i.e., the degree to which relevant knowledge and skills are acquired on the job or in training programs.

The revival of interest in the link between personality and work performance can also be attributed to the popularity of the Five-Factor Model of personality, which has gained acceptance as a meaningful and comprehensive structure of personality traits (Digman [1990]; Neuman, Wagner, and Christiansen [1999]; Wiggins and Trapnell [1997]). The model, originally developed by Tupes and Christal [1961], builds on five broad personality factors: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. These factors were developed, with a high degree of consistency, from analyses of trait ratings in diverse populations (Digman [1990]; Goldberg [1992, 1993]). A number of methodologically refined meta-analyses conducted over the last decade have confirmed links between the “Big Five” and work performance (Barrick and Mount [1991]; Barrick, Mount, and Judge [2001]; Salgado [1997]; Tett, Jackson, and Rothstein [1991]).

Studies on the personality-work performance link have been conducted in a large number of professional fields, but little systematic research has been conducted on the traits of successful traders in real-life financial markets. While individual factors important to successful trading continue to receive much interest among market practitioners, published accounts about successful traders have largely been autobiographical (e.g., Goldstone [1988]; Krieger and Claflin [1992]), or anecdotal (Schwager [1989, 1992]).

For example, Biais et al. [2001] conducted a study with students in an experimental market that related measures of psychological traits and cognitive biases to trading performance. The authors found that impulsive subjects placed more orders, and that overconfident subjects were more likely to place loss-making orders. Traders with a tendency to the illusion of control, as indicated by their perceived ability to influence the movement of a dot on a screen, underperformed compared to others (Fenton O’Creedy et al. [1998]).

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One reason for the paucity of research in this area is how difficult it is to gain access to a field whose participants feel that time literally is money, as Ben Franklin remarked two centuries ago (see Kahn and Cooper [1993]). In addition, there is usually a high degree of confidentiality about their activities. Indeed, the proposition that markets are efficient, with prices fully reflecting available information at all times (Fama [1970]) is connected to the notion of rational market agents who make informed decisions in unbiased ways. This notion does not invite research into the personal characteristics or differences of individual market decision makers.

Additionally, there is some belief that any variation in the success of professional market decision makers (such as mutual fund managers, for example) may be randomly distributed, and a function of chance rather than ability (Taleb [2001]). This casts similar doubt on the value of examining individual trading performance. Given the sheer number of mutual funds in the U.S., a normal distribution of performance and returns, rather than extraordinary investment skills, may explain why some funds outperform the market even for extended periods of time (Bazerman [2002]).

The "hit and miss" approach to the performance of market participants, however, is contradicted by reports about the possibility of training persons to become exceptionally successful traders (Schwager [1992]), and by the conviction of market practitioners that some traders are successful because of certain individual characteristics and skills. Traders claim to have traded as successfully as "700 standard deviations away from randomness, a departure that would occur by chance alone about as frequently as the spare parts in an automotive salvage lot might spontaneously assemble themselves into a McDonald's restaurant" (Niederhoffer [1997]).

This discrepancy in views about the nature of collective market processes (neo-economic versus behavioral) and of individual market participants (rational versus psychological) makes the financial markets a unique setting for studying the individual characteristics underlying successful trading performance. We explore the characteristics perceived as important for a successful trader in the foreign exchange market, the largest worldwide financial market, with daily trading volumes of more than \$1.2 trillion (Bank for International Settlements [2001]).¹ This study also 1) establishes comprehensive factors on which a successful foreign exchange trader is perceived by subject matter experts, 2) determines the perceived importance of these factors, and 3) explores whether subgroups of traders define a successful trader differently. Implications for the use of personality testing in trader selection are also discussed.

Method

This exploratory study is based on expert judgments by professional traders as subject matter experts. Self-developed questionnaires were used to analyze characteristics based on a preselected list of personality traits complemented by items expressing personal skills and cognitive abilities. Practicing foreign exchange professionals were involved at two stages of this research: for the selection of characteristics potentially relevant to foreign exchange trading, and for rating these characteristics according to their perceived importance.

Questionnaires were distributed to approximately 600 foreign exchange professionals trading for the largest commercial banks in Austria, Germany, Switzerland, and the U.K. and the central banks of Austria, Switzerland, and the U.K.² Because London is the capital of global foreign exchange trading, traders from other leading investment and commercial banks in the U.K. were also included.³ Questionnaires were distributed by a contact person in each organization. Traders sealed their answers in attached envelopes and could return them either through their contact person or by mail. 321 questionnaires were returned, a return rate of 54%.

In a series of institutional and professional background questions, the questionnaire asked for type of trading institution (commercial or investment bank, central bank); bank location (continental Europe versus the U.K.); number of traders in the department; seniority (trainee, junior trader, senior trader); type of foreign exchange instrument (spot, forward, money market, foreign exchange derivatives); trading area (interbank versus customer trading); trading limit (i.e., the maximum open position a trader is entitled to have, ≤ \$10 million, \$11 million–20 million, \$21 million–50 million, or ≥ \$51 million); and the number of years of work experience in the foreign exchange market. Additional personal background questions asked for family status, gender, and age.

Traders rated the importance of a series of twenty-three characteristics for a successful foreign exchange trader on scales from 1 = unimportant to 4 = very important.⁴ They were also asked to provide any additional characteristics they considered important. The list of characteristics was informally established with the help of foreign exchange experts, who suggested a pool of potentially relevant characteristics and helped determine the items included in the questionnaire. Ratings by 291 of the 321 responding traders who had rated all of the twenty-three final characteristics entered the analysis.

Ninety-five percent of the respondents were commercial or investment bank traders and 5% were central bank traders. 68% of the traders worked in continental Europe (Switzerland 37%, Austria 18%, Germany 13%), and 32% in the U.K. The majority held

senior trading positions (senior traders 76%, junior traders 20%, trainees 4%). 52% were spot traders, 9% were money market traders, 8% were derivatives traders, 3% were forward traders, and 18% were a combination. The majority (77%) traded in the interbank market, and 23% were customer traders. 91% were male and 9% were female. Surveyed traders had an average of 9.4 years ($SD = 6.0$) of work experience in the foreign exchange market.

Results

Table 1 lists the twenty-three characteristics and their ranks. Quick reaction time is considered the most important characteristic. Discipline, experience, concentration, and stress resistance are also rated as very important. Although no characteristic is rated as unimportant, social skills, computer literacy, and organizational skills are least important.

A Greenhouse-Geisser epsilon-adjusted ANOVA with repeated measures shows a highly significant difference in how important the twenty-three characteristics are rated ($F_{(16,64, 4826.55)} = 99.82, p < 0.001$). Standard deviations in Table 1 indicate differences in how homogeneously traders rate the importance of each characteristic. For example, quick reaction time is rated more homogeneously than mathematical ability.

Table 1. Ratings of Perceived Successful Trader Characteristics ($n = 291$)

Item	M	SD
Quick reaction time	3.71	0.50
Discipline	3.65	0.55
Experience	3.62	0.52
Concentration	3.62	0.53
Stress resistance	3.54	0.57
Willingness to take risks	3.43	0.61
Intuition	3.42	0.56
Emotional stability	3.38	0.68
Ability to work in a team	3.33	0.72
Simultaneous information processing	3.31	0.67
Judgment of information sources	3.21	0.61
Learning ability	3.19	0.60
Communication skills	3.14	0.72
Integrity	3.13	0.79
Independence	3.05	0.75
Analytical thinking	3.03	0.73
Aggressiveness	2.97	0.80
Optimistic attitude	2.90	0.79
Mathematical ability	2.82	0.82
Curiosity	2.67	0.76
Organization skills	2.56	0.73
Computer literacy	2.54	0.78
Social skills	2.52	0.74

Note: Scale: 1 = unimportant, 2 = less important, 3 = important, 4 = very important.

The ratings of single items were then factor analyzed using a principal component analysis, and a Varimax rotation with Kaiser normalization.

As Table 2 shows, eight factors with eigenvalues > 1 can be distinguished, explaining 59.1% of the total variance (summarized as follows):

1. *Handling information* has high loadings of the items computer literacy, mathematical ability, social skills, and communication skills. Organizational skills also loads on this factor, but to a lesser degree.
2. *Tackling decisions* has high loadings of aggressiveness, stress resistance, willingness to take risks, concentration, and quick reaction time.
3. *Autonomous organization* has high loadings of independence, organization skills, optimistic attitude, and, to a lesser degree, willingness to take risks.
4. *Interested integrity* has high loadings of curiosity and integrity.
5. *Information processing* has high loadings of analytical thinking, learning ability, and simultaneous information processing.
6. *Market meaning making* has high loadings of judgment of information sources, intuition, experience, and quick reaction time, and a lower loading of simultaneous information processing.
7. *Disciplined cooperation* has high loadings of discipline and ability to work in a team.
8. *Emotional stability* has high loadings of emotional stability and a lower loading of experience.

To ascertain the importance of the dimensions resulting from the factor analysis, we calculate hypothetical overall ratings of the eight factors as statistical means of the items contributing to a given success factor with a loading of > 0.40 . Items with loadings of > 0.40 on more than one factor were only used in the calculation of the factor with their highest loading. For example, the overall rating of tackling decisions is the statistical mean of the items aggressiveness, stress resistance, willingness to take risks, concentration, and quick reaction time.

Table 3 summarizes the computed values of the eight factors ranked according to their importance. Five of the eight factors are perceived to be most important for a successful trader: disciplined cooperation, tackling decisions, market meaning making, emotional stability, and, to a somewhat lesser degree, information processing. None of the eight factors is seen as unimportant, but interested integrity, autonomous organization, and information handling are rated the least important success factors. A Greenhouse-Geisser epsilon-adjusted ANOVA with repeated measures again shows a highly

Table 2. *Factor Analysis of Perceived Successful Trader Characteristics (n = 291)*

	Factors							
	Handling Information	Tackling Decisions	Autonomous Organization	Interested Integrity	Information Processing	Market Meaning Making	Disciplined Cooperation	Emotional Stability
Computer literacy	0.74							
Mathematical ability	0.67							
Social skills	0.52							
Communication skills	0.52							
Aggressiveness		0.68						
Stress resistance		0.66						
Willingness to take risks		0.54	0.49					
Concentration		0.52						
Quick reaction time		0.49						
Independence			0.73			0.48		
Organization skills	0.41		0.62					
Optimistic attitude			0.54					
Curiosity				0.73				
Integrity				0.66				
Analytical thinking					0.72			
Learning ability					0.57			
Simultaneous information processing					0.52	0.42		
Judgment of information sources						0.70		
Intuition						0.55		
Experience						0.51		0.48
Discipline							0.79	
Ability to work in a team							0.62	
Emotional stability								0.80
Explained variance (%)	9.5	8.4	7.5	7.4	7.1	7.0	6.4	5.7

Note: Extraction method: principal component analysis. Rotation method: Varimax with Kaiser normalization. All factor loadings > 0.40 listed.

Table 3. *Ranking of Perceived Successful Trader Factors (n = 291)*

Factor	Included Items	M	SD
Disciplined cooperation	Discipline, ability to work in a team	3.49	0.51
Tackling decisions	Aggressiveness, stress resistance, willingness to take risks, concentration, quick reaction time	3.45	0.39
Market meaning making	Judgment of information sources, intuition, experience	3.42	0.38
Emotional stability	Emotional stability	3.38	0.68
Information processing	Analytical thinking, learning ability, simultaneous processing of various information	3.18	0.47
Interested integrity	Curiosity, integrity	2.90	0.63
Interested integrity	Independence, organization skills, optimistic attitude	2.84	0.54
Handling information	Computer literacy, mathematical ability, social skills, communication skills	2.76	0.53

Note: Scale 1 = unimportant, 2 = less important, 3 = important, 4 = very important.

significant difference in how important the eight factors are perceived ($F_{(5.80, 1681.27)} = 123.29, p < 0.001$).

The open question of which additional characteristics would be important for a successful trader elicited a total of twenty-seven answers from twenty-three traders. Of these answers, twenty-four (89%) could be assigned to one of the factors resulting from the factor analysis. The three remaining answers, which were seen as adding no new dimensions to the factor analysis, were being able to play blackjack, flexibility, and luck.

Do traders' personal and professional attributes make a difference in how important they perceive each factor? Table 4 gives an overview of how these personal and professional variables may relate to percep-

tions of a successful trader. Multivariate analyses of variance show that the eight factors are not rated differently by traders from different types of trading institutions ($F[8, 282] = 1.16, p = 0.32$), with different numbers of traders in their department ($F[32, 1064] = 0.74, p = 0.85$), by trader subgroups holding different levels of seniority ($F[16, 540] = 1.19, p = 0.27$), or by traders with different trading limits ($F[24, 726] = 0.94, p = 0.55$). Family status ($F[24, 837] = 1.22, p = 0.21$), age ($F[40, 1400] = 0.99, p = 0.49$), and gender ($F[8, 281] = 1.99, p = 0.05$) did not appear to matter either.

However, there is a statistically highly significant overall difference between traders working in continental Europe and in the U.K. ($F[8, 280] = 6.14, p = 0.001$).

Table 4. *Perceived Successful Trader Factors: Subgroup Differences*

Variable	Subgroup Differences ^a	Affected Dimensions ^b	Direction of Difference
Institution	n.s.		
Number of traders in department	n.s.		
Seniority	n.s.		
Family status	n.s.		
Trading limit	n.s.		
Age	n.s.		
Gender	n.s.		
Trading location	***	Handling information Tackling decisions Market meaning making	Continental Europe > U.K. Continental Europe > U.K. Continental Europe > U.K.
Traded foreign exchange instrument	**	Handling information Information processing	Money market > spot Combination > spot
Interbank versus customer trading	**	Handling information Interested integrity Information processing Market meaning making	Customer trader > interbank trader Customer trader > interbank trader Customer trader > interbank trader Customer trader > interbank trader

^aMultivariate analysis of variance; n.s. = F not significant, **F significant at $p < 0.01$, ***F significant at $p < 0.001$.

^bUnivariate F-tests; dimensions with F significant at $p < 0.05$ are shown.

Univariate F-tests show that differences are present in how each group perceives the importance of handling information ($F[1, 287] = 26.13, p = 0.001$), tackling decisions ($F[1, 287] = 17.65, p = 0.001$), and market meaning making ($F[1, 287] = 5.11, p = 0.03$). Traders from continental Europe rate these three factors as significantly more important than traders from the U.K.

There is also a statistically highly significant overall difference in how dealers trading different foreign exchange instruments (spot, forward, money market, derivatives, and "combination" traders) perceive the importance of several factors ($F[32, 940] = 1.82, p = 0.01$). Here, univariate F-tests show differences in the perceived importance of handling information ($F[4, 239] = 5.59, p = 0.001$) and information processing ($F[4, 239] = 4.26, p = 0.01$). Scheffé adjusted multiple subgroup comparisons indicate, on a significance level of 0.05%, that "combination" traders perceive handling information as more important than spot traders, and that money market traders perceive information processing as more important than spot traders.

Lastly, there is a statistically highly significant overall difference between interbank and customer traders ($F[8, 247] = 3.01, p = 0.01$). Univariate F-tests indicate that handling information ($F[1, 254] = 13.03, p = 0.001$), interested integrity ($F[1, 254] = 5.58, p = 0.02$), information processing ($F[1, 254] = 8.76, p = 0.01$), and market meaning making ($F[1, 254] = 8.63, p = 0.01$) are rated as more important by customer traders than by interbank traders.

Discussion of Results

When condensed by a factor analysis, foreign exchange trader ratings of twenty-three potentially im-

portant characteristics for a successful trader result in eight main factors that together explain almost 60% of the variance. All but three of the additional characteristics from the open question were assigned to these eight factors, which supports the overall validity of the resulting factor structure. The additional finding of professionally meaningful subgroups of traders with different perceptions of the "ideal" trader may help explain any leftover variance.

Of the eight factors, foreign exchange traders rate disciplined cooperation as the most important factor. In an unpredictable environment where sudden changes in market direction can turn gains into losses within moments, a trader's discipline may be the only controllable thing. This discipline is needed to adhere to previously established stop loss limits, or to counteract such human biases as overconfidence and the illusion of control (Goldberg and Nitzsch [2001]). As Biais et al. [2001] found, highly self-monitoring student participants in an experimental market place less unprofitable orders than others.

The item teamwork also loads highly on this factor. Such cooperative aspects of trading discipline may also be required when traders suffer losses, for example, and seek the advice of colleagues without attempting to cover the losses up. The consequences of not having cooperative discipline are exemplified by media reports about rogue traders, who allow their losses to escalate without closing their positions, and conceal their losses while taking greater and greater risks.

The factor tackling decisions can be understood as a trader's readiness to assert proactive decision-making. Financial markets have changed dramatically since the time of Rothschild, who capitalized handsomely on his advance knowledge of Napoleon's defeat in the Battle of Waterloo (Cohen [2001]). They are now global in-

formation networks, where individual participants need to act and react within seconds (Cheung and Chinn [2001]). Trading decisions involve large risks and need to be made rapidly. Contemporary electronic news screens provide traders with real-time market information about current exchange rates, with trade executions by other market participants, and with a plethora of economic and political events that could affect the markets. Recent technology like electronic dealing and matching systems link banks around the globe, and allow traders to buy and sell hundreds of millions of dollars in seconds (Luca [2000]).

The importance of a tackling attitude in trading decisions is also supported in the experimental market study conducted by Biais et al. [2001]. The authors found that "impulsive" subjects who act more rapidly and with less forethought did not place unprofitable trades more often than do other traders. A high degree of concentration is needed for extended periods of time, as the half-life of a foreign exchange trader's position may be as little as ten minutes (Lyons [1998]). Mistakes can be extremely costly, so the ability to cope with stress is also an important aspect of tackling decisions. Traders need to be decisive no matter what stressors they are confronted with (Kahn and Cooper [1993, 1996]).

The factor market meaning making expresses the ability of traders to quickly formulate a market view by using intuitive judgment based on experience. Although trading decisions can never be made with certainty, in the long run they can be made with some probability of being right more often than wrong. A trader's judgment can be helpful in perceiving current market patterns and changing market conditions, and in anticipating likely outcomes. Emotional stability is considered almost equally crucial for a successful foreign exchange trader.

Among the main factors resulting from the factor analysis, handling information is rated as the least important. The items loading on this factor relate to how information is collected, manipulated, and passed on to others, including the processing of information by mathematical means or with the help of computers.

Only three out of ten institutional, professional, and personal background variables result in significant differences in how important the eight factors are perceived. Differences in how a successful trader is perceived by subgroups of two professionally relevant trading aspects (type of foreign exchange instrument traded and trading area) may signify different personality requirements for successful trading in different arenas. The additional finding that traders from different trading locations assign differing importance to the factors may be explained by geographically different job requirements, or because traders in different locations use different approaches when forming expectations about the market (Oberlechner [2001]). There may also be language and cultural differentials in trader interpre-

tations of the characteristics, which might indicate the need for further analysis of cultural and semantic meanings attributed to the characteristics.

Conclusion

This research has shown which characteristics practicing trading experts perceive as most important for successful foreign exchange traders. This study has brought into focus an aspect of financial markets that is often overlooked in finance, that trading in financial markets constitutes a specific professional activity, requiring a specific set of personal traits, skills, and abilities. Behavioral finance has begun to build market models based on less than perfect decision makers, explaining collective market behavior "anomalies" by relating them to human decision making biases (Kahneman and Tversky [1979]; Shefrin [2000]; Shleifer [2000]; Thaler [1991, 1992]). However, these models have paid little attention to individual characteristics of, and individual differences between, financial market participants.

The findings suggest the need for systematic job analysis to select and train traders better. In the long run, they may lead to systems that allow for more informed trader selection decisions and better hiring methods. Valid instruments for predicting trading performance and for selecting traders need to be carefully developed (Hogan, Hogan, and Roberts [1996]). As with any effective personality assessment instrument, they must build on an analysis of important work aspects and need to be matched to job criteria to be meaningful (Costa [1996]). The present exploratory findings might constitute a first step toward a more systematic job analysis of the importance of personality aspects relevant to trading.

For the market institutions it is crucial that the traders working on their behalf dependably follow institutional trading policies and rules, especially in regard to risk management. The damage caused by rogue trading in recent history, such as covered up losses of \$750 million at Allfirst Financial of Baltimore and the fall of Barings Bank after \$1 billion in losses on unauthorized trading activities (Fuerbringer and Kilborn [2002]), underscore the potential benefits of better trader selection methods.

Personality measures may be particularly valid in the prediction of contextual performance aspects, as Borman and Motowidlo [1997] suggest. The traders themselves perceive disciplined cooperation and interested integrity to be important dimensions of a successful trader. Integrity testing may have the potential to identify a propensity for dangerous or harmful behavior (Goodstein and Lanyon [1999]; Ones, Viswesvaran, and Schmidt [1993]; Sackett and Wanek [1996]). Integrity tests, Schmidt and Hunter [1998] find, have an overall predictive validity for job performance of 0.41. The use of stress tolerance scales, such as the Hogan Person-

ality Inventory Stress Tolerance Scale, might simultaneously support the prediction of counterproductive work behavior (Ones and Viswesvaran [2001]).

Trading institutions could profit greatly from a better understanding of the trader characteristics related to trading performance. With reported individual profits of \$100,000 daily (Lyons [1998]) or \$2.5 million yearly (Schwager [1992]), even a modest increase of prediction accuracy could substantially increase trading profits (Earles, Driskill, and Dittmar [1996]). At the same time, however, it is important to note that there are some disadvantages from using personality instruments in trader selection, as applicants usually do not react favorably to them (Rosse, Miller, and Stecher [1994]).

One limitation of this study is that findings are based on traders' ratings of success, and that no outside criterion was established to objectively measure and correlate trading performance to the assessed characteristics. If possible, future research should relate traders' characteristics to such performance criteria as supervisor ratings or generated trading profits. However, as suggested in Robertson and Kinder [1993], the assessments and self-ratings provided here are valuable, as they demonstrate greater validity coefficients for the relationship between performance and those personality aspects rated by practitioners to be predictive. Expert judgment of the importance of abilities as predictors for performance have also been described by Earles, Driskill, and Dittmar [1996].

While this study has focused on individual foreign exchange traders, differences in how a successful trader is perceived in different trading locations or in different trading areas suggest that future research should explore the fit between personality and trading environment more deeply. Relating patterns of trader personality, skills, and abilities to the specific demands of a specific kind of trading may help form optimal personality-environment matches. Such a pattern approach to identifying and matching individual style patterns and work environments is described by Gustafson and Mumford [1995]. Another topic for possible exploration concerns the interdependence among individual traders, the particular team traded in, and the specific institution traded for.

Although trading is sometimes conceived of as a solitary activity, traders often work in teams where they can and do complement each other. In addition, trading floors of different banks have different approaches and philosophies. Such group and organizational environments may play a decisive role in the performance of individual decision makers in financial markets. Star financial analysts, for example, often do not continue to perform on a top level after being hired by a new financial institution (Groysberg [2001]). If contextual factors like the ones mentioned above are considered, measures of personality characteristics may help identify traders who will contribute to advantageous combinations of

people (Kichuk and Wiesner [1998]) in groups and in organizations (Kristof [1996]).

Future research on the link between trader characteristics and trading success could also examine the intervening role of trading styles. Characteristics such as personality traits may determine trading success indirectly via preferences for certain decision making and investment styles. Women, for example, have been shown to hold more successful investment accounts than men by virtue of their more passive, and probably less overconfident, investment style, which avoids the transaction costs of more active portfolios (Barber and Odean [2001]). Moreover, personality may play a role in what kind of understanding of the financial market traders have. Implicit metaphorical conceptions have been shown to influence how the market is perceived and how individual market participants interact with it (Oberlechner, Slunecko, and Kronberger [2004]).

A thorough understanding of personal characteristics of successful decision makers in financial markets may pay off literally, but figuratively as well, as we deepen our knowledge of how these markets are understood by the people living and acting in them.

Notes

1. Decisions in this market are executed by foreign exchange traders acting on behalf of such market participants as commercial and investment banks, central banks, hedge funds, investment funds, and international corporations.
2. A slightly lower number of questionnaires was actually sent to participating banks. After the mailing, some organizations made additional copies for distribution among their traders. This number is therefore an estimate.
3. Surveyed traders came from Bank Austria, Bank of England, Bankers Trust, Barclays, BAWAG, Bayerische Landesbank, Commerzbank, Creditanstalt Bankverein, Credit Suisse, CS First Boston, Deutsche Bank, Die Erste, Dresdner Bank, Giro Credit, Goldman Sachs, HSBC Midland, J.P. Morgan, Merrill Lynch, Morgan Stanley, Nat West, Nomura, Oesterreichische Nationalbank, P.S.K., RZB, SBC Warburg, Schweizerische Nationalbank, and UBS.
4. The instructions asked respondents "For a successful foreign exchange trader, how important are the following characteristics?" As respondents to a pilot version of the questionnaire suggested that none of the preformulated characteristics would be unimportant for traders, the scales for the importance ratings include the steps *very important*, *important*, *less important*, and *unimportant*.

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