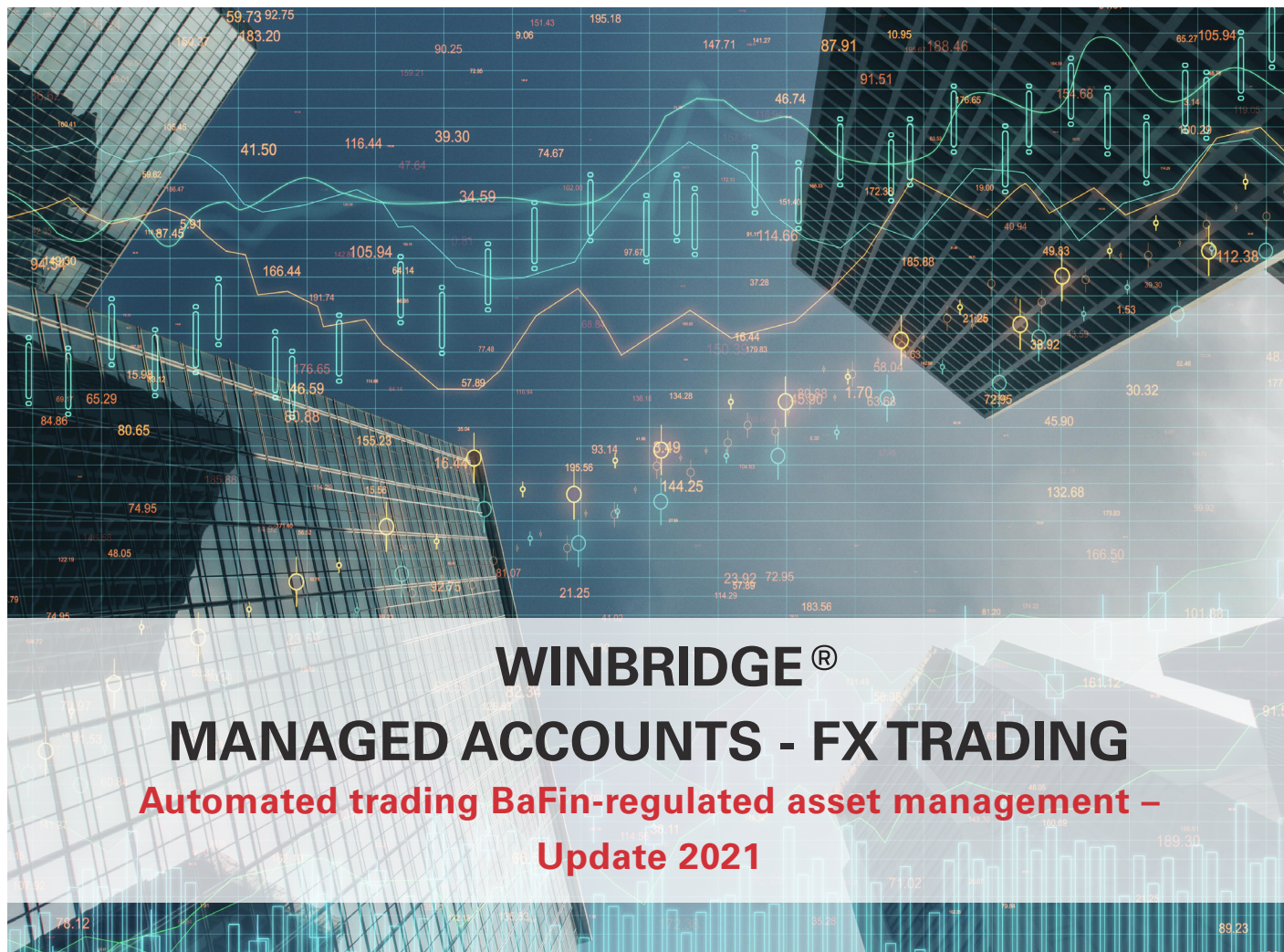


CHECK-ANALYSE

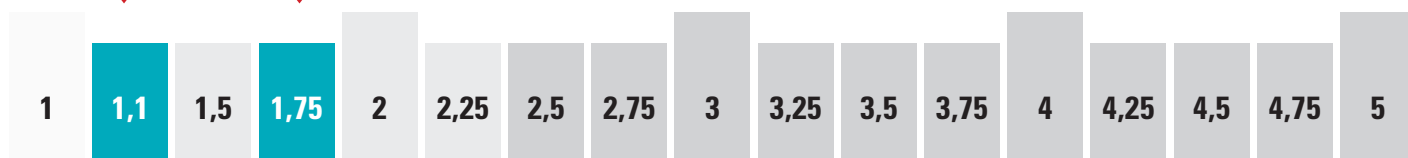
ANALYSIS AND RATING OF INVESTMENT STRATEGIES



WINBRIDGE[®] MANAGED ACCOUNTS - FX TRADING Automated trading BaFin-regulated asset management – Update 2021

RISK MANAGEMENT

RETURN



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Managed accounts – highly transparent

This investment product, “Managed Account” from WINBRIDGE Asset Management GmbH Munich, a subsidiary of Winbridge AG, Zurich, offers securities transactions including spot transactions, options, swaps, forwards, futures and CFD (see box on p. 8 for details) on banks’ established global foreign exchange markets.

It invests in a dynamic portfolio of key currencies such as USD, EUR, YEN, CHF, GBP, AUD and CAD, which is adjusted automatically by means of algorithms. Trade in these currencies has the deepest liquidity of any market (supply and demand are normally balanced in seconds), which means that they are generally easier to trade than less important currencies such as the Turkish lira or Mexican pesos.

The WINBRIDGE investment strategy profits systematically from value changes in foreign exchange trading, which adds up to trillions every day, by investing its own funds and that of its managed accounts in forex trades that are flexible but defined using a precise rule-based system, and then generally divesting at a profit.

How do investors participate?

Investors set up a trading account (differential trading account) in their own name with a regulated custodian bank into which they pay at least EUR 25,000. The aim is for WINBRIDGE to increase these assets by means of its algorithmic trading management on foreign exchange markets, which historically has achieved an average annual return of around 15% (= target), with a range to date from around 4% (lower limit) to well over 20% (see p. 8 for the latest WINBRIDGE performance figures).

BaFin licensed asset manager

WINBRIDGE is authorised and supervised under Section 32 German Banking Act (KWG) IIIa Financial Portfolio Management and by the German financial supervisory authority BaFin to carry out transactions on behalf of its clients. This means that WINBRIDGE has to comply with the strictest investment guidelines which are controlled by regulatory law and document its compliance.

Compliance is mandatory under the Securities Trading Act (WpHG) and requires continuous adherence

The CHECK results

▶ Performance	1.05
▶ Transparency	1.1
▶ Investor suitability	1.25
▶ Risk management	1.1
▶ Conflict of interests management...	1.1
▶ Management performance	1
▶ Trading strategy	1.15
▶ Market penetration	1.15
▶ Return rating	1.75
▶ OVERALL CHECK RATING	1.18

CHECK-ANALYSE

SUMMARY

- ▶ An algorithmic swing trader with a decade of strong performance.
- ▶ Performance disclosure to BaFin by means of “account inspection and bank documents” according to company information
- ▶ Supply trading system aimed at responding flexibly to the market and minimising risks
- ▶ Excellent transparency towards investors and full documentation for every trade
- ▶ Investor maintains full control over their trading account at all times
- ▶ WINBRIDGE has binding contractual obligations to respect strict external (BaFin, German Banking Act (KWG) audit) and internal compliance rules
- ▶ Significant investment by management, according to information provided – alignment of interests
- ▶ Risk exposure agreed individually with every investor

to comprehensive risk reviews. Evidence must also be kept that these mandatory checks are being adhered to and conducted effectively.

WINBRIDGE has successfully provided this evidence! CHECK has not yet found any similar authorisation for other market participants in foreign exchange trading in the context of asset management.

Additional tightly knit controls

The client’s trading account with the custodian bank is also subject to the supervisory authority of the financial markets regulator BaFin in Germany and the self-regulatory organisation SRO in Switzerland, which is supervised by the financial authority FINMA.

The new Financial Services Act (FINIG) which came into force in Switzerland on 1 January 2020 also expands the scope of financial supervision: all asset managers, including WINBRIDGE AG, are now covered by the Swiss financial market supervisor FINMA. These controls are an advantage for investors, because

FOREIGN EXCHANGE SPOT AND FUTURES TRANSACTIONS

Performance and consideration are exchanged immediately: forex dealers carry out over-the-counter transactions worldwide between banks, asset managers, pension funds, hedge funds, large companies and other banks. Spot transactions are completed by banks on behalf of their clients as a broker with the right to act as principal. Financial instruments, on the other hand, are used both for hedging and for speculative purposes. With financial instruments like forwards, options and CFD, the timing of performance and consideration depends on the terms agreed. WINBRIDGE generally trades by means of spot transactions, so there is no risk of having to exit a (favourable) position on a fixed date in the future. However, financial instruments are an advantage if the intention is to lock in an existing trading gain by means of a parallel forward hedging transaction, e.g. with a contract for difference, or CFD.

the regulatory supervision helps to ensure that compliance, documentation and risk management are respected and performed systematically.

Importance of external, state supervision

Global foreign exchange trading is not governed by any centralised, government stock market authority, nor is it subject to any controls by international institutions. Trading rules are decided pragmatically and empirically among the banks, which sell currencies to their clients and buy them for themselves. Foreign exchange desks are at most limited by acknowledged trading practices, such as trading times. According to Euromoney, 10 global banks control some two thirds of the total trading volume.

In the past the market has been manipulated by traders at these banks, who colluded internally and timed their transactions to influence the fixing rates, with the effect of driving up these exchange rates; a practice known as front-running. At the same time these traders bet on the increase for their own account.

After being fined billions, the banks have established internal controls to combat this, as has the EU (code of conduct with 55 rules). The European Securities and Markets Authority ESMA, established in 2011,

was also appointed to supervise the investment banks and the brokers. In Australia this role is played by the ASIC, in the UK by the FSA, in Switzerland by the SFBC, in the USA the NFA, and so on.

Forex brokers active in Germany can also submit to an additional extensive audit by the BaFin. Its supervision entails strict requirements concerning cost transparency and documentation obligations. Brokers in Germany are also obliged to participate in the statutory deposit insurance scheme. In addition, a significantly broader deposit insurance scheme has been set up by the Association of German Banks. The choice of broker can therefore be of vital importance for investor security.

Regulatory gain over risk

WINBRIDGE management was able to demonstrate plausibly to the German supervisory authorities that the risks of its foreign exchange trading system made it suitable for authorisation. This shows that WINBRIDGE's risk management in particular is transparent and comprehensible. For this reason, WINBRIDGE was authorised to carry out foreign exchange transactions on behalf of its clients.

WINBRIDGE managers are therefore sufficiently competent and trustworthy to take investment decisions for their investors in the most liquid financial market in the world, the foreign exchange market. The authority reviews on a regular basis whether the internal WINBRIDGE control procedures to avoid risks and conflicts of interest are sufficient for the "orderly operation" of its managed accounts (BaFin).

Since the custodian bank where the accounts are held is also subject to full regulation, it is also obliged to ensure complete transparency and is directly accountable to the client.

II TARGET GROUP AND CLIENT BENEFITS

Appropriate and suitable

An asset management contract may only be signed with the investor in the form of a managed account contract to set up a securities trading account with WINBRIDGE when it is clear that the investors understand the WINBRIDGE trading system (appropriateness test) and are therefore in a position to judge whether this system is capable of meeting their investment objectives (suitability test).

Both the German central bank – the Bundesbank –

Major pairs		Cross pairs		Exotic pairs	
Currency pair	Volatility (in points per day)	Currency pair	Volatility (in points per day)	Currency pair	Volatility (in points per day)
EUR/USD	48,63	AUD/CAD	58,1	USD/BRL	461,93
GBP/USD	102,05	AUD/CHF	49,3	USD/DKK	292,1
USD/JPY	46,63	AUD/JPY	60,13	USD/HKD	61,4
USD/CHF	46,1	AUD/NZD	62,28	USD/ILS	175,03
AUD/USD	43,45	CAD/CHF	43,9	USD/INR	301,63
NZD/USD	47,48	CAD/JPY	52,28	USD/SEK	673,85
USD/CAD	54,3	CHF/JPY	51,97	USD/SGD	34,48
Avg.	55,52	EUR/AUD	97,48	USD/TRY	518,17
MAJOR CURRENCIES The major currency pairs have the lowest average volatility, compared with less frequently traded currencies. They are therefore well suited to momentum analyses and are more stable than exotic currencies (see column on the right). In addition, other currencies are less liquid and so the spreads on purchase are significantly wider.		EUR/CAD	73,6	SECOND-TIER CURRENCIES Currencies other than the main currencies have the greatest volatility. This can be very profitable, but it entails very high risks. Barriers to entry are also higher because the spreads are wider, and liquidity can be an issue when it comes to closing a larger position at short notice.	
		EUR/CHF	47,65		
		EUR/GBP	59,45		
		EUR/JPY	65,28		
		EUR/NZD	121,13		
		GBP/AUD	168,25		
		GBP/CAD	143,63		
		GBP/CHF	107,25		
		GBP/JPY	123,13		
		GBP/NZD	192,98		
		NZD/JPY	59,9		
		Avg.	86,19		
				Avg.	314,82

A warning is sent nonetheless

The art of the WINBRIDGE traders consists of keeping the total risk window for open trades so low that risky trades which may exceed a strictly defined loss limit are closed before a (higher) risk can occur.

This does also have the effect of limiting upside, but longer-term trades still generated sufficiently positive returns in recent years, with a much more modest risk.

Trading account: actively managed liquidity reserve

Whether investors are familiar with foreign exchange trading or not, they can withdraw money from their trading account or top it up at any time, if they wish to access liquidity or increase their chances of profits, for example. This means that the

and the BaFin carry out regular reviews to ensure that these appropriateness and suitability tests are performed and documented reliably. The process starts with a detailed asset management contract with WINBRIDGE Asset Management GmbH in Germany, which includes a clearly explained risk advisory section. This ensures that the WINBRIDGE traders are in a position of parity with regard to the investors, who understand these risks and can think about them and decide at any time whether they wish to continue accepting all or some of them or not. The asset management contract has two annexes, which describe typical risk scenarios, and defines the investor's specific investment guidelines, which are strictly binding for WINBRIDGE at all times. Clients can terminate this contract at any time without notice.

Warning signal for client account

If individual positions in ongoing forex trading should incur a loss of 10% or more (which has not been the case in recent years, according to the information provided), the investor must be notified forthwith. The investor must then decide whether to continue with the risks or not. Effectively, this may mean that the account is still ahead by 9% on balance in terms of committed capital, but the latest trades mean it is down by 1%.

committed capital is actively managed (in contrast to the passive custody of a current account).

All deposits are treated equally at the level of the master account.

Privileged market access is ruled out. All investors have a pro rata interest in the master account and can determine the amount of this interest themselves. This involves signing a binding agreement with WINBRIDGE as part of the asset management contract, which can be amended at any time.

All investors participate in the master account

The WINBRIDGE master account is the operating WINBRIDGE trading account, whose deposits are used by the WINBRIDGE traders for active forex trading. This account contains an individually agreed pro rata interest in all client trading accounts.

Investors transfer a partial right to dispose of funds on their trading account to WINBRIDGE, which uses these funds equally for all participating investors across the system. Solo mandates with individual trading strategies are not permitted, to ensure that all investors are treated equally. Individual strategies are also not compatible with the automated approach adopted by the WINBRIDGE swing trader.

However, investors can influence the share they have of the respective trades. Gains and losses on the master account are credited or debited from the client's custodian bank as soon as the foreign exchange transaction has been settled or the broker appointed by WINBRIDGE, a regulated trading firm in London, has repaid the capital.

WINBRIDGE has no direct access to the foreign exchange income. It is a trader and administrator, not an owner. It receives management and performance fees. The holder of the trading account remains the account holder and has unrestricted access to their actively managed securities account, after deduction of costs and carried interest.

III RISK MANAGEMENT AND TRANSPARENCY

Unique selling proposition: permanent transparency

Investors have a complete overview of their trading account balance at all times and can use the daily account statements from the bank and the broker to track the trading results. CHECK has seen client trading lists, which show that the results of the WINBRIDGE trading positions have been received by the clients and are fully documented.

Investors can track the effects of the WINBRIDGE trading strategy for every currency pair and every traded position. CHECK has not found an asset manager for retail investors in forex trading on the market to date with a comparable regulatory regime or anything like this level of transparency: a USP for WINBRIDGE.

No margin calls for private investors

There is no reference to any need to provide additional margin capital, because the new financial supervisory rules for private clients in Germany in effect since 8 May 2017 mean that contracts for difference may no longer be offered to retail investors, not even at the investors' explicit request. The WINBRIDGE asset management contracts still include the option of choosing higher risk transactions which may result in margin calls, but this no longer applies, unless institutional or professional investors are involved.

The supervisory authority has confirmed that this restriction serves to protect investors. The liability for additional payments inherent in contracts for difference means that investors could theoretically be faced with an infinite risk of loss. Regulations therefore restrict potential losses for private investors to the amount

of paid-in capital. "This restriction means that investors can take a conscious decision at all times on the portion of their total assets that they wish to expose to this risk. The restriction is therefore suitable for achieving its intended purpose", explains the BaFin.

Trading account separate from WINBRIDGE accounts

Of vital importance is the fact that the assets of WINBRIDGE have to be kept separate from investors' deposits. This is required by law and monitored by BaFin. WINBRIDGE manages the master account, which is directly involved in the foreign exchange trading, but may not use it for any other purpose. Management and performance fees are only deducted on the basis of the management contracts and with the approval of the custodian bank. Investors maintain full control over the trading account in their name. This ensures that any possible conflicts of interest are minimised, by which WINBRIDGE could be tempted to take inappropriate risks for its own advantage. As defined by WINBRIDGE, appropriate means that the risk limit, beyond which investors have to receive an additional warning due to current market risks (as required by legislation and the asset management contract) is not exceeded whenever possible.

The WINBRIDGE traders endeavour to stay below this risk limit all the time, so that there is never any need to issue an additional warning. The risk limit that triggers a warning (loss of 10% on the account) is mandated by the financial supervisor BaFin and relevant legislation. According to the information provided, this warning limit has not been reached in recent years, however, since the risk and money management of WINBRIDGE's swing trading, the overall exposure and the diversification policy have been set to reduce risks even further.

In the WINBRIDGE trading strategy the traders are conservative, not risking more than approx. 0.3% of the client investment volume per trade.

WINBRIDGE demands strict compliance

In the interests of clients WINBRIDGE employees have to commit to wide-ranging rules on transparency and good conduct and their compliance is audited regularly. They may not trade on their own account in parallel with client accounts, for example. "Front-running and betting with or against client transactions is strictly forbidden". All gratuities and payments from business partners have to be disclosed.

Incentives to take greater risks have to be avoided and performance-related fees must be appropriate

(the fees should not provide an incentive to take higher risks in employees' own interests). This means a fully performance-related fee is not appropriate. Payments from third parties, also for services to third parties, must be disclosed. "All managers and employees are obliged to disclose their accounts, securities accounts and personal transactions."

IV DETAILS OF THE TRADING SYSTEM

Forex – the ultimate market

Professional investors consider the foreign exchange market to be the pinnacle of active speculative trading. They are not interested in hedging future exchange rates for trade in goods and services, but in the right timing for the sale and purchase of currencies. They profit (or lose) on the price differences between buying and selling. The interesting feature in comparison with other kinds of price speculation is that it is possible not only to bet on certain trends, but that in forex trading any trend, up or down, can be used to optimise returns.

The trading perspective focuses on the trend as such, not on whether it is trending higher or lower (as is often the case with shares). Since exchange rates fluctuate less in absolute terms than share prices, for example, forex trading is generally said to be less risky. However, to derive profits from these smaller fluctuations, forex traders use leverage (WINBRIDGE up to a maximum of around 30 times), which increases returns, but also the risks.

Forex trading – purely financial, no real assets involved

Currency markets basically reflect changes in the value of freely tradeable currencies from imports and exports of goods and capital. They are also influenced by the decisions of central banks, hedge funds and political, financial or economic crises. As states compete economically with one another, economic developments prompt them to intervene in foreign exchange markets.

The price and stability of a currency can have a decisive impact on the commercial power of a nation. With an average daily volume of around USD 5 trillion, an average of 25 billion USD currency pairs are traded in 20 hours of trading. That is USD 461.6 million per hour and nearly USD 7 million per second. Nobody has an overview of these transactions and their effects, much less control them or perform any fundamental classification or analysis. 65.5% of the currency pairs involve

the main currencies USD, EUR, JPY, GBP, AUD, CAD and CHF.

Why only major currency pairs?

Traders agree that the risks of trading in the main currencies are much lower than for other, second-tier currencies (Turkish lira, Brazilian real, Mexican peso, see box on p. 4), which are more risky if only because the spread between buy and sell prices is much wider. The spread represents the fee that has to be paid to the broker to execute the buy or sell order. For most of the major currency pairs to which WINBRIDGE restricts its trading the spreads are very narrow. Economies of scale apply here: the bigger the trading volume, the lower the spread (and vice versa). That also means that the bigger the trading volume, the lower the risk of not being able to sell quickly enough (see flash crash risk).

Deep liquidity – guarantee for a functioning marketplace

FLASH CRASH RISK

The foreign exchange market is generally considered to be the biggest and most liquid of the financial markets. Automated trading systems, New Year holidays and a quarterly report showing that Apple's revenue in China had collapsed, for example, were enough to cause within minutes an "unjustified" mass flight into Japanese yen. Within a few minutes at the beginning of 2019 the price of the main currencies USD and EUR fell so fast against the yen that even the algorithms of the computerised trading systems were unable to find buyers fast enough to exit from losing positions. Traders had speculated on the yen falling or staying flat against other currencies, which would rise accordingly (e.g. AUD, because China, the biggest importer of raw materials from Australia, would be a source of strong demand for this currency). As the traders and institutional investors returned from their New Year holiday they realised their terrible mistake and incurred substantial losses. As other currencies fell (USD, EUR, AUD...) automated sales triggered a rout, which had the effect of rapidly driving up the yen. At the same time WINBRIDGE closed with a gain of 1.3% (see performance chart on p. 8). Conclusion: Flash crashes show how risky margin calls can be if open positions which turn out to be going in the wrong direction cannot be closed in time. Margin calls are ruled out for private investors at WINBRIDGE. The WINBRIDGE trading system has the foresight of including a draw down of around 5% (reduced leverage), which enables it to absorb extreme short-term fluctuations until the exchange rate has recovered again.

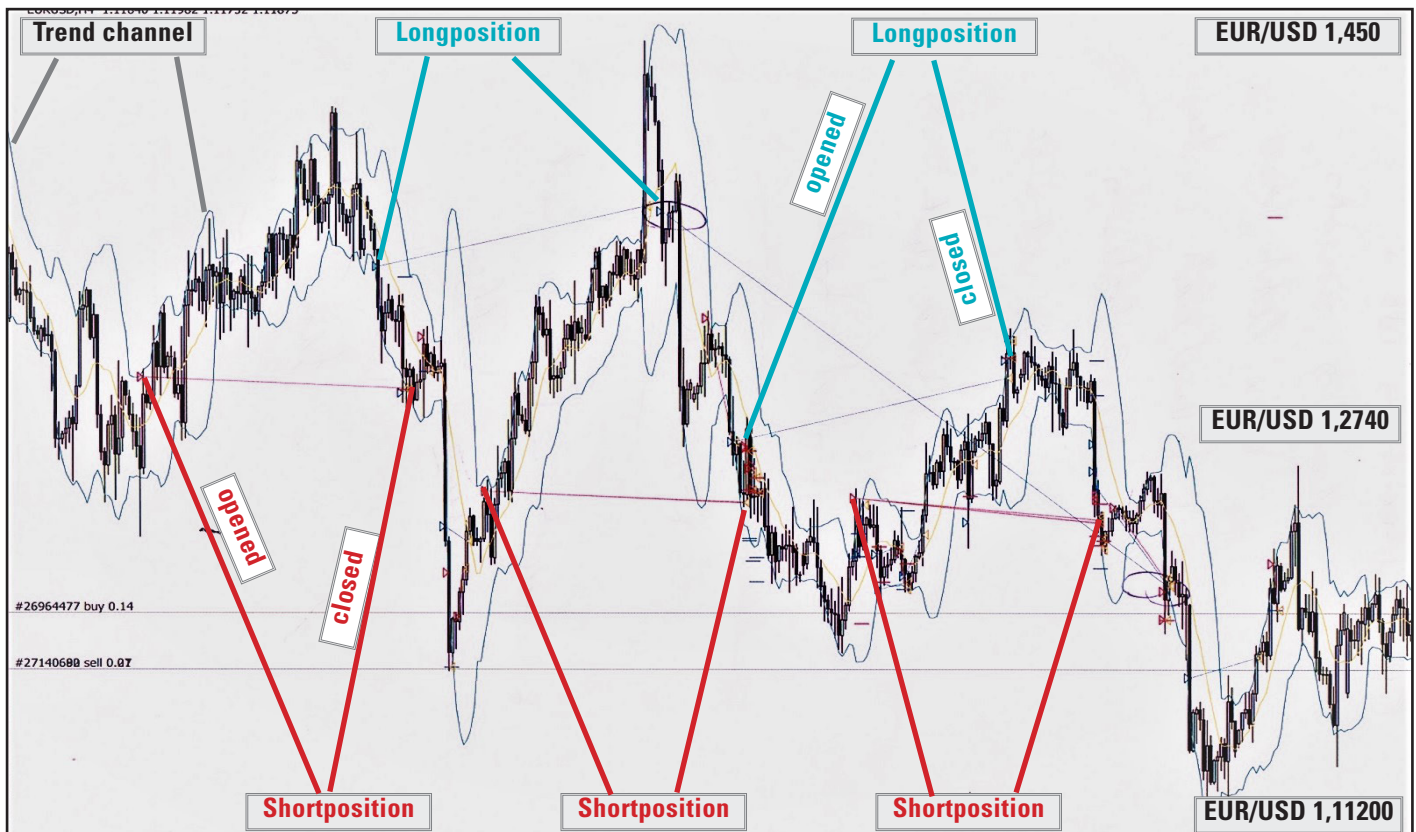
The outstanding advantage of global forex markets is their liquidity. Like all markets, foreign exchange markets depend on there being demand/buyers to match the supply/sellers. A daily trading volume of around USD 5 trillion generally ensures that there is sufficient supply to cover demand and vice versa (i.e. both willing sellers and buyers).

And here too, the rule is: if demand drops, the price goes down! And vice versa. This is what happened in Japan in January 2019. The USD fell by several yen and the EUR by 6%. This catapulted the price of the yen skywards. Supplies of this currency became

Positions of around EUR 2.5 trillion were traded. This accounts for around half the total daily trading volume of all currency pairs. If there is now a shortage of demand from buyers, the price of these currencies falls within minutes. And all the instruments intended to mitigate risk only worked once sufficient buyers had been found. Until then, the other currencies were in free fall and caused many insolvencies.

Controlled leverage

The leverage obtained by borrowing is the main driver



Swing traders at work: The currency pair EUR/USD was traded in the period from 07. 02. 2019 to 06. 05. 2019. The red lines starting with the small triangles show the beginning and end of short trades; the blue lines at the top of the chart show the long trades. The chart shows clearly how in these examples the algorithm is fixed on more long-term trades, as it is intended to, i.e. it fairly persistently picks up on a position and then closes it again after 2 to 3 weeks. In this month the swing trader achieved a positive performance of 2.7%.

scarce and demand for the other currencies fell at the same speed.

The result: the “carry trade”, a favourite of forex traders with an appetite for risk, which consisted of borrowing in yen (where interest rates had been at zero for a decade) and investing in currencies with high interest rates (e.g. Turkish lira or Australian dollars) ended in a fiasco. The short-term loans (as are common on foreign exchange markets) had to be repaid in yen, which were now much more expensive. This was exacerbated by leverage of up to 100 times equity (e.g. EUR 10 deposit for a credit of EUR 1,000).

of excess returns in forex trading. This gearing effect makes it possible to generate large gains (or losses) from a small down payment. The accuracy of the trading strategies used and the associated know-how of the traders are therefore of vital importance. Mistakes can have far-reaching consequences.

The leverage used by WINBRIDGE (maximum 30x) not only increases the potential gains, it also multiplies the scope for losses. Over roughly the past decade the WINBRIDGE management has been able to control this risk step by step by means of algorithms and generate positive returns throughout for its clients.

Typical, technical trading process

Minimum transactions in forex trading are generally for 100,000 units. With leverage of 30x this means that 3,333 units have to be posted as margin (collateral). The higher the leverage, the faster a trading position can (and will be) "closed out" by a broker, because it can fall "out of the money". If the rate falls by more than 3.3% in a short period, for instance, the trader can lose the margin if a predefined stop-loss (of 2.0%, say) does not intervene.

This can happen if in the hypothetical scenario the broker cannot find a buyer at a 2% loss limit (which may be the case in a rare flash crash, see box), but only at a loss of 4%. The debt is borrowed from the broker, who charges interest on the outstanding amount. The longer the position is kept open, the longer interest is paid. Interest income can also be earned, however, if the borrowed USD are sold against the EUR. Because the capital market interest rate for the US dollar is currently around 2.25% higher than for the euro.

Volatility is a key value driver – when does a trend begin and end?

Volatility refers to the range between the highest and lowest prices for a currency in relation to another major currency within a given period. Without volatility (e.g. if the EUR/USD exchange rate remained constant) it would not be possible to earn a profit, even with the WINBRIDGE Swing Trader system. High volatility is therefore desired, but it also increases risks as well as opportunities, especially in the event of very sudden and extreme price movements (see diagram of a flash crash). Swing traders look for regular patterns when certain high and low points are reached within the range by which an average price fluctuates over a period of, say 200 days. These intersections are

HOW DO EXCHANGE RATES WORK?

Example: the exchange rate 1.3520 for the currency pair EUR/USD means that 1.3520 US dollars have to be paid for 1.0000 euro. In other words, EUR 1.0000 is worth USD 1.3520! The system applies accordingly to all other currency pairs. Currency pairs with a consistently high volume and the US dollar as a partner are known as major currency pairs, or "majors". Examples: EUR/USD (euro / US dollar), GBP/USD (UK pound sterling / US dollar), USD/CHF (US dollar / Swiss franc), USD/JPY (US dollar / Japanese yen), USD/CAD (US dollar / Canadian dollar), AUD/USD (Australian dollar / US dollar). Illiquid, rarely traded currency pairs are known as exotic currency pairs, for which the spread between the buy and sell rate is much wider. Examples include the Danish krone, the South African rand or the Turkish lira. WINBRIDGE does not trade in these currencies.

weighted by the algorithm, compared with many past permutations and their potential to become a trend is analysed, until a buy and sell decision is made to the broker automatically.

Since the trading units (lots) are predefined, the buy/sell decision can only take place within these ranges. So if the price breaks through the high points of an emerging variation range (trend channel) to the next higher point and at the same time the low points on the lower line of the trend channel are also broken (forming a stepped zigzag line), then the algorithm identifies an upwards or downwards trend. In a long trend the following high points are higher than the previous ones, AND the following low points are also higher than those earlier. This represents a key trend signal.

CURRENT NET PERFORMANCE OF WINBRIDGE MANAGED ACCOUNTS IN PER CENT FROM 31/07/2021

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2010	5,2	-0,8	10,0	4,6	7,3	8,4	2,9	2,0	-0,4	1,4	9,6	-1,6	57,4
2011	-5,6	4,4	4,4	-5,2	8,2	11,5	37,8	-42,3	30,4	7,6	6,9	2,2	43,7
2012	3,7	9,4	2,9	0,9	-8,1	-4,2	-5,4	-3,3	10,2	2,3	-4,3	10,5	12,5
2013	29,4	-0,8	1,2	3,1	7,8	-0,7	0,7	1,3	-6,2	1,4	2,7	2,8	46,8
2014	1,7	-4,7	2,6	0,4	4,9	-5,7	10,0	-2,9	8,8	-5,6	0,7	5,8	14,7
2015	-18,2	7,4	8,8	-4,2	9,4	2,9	6,2	8,1	0,6	1,4	8,3	-1,3	23,0
2016	6,9	0,3	-2,4	3,5	5,3	1,4	0,7	1,1	2,4	3,2	0,7	1,9	27,6
2017	-0,2	-0,4	1,7	1,1	-0,3	-1,5	-1,2	-1,1	1,8	2,2	0,8	1,2	4,1
2018	1,6	1,8	-0,3	1,7	1,6	0,8	1,1	1,6	0,9	1,3	1,8	0,4	15,2
2019	1,3	2,7	-0,5	4,6	0,4	0,3	-2,3	0,4	0,6	1,6	0,4	0,2	9,9
2020	-1,9	0,2	-11,3	-2,6	9,2	8,6	2,7	0,8	1,8	3,1	2,4	-0,3	11,8
2021	1,3	2,1	5,4	2,3	1,2	-0,2	0,8						13,8

"The performance is a cross-section of all the managed accounts and may differ significantly from that of individual accounts. We do not trade – not even on request – in currency pairs that are supported by ongoing central bank measures or that are subject to a minimum exchange rate or the European Exchange Rate Mechanism II (ERM II), like the Danish krone, which is tied to the euro. The difference between the annual results shown and the total of monthly profits is due to the reinvestment effect. The results shown are net of all fees (net performance). The managed accounts mentioned are denominated in CHF, EUR and USD." Source: Winbridge

Other factors must also be present before the swing trader opens or closes a currency position.

Plausibility of the business model

CHECK has ascertained several times in the course of site visits that the trading system identifies trends intelligently and comprehensively under the ongoing control of the experienced WINBRIDGE forex trader, that it opens positions in several currency pairs in parallel and that sufficient trend signals had materialised for the algorithm.

Exits are also completed on a very precise basis. During a recent site visit in Q1 2020 (in the first week of February) many EUR/USD long trades were still open that were based on a stronger EUR, and at the same time the system completed numerous short trades against the EUR, which were each closed successfully. At the end of the month, at the latest the end of the quarter, it then becomes clear how all the trades have performed in aggregate (longer traders cannot be netted at this point because they have not yet been closed). To date the swing trader trades have always generated a significantly positive return, generally at least (with one exception) in high single figures, mostly in double figures!

Markets drive (or reduce) volatility

If demand is weak and does not exceed average trading volumes there is not much movement on foreign exchange markets. This produces a sideways movement (Section A). There is no real change in the trend. But as soon as market participants decide to buy or sell more, prices start to move and the range of variations increases (Section B). For the swing trader's algorithm this means that the width of the trend channel, as defined by the standard deviation, starts to go up, which increases volatility and so the probability of trading signals.

In the beginning (Section A) the candles are short (each candle represents a time interval of e.g. 4 hours). In Section B more and more market participants become active. Prices start to go up and ever more mar-

ket participants follow this signal. Prices continue to rise, the candles become longer and volatility goes up.

In Section C there are very wide price fluctuations within a very short period. The volatility is indicated by "Bollinger Bands" (outer lines, named after a financial expert who identified them on the basis of the standard deviation of a price curve). If they are close together, then volatility is low. Volatility goes up as the bands diverge. In the middle is the curve showing the statistical mean, which is always equidistant from the outer lines. If the bands diverge, then volatility is high, and vice versa. It is a function of the standard deviation of the individual candles. WINBRIDGE swing traders also use this instrument to analyse trend signals.

0.3% of client investment volume per trade

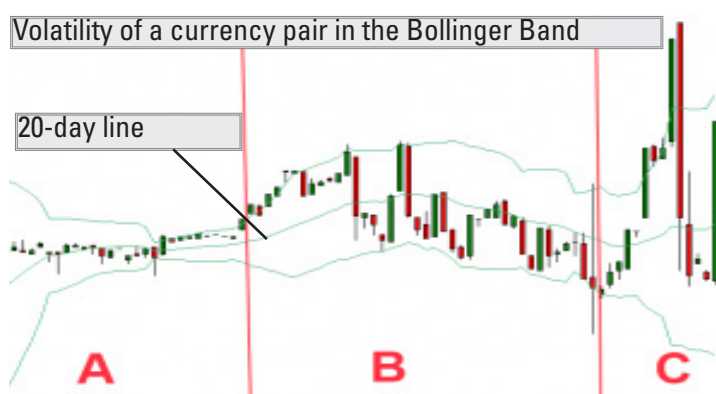
Long-term analysis of both successful and unsuccessful traders has shown that the key success factor is not the number of winning trades, but the factors, "maximum risk" and optimum "risk-return ratio". Only when the traders have defined a maximum risk of loss for all their trades AND ALWAYS STICK TO THIS LIMIT do they have a chance of long-term success. This maximum risk is additionally defined by the percentage of capital committed in relation to the total equity available on a trading account.

Examples of trades for higher and lower risks

A trader that risks 10% of their capital per trade and has a starting capital of EUR 10,000 ends up with capital of 3,874 after 10 losing trades (10% of the respective starting amount; first EUR 1,000, then EUR 900, then EUR 810,...). A trader who only risks 2% of capital per trade still has EUR 8,337 after 10 losing trades. Whereas higher-risk traders need to earn 2.58 times their reduced stake in order to recoup their starting capital (around 260%), a conservative trader only needs a few trades to make good their losses (around 20%). WINBRIDGE does not generally bet more than 0.3% of client investment volume per trade (and is still successful!).

Performance from optimised risk-return ratio

WINBRIDGE also achieves its positive performance by strict compliance with another vital risk management factor, namely the optimum RISK-RETURN RATIO (RRR). An investigation by a forex specialist of 50,000 live trading accounts in 2009 revealed that around 60% of the trades were closed at a profit (quoted by Pipsologie Gil Paz). However, the remaining 40% of losing trades lost about twice as much on each trade on



average. This is the result of an inadequate RRR.

For the currency pair EUR/USD alone, the positive trades closed with a cumulative value of 65 pips (a pip can have a value of USD 1,000). But the losing trades ended up down by 127 pips. The explanation for the discrepancy lies in the unfavourable risk-return ratio, because if a "take profit" order is given to the broker to close a position (i.e. sell) at +5 pips, then lots of small trades are closed at a profit. At the same time the stop-loss limit is often set at -200 pips, however (in order to "wait out losses for as long as possible", for example). In this situation a single losing trade that does not recover "as expected" is enough to make the overall performance negative.

Technique of profit-taking and hedging – application of the RRR

The important thing is therefore not only that the trades have a positive performance, but of how much. If on the other hand the maximum risk is set differently, at 5 pips, for example, and the take-profit limit at 200 pips, it can happen that some trades are closed too early (e.g. 6 out of 10), because the stop-loss limit was reached "too early". But the remaining four trades that break out upwards in a long position recover the sustained losses. Even at 20 pips a performance of 80 pips is achieved with four successful trades. Deducting 30 pips for the losing trades means the net result is 50 pips. Now the stop-loss limit is adjusted for the 4 successful pips.

In our example two trades are now closed due to changes in market prices, because they reach the new +20 pips stop-loss limit of -5 pips. This means the previous gains, less the small losses, are now hedged! The remaining two trades in our example continue their positive performance of 20 pips before being closed in their turn, possibly because the analysis of the trend channel shows that the algorithm has flagged up a break-out downwards. The net balance in our example is +120 pips with a maximum risk of 50 pips (10 times -5). Examining this example shows how even with a loss limit of 0.3% equity per trade (standard practice at WINBRIDGE), making parallel use of trends in several currency pairs makes a return on equity of 1.5% per month realistically achievable.

Hedging profits

Another integral part of the swing trader's system is that profitable positions are hedged (automatically) once a defined minimum performance has been reached. So the daily target (20 pips) or even the weekly profit target (150 pips) can sometimes be

achieved within a few hours (the internal benchmark for the annual target is currently a net return to investors of 15%). This is achieved by hedging existing profits; by selling part of the position, opening an opposing position for the same amount and/or adjusting the exit threshold (trailing stop-loss order). In this way the WINBRIDGE algorithm can hedge existing profits and so reduce the performance risk autonomously. The potential for further upside is maintained at the same time.

Pursuit of several strategies simultaneously – a sophisticated trading system

Experienced traders like the WINBRIDGE managers have developed sophisticated trading strategies that enable them to make profitable trading decisions at a reduced risk. Using their own software they have been developed in house over the course of ten years and have been tried and tested in practice. The active algorithms are continuously refined in cooperation with software specialists. One element of the WINBRIDGE system is simultaneous trading in several currency pairs. The aim is to exploit interdependencies (positive and/or negative correlations) between the different currency pairs. So if a strong USD triggers a trend, it is often followed by other currencies that depend on the USD.

Setting the size of trades – Application of risk management

In addition to volatility, which is a key source of signals for the WINBRIDGE swing trader, the automatically managed system also includes adjusting the optimal size of trades (lots). When risks increase the lot size is reduced, for example, and is increased as the upside potential goes up. Both components form an integral part of risk management. The lot sizes are adjusted downwards or upwards in the course of trading, depending on whether a trading position is going in the "wrong" direction or the "right" one. Combating the temptation to increase the stake when a losing trade is realised, the WINBRIDGE system successively scales down the position as losses become imminent, but sticks to the strategy, adjusting it back up again if the trend materialises in the forecast direction. Solid results have been achieved with this system in recent years.

Automated trading decisions – a USP for WINBRIDGE

In contrast to the classic trend-following systems, the idea of the swing trader system is to identify trends at

a very early stage. Because it can take several days or even weeks until a classic trend provides “unequivocal” signals (some 60% to 80% of private forex traders suffer losses). The WINBRIDGE trading software has been refined over the past decade in order to automate the transmission of profitable trading decisions to the broker as far as possible. This is achieved by combining complementary trading strategies and applying them at the same time. They include the three main strategies: “swing”, “trend” and “breakout”. In different market situations these aim to interpret “contradictory” signals “better” than other systems.

Depending on the market, an internal rating system is used to weight the applied strategies dynamically, for example. A larger portion of the overall trade is allocated to the strategy with the better profit-loss ratio. One great advantage for the trader is that the signal processing is controlled by the algorithm and so takes place without any arbitrary intervention by the trader.

No trader or trading team can keep an eye on all the many factors that influence the various currency pairs (around 28 major currency pairs alone), assess and weight them quickly, look out for the impact of real economic factors and predict the effects on the criteria of their own trading strategy. Nevertheless, the trader controls the automated process and if the market “overshoots” in a way they think the algorithm cannot process quickly enough (or a flash crash could occur), they can intervene and close positions that appear to be excessively risky (or take them out of the market).

In phases of extreme risk the WINBRIDGE trader closes all positions and exits the market temporarily (as was the case with the Brexit referendum in 2016 (see flash crash risk).

V PERFORMANCECHECK

WINBRIDGE’s historical trading performance

Looking more closely at the historical WINBRIDGE trading performance, when the WINBRIDGE managers Daniel Kuster and Daniel Frei offered their asset management services on their own account to trusted clients in a private network with another partner, it is noticeable that the trading results of earlier years are much more volatile than in recent years. CHECK investigations revealed that the leverage, the lot sizes and the trading strategies were all riskier at that time. In this period the volatile outliers in the trading system were systemic (August 2011 – 42.3%). Nonetheless, for ten years they succeeded in generating (very) positive full-year results (July 2011 + 37.8%).

The overall impression gained from observing the trading activities and analysing the written and oral in-

formation provided by the WINBRIDGE management is that the business model is plausible. Although there is no audited track record, the learning curve towards a minimum-risk trading strategy is presented plausibly. Here it can be said that the WINBRIDGE swing trader has “learnt”. It has been adjusted towards a lower-risk trading strategy. The result is that notwithstanding the long-term mean, annual results can now sometimes be in single figures (2017: +4.1%). The following year saw a performance of 15.2 %. Strong results were recorded for the years 2010, 2011, 2013, 2015 and 2016. To the extent that WINBRIDGE’s client base is widening and becoming more risk-conscious, the risk appetite and tolerance of losses is declining, according to the company.

VI CONTRACT TERMS – FORECAST

Investment structure – Costs – Performance fees

The client appoints WINBRIDGE to manage part of their assets on defined contractual terms by setting up a trading account. Clients have no say in the management of their investment. They “invest” in or speculate on the trading know-how of the WINBRIDGE managers and potential double-digit annual profits. This speculation has been successful, achieving a return over the past nine years up to 2017 of 4.2% and up to 2019 of 9.2% (NB: historic trading results have only partially been verified). The tenth year saw almost a double-digit percentage return.

These results are all the more impressive as they are net of management fees of 0.25% per quarter and 0.15% commission (30% performance fee is only payable when the previous high-water mark for the account has been exceeded). Investors pay a 5% upfront fee when signing the contract. The investment is not for a fixed period. Investors are notified of the principal investment policies and the costs in two annexes to the contract. A detailed asset advisory memorandum including a full explanation of the risks, which clients must demonstrably have understood, ensures that investors are aware of the main risks of foreign exchange trading using leveraged financial instruments. WINBRIDGE carries out a suitability check to ensure that the investor’s savings objectives are compatible with the aims of foreign exchange trading.

Which brokerage system does WINBRIDGE use?

In addition to market makers, which offer prices of their own, STP and ECN brokers play a key role in foreign exchange trading. Experienced traders like WINBRIDGE prefer their market models. STP brokers

forward orders from their clients directly to a pool of liquidity. This pool consists of banks, brokers and other financial institutions. STP stands for straight-through processing. In this case the broker is only paid for receiving and forwarding the orders. STP brokers live from commissions alone and pass on the spreads from the liquidity pool directly to their clients.

WINBRIDGE capital under management – Outlook

Trading volumes originally started with six-figure sums, after the management had worked for several years as a service provider for third parties. In 2012 the transaction volumes reached seven-figure amounts. In 2014 they rose to eight-figure amounts. In the years ahead the management anticipates that its equity capital under management will reach nine figures.

Proof of concept

In order to understand the efficiency and authenticity of WINBRIDGE's forex trading strategies, CHECK spent two days inspecting active WINBRIDGE trading and other aspects. The details of the swing trading strategy remained a commercial secret. But CHECK was still able to gain a rudimentary grasp of how a trading system that has grown over the course of a decade has remained successful and become more risk-sensitive. The algorithm supports the decision-makers, whose great experience and dedication play a key role. In addition, new strategies are being devised all the time, back-tested implemented gradually and rolled out when they have proved their worth.

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Summary

The result is a convincing impression of the competence, compliance and trustworthiness of WINBRIDGE management and their approach to business. The information about their current business practices adds up to a coherent whole. For past results we refer to the wide-ranging BaFin assessment, which the company says required the comprehensive disclosure of "bank and account documents". The expectation of a positive performance towards a double-digit target return, supported by sophisticated risk management, seems plausible.

CORRELATION BETWEEN CURRENCY PAIRS AND DAX

red = negative correlation, green = positive correlation The swing trader makes use of the fact that certain events cause a positive correlation with related currency pairs

	EURUSD	USDJPY	GBPUSD	AUDUSD	USDCAD	USDCHF	NZDUSD	[DAX30]	[DJ130]
EURUSD		+8	+7	-64	+10	-97	+5	+20	-80
USDJPY	+8		-53	-69	+74	-13	-65	+66	-6
GBPUSD	+7	-53		+24	-83	-12	+49	-71	-28
AUDUSD	-64	-69	+24		-56	+68	+52	-27	+65
USDCAD	+10	+74	-83	-56		-8	-68	+62	+6
USDCHF	-97	-13	-12	+68	-8		-5	+3	+89
NZDUSD	+5	-65	+49	+52	-68	-5		-5	-23
[DAX30]	+20	+66	-71	-27	+62	+3	-5		+94
[DJ130]	-80	-6	-28	+65	+6	+89	-23	+94	

IMPORTANT NOTICE

CHECK rates the cost-effectiveness of capital investments. Even a positive rating is no guarantee against the risk of losses. The investments examined and rated here are not safe deposits in the same sense as a covered bond, a fixed-term deposit or a savings account. CHECK analyses information about the offering at the time of the current issue. CHECK-Analyse is not a "securities services provider" and CHECK is not involved in the distribution of financial products. CHECK does not provide "financial analysis" within the meaning of Section 34b Securities Trading Act (WpHG).