

ZKB Investment Building Block – Structured Product with Capital Protection on the ZKB Dynamic Asset Class Index



Content

Introduction	4
ZKB Dynamic Asset Class Index	6
Investment Solution	11
Redemption	12
Opportunities and Risks	16
Contact	18
Annex – Index Guidelines	19

These products constitute Structured Products in Switzerland. They do not constitute collective investment schemes in the meaning of the Swiss Federal Act on Collective Investment Schemes (CISA). They are not subject to an authorisation or supervision by the FINMA and investors do not benefit from protection under the CISA.

Introductions

Key Data

The ZKB Investment Building Block is a Structured Product on the ZKB Dynamic Asset Class Index.

- 1. Minimum repayment for example of 90% of the Denomination at expiry, guaranteed by Zürcher Kantonalbank (Rating S&P: AAA, Moody's: Aaa, Fitch: AAA)
- 2. Participation in the ZKB Dynamic Asset Class Index offers:
 - Diversification
 - Trend following
 - Risk control
- 3. Maturities from 5 to 40 years are possible
- 4. Flexible product, suitable in any life phase

What does asset allocation stand for?

The active allocation of investments across different asset classes is known as asset allocation. Typically, assets like equities, bonds, real estate and currencies are chosen to build an investment portfolio. Next to different risk/reward profiles, these assets differ with regard to liquidity, accessibility, transaction- and management costs. Equities, for example, can be bought and sold in the same quality every day at the stock exchange. The handling takes place in a securities account and is fast and efficient. Accessibility, purchase and sale of real estate on the other hand, follow a different pattern.

The selection of the asset class is considered to be the most important success factor. The decision whether to invest in bonds or equities is more important than chosing stock A over stock B.

What are the different approaches?

The different approaches to asset allocation differ for example by the determination of the weights for each asset class. The weights can either be determined by a quantitative, computer-supported model, or they can be assigned by an expert committee.

In the strategic asset allocation, the general long-term orientation of an investment is determined. In order to react to short-term market changes, the weights are adjusted in the tactic asset allocation.

A combination of tactic and strategic asset allocation is the so-called Core Satellite approach. The basic investment philosophy is set in the Core, the finetuning with single investments occurs in the Satellites.

Further criteria of asset allocation can be diversification, sustainability, yield and risk tolerance.

How is asset allocation implemented in practice?

The implementation of asset allocation differs by the following criteria:

Investors can take the investment decision either by themselves, whereby help from an external source can be acquired, or the process can be delegated altogether.

The instruments used to represent the different asset classes can be single securities such as shares or bonds, respectively investment funds and Tracker Certificates mirroring the individual asset classes.

The repayment of the invested capital at maturity can be (partially) protected by a third party or the asset allocation is carried out without such an additional protection.

ZKB Dynamic Asset Class Index

Fundamental values of he ZKB Dynamic Asset Class Index

The past 10 years were on the one hand characterised by steady market phases, on the other hand by phases that were extraordinarily volatile. For many investors, this implied that earnings from good market phases had to be given up during corrections, which was emotionally stressful for investors.

To generate sustainable returns and to avoid emotion-based investment decisions, the ZKB Dynamic Asset Class Index employs a model-driven approach to realise an optimized asset allocation. The ZKB Dynamic Asset Class Index combines three elements:

- Diversification
- Trend following
- Risk control

These three values are generally not subject to short-term changes, but can be used in the long run and are characterised by their lasting attractiveness.

The ZKB Dynamic Asset Class Index focuses in the asset classes on liquid instruments that can be managed homogeneously. This makes the index more efficient.

Diversification

Diversification describes the dispersion of investments in order to avoid concentrated risk due to large positions in single investments.

The ZKB Dynamic Asset Class Index divsersifies on two levels. On the first level, three different asset classes are selected: equities, commodities and bonds. On the second level, the ZKB Dynamic Asset Class Index invests into single assets of the respective asset classes instead of investing into an aggregated index. In equities, investments are made into eight single country indices. In commodities, 21 different commodity futures are available, such as crude oil and gold. In bonds, the index can invest into 10 different bond futures such as government bonds of Switzerland, Germany and the USA.

Chart 1: Diversification on two levels



Trends

Asset classes develop differently during the course of an economic cycle (see chart 2). Rising share prices are mainly driven by expectations of economic growth (cyclical).

Commodity prices follow the actual demand. Prices for commodities increase after the boom is evident and are therefore somewhat delayed (post cyclical).

When growth tends to slow down, central banks regularly lower key interest rates in order to stimulate economy. Combined with lower demand for capital, interest rates fall and prices of bonds with fixed coupons increase (anti cyclical).

Source: Zürcher Kantonalbank

To follow the trend is the intuitive behaviour of many investors. Usually, good performing assets are increased while the ones with poor revenues are sold. The danger herewith is that buying and selling occur to slowly. Consequently, relatively high entry prices are paid and relatively low exit prices are realised. Furthermore, the decisions are often accompanied by fear and greed, both of them poor partners to form a decision.

The ZKB Dynamic Asset Class Index adjusts the asset allocation on a monthly basis. A model calculates the optimal composition of the index and automatically carries out the adjustment. The model complies with intuitive investment behaviour, but adapts it faster and more efficient.

During a typical economic cycle, the weights of the single asset classes change as follows (see chart 3):

- In a growth phase, the product invests in equities and commodities.
- At the first sign of economic cooling, the weight of commodities is increased at the expense of equities.
- At an upcoming recession, equities and commodities are reduced in favour of bonds.

Risk control

Risk control is the top priority of the ZKB Dynamic Asset Class Index. The weight of a single investment is therefore based on its potential return as well as on its potential risk. An investment yielding an average return with a low risk is preferred over an investment with high returns und high risk. No investment can overrule the primacy of risk control.

Assets with high fluctuations are generally considered risky. The fluctuation of an asset is also known as volatility. The volatility of an asset usually shows a typical pattern: prices increase continuously, relatively slowly and constantly, in the case of stocks sometimes even over several years. The volatility is low. If there is no further room for increase, prices tend to move sideways. In this phase, extreme price changes towards both directions are possible and volatility is increasing. In the course of the correction, volatility reaches its peak before prices reach their floor. Price fluctuations and volatility decrease.



Chart 3: Asset Allocation



Investment Solution

To realise the risk control, the ZKB Dynamic Asset Class Index calculates the current volatility of each index member and reduces investments that are above the target volatility. The target volatility is set at a low 9%. Because the ZKB Dynamic Asset Class Index does not tolerate higher risk, the yield target ranks below the ambition to avoid losses. This way, earned profits are efficiently protected from losses and the index can return faster into the profit zone when markets recover: money that is not lost in the first place does not need to be recovered later on.

Thanks to the risk control, the index is designed for continuous and sustainable development. This way, the index is not subject to high fluctuations and losses are held as small as possible.

Chart 4: Volatility and market prices



Structured Product by Zürcher Kantonalbank

The ZKB Investment Building Block offers

- unconditional capital protection
- participation in the ZKB Dynamic Asset Class Index

Both features are realised by means of a Structured Product in an inexpensive and uncomplicated way.

Flexibility

The ZKB Investment Building Block combines the need for wealth protection with the need for return. Investors' general requirements with regard to their investments remain by large more or less the same in different life stages. Thanks to the longterm attractive underlying, the ZKB Investment Building Block can be universally used in different modifications. The necessary adaptions to changing life stages are realised in the structured product, i.e. by altering maturity and the level of capital protection. The product can be used as:

- an investment product
- instrument for asset formation
- as investment tool for saving premiums for 3a/3b products (in collaboration with an insurance company)
- as bridging between asset formation and capital consumption
- to use up capital
- as a flexible means to save money instead of repaying mortgages

The universal use of the ZKB Investment Building Block leads to a simplified management of assets as investors are not confronted with a big number of different investments. The different investments are solely a modification of a single building block.

Redemption

The repayment at expiry consists of the two components capital protection and participation.

Capital Protection

At expiry, Zürcher Kantonalbank guarantees the capital protection¹⁾ in the form of a minimum redemption. This minimum redemption payment is not attached to any conditions and will be paid in any case.

Chart 5: Payment at Maturity

110% Participation
Capital Protection 95% of Invested Capital
Source: Zürcher Kantonalbank

Participation

ï

12

Investors participate in the average performance of the ZKB Dynamic Asset Class Index. In order to calculate the average performance of the index, the change of the index level since issue is regularly, e.g. quarterly, observed. At the end of the Structured Product's maturity, the average of all observations is calculated in which investors participate (see chart 6).

Investors participate with a predefined factor (participation rate) above a predefined index level (strike price) in the performance of the ZKB Dynamic Asset Class Index.

ank Chart 6: Averaging



- Averaging observations
- Average Performance
 - Source: Zürcher Kantonalbank

Participating in the average performance of the index brings several advantages for investors:

- Investors are only marginally affected if markets collapse at the end of the maturity. The averaging can be considered as partial profit (or loss) taking on the investment and offers therefore a protection of realised profits.
- Thanks to the averaging, investors can achieve higher participation rates. Depending on the level of capital protection and the interest rate level, participation can also be above 100%.
- By averaging the performance, the market value of the Structured Product is stabilized.

Usually, the strike price is set at 100%, meaning that investors participate in an increase of the index starting from the initial level (100%, see chart 7a). However, it is also possible to set the strike price for example at 90%, hence investors already participate in the index performance starting form a lower level (90% of the initial level, see chart 7c). In such a case, even if the index decreases by 3% to 97% of its initial level, investors would participate in a 7% performance (difference to the strike price).

Example

The following charts 7a–c depict different variations of the product and underline the dependence of the repayment in relation to:

- Average development of the ZKB Dynamic Asset Class Index
- Participation rate
- Capital protection: the lower the capital protection the higher the participation rate
- Strike price: the lower the strike price, the lower the participation rate

Charts 7a and 7b show that the ZKB Investment Building Block can perform even better than a direct investment if markets increase and if capital protection is kept at a lower level. If markets fall, the capital protection shields investors from considerable capital losses in all scenarios.

¹⁾ Products with minimum redemption of 90% or more

Chart 7: Payoff profiles of different product variations at maturity



investment Strike price 100% Participation 110% c) 140 Block 130 ZKB Investment Building 120 110 100 Capital protection 90 Strike price 80 70 110 120 130 140 70 80 100 90 **ZKB Dynamic Asset Class Index** - Direct - Capital protection 90% investment Strike price 90% Participation 75%

Reporting

Zürcher Kantonalbank provides a detailed reporting for each single ZKB Investment Building Block. The reporting will contain among others the current price as well as the development of the product since issue. Further, the performance of the product since issue is derived and split into single performance factors, which will be explained in detail.

Based on this transparency, investors can at any point in time track the profit or loss of the investment as well as its success factors.

Taxes

For retail investors with tax domicile Switzerland, the implied internal rate of return from the capital protection component is subject to income tax at sale or maturity. The participation in the ZKB Dynamic Asset Class Index on the other hand qualifies as capital gain and is not subject to income tax for private investors with tax domicile Switzerland.

Risk Level



Product with 95% capital protection: Risk Level 2

Product with 90% capital protection: Risk Level 3

Sustainability Indicator

Zürcher Kantonalbank awarded a sustainability indicator to over 500 debtors and companies. Structured Products are not covered by the investment research. Therefore, Structured Products on the ZKB Dynamic Asset Class Index have no such rating.

The ZKB Dynamic Asset Class Index consists of equities, commodities and bonds. As the ZKB Sustainability Research categorically excludes investment in commodities, the ZKB Dynamic Asset Class Index would even with rating not be deemed sustainable as defined by the ZKB Sustainability Research (as per January 2012).

100 110 120 130 140

ZKB Dynamic Asset Class Index

- Capital protection 95%

70

70 80 90

- Direct

Opportunities and Risks

Opportunities

 Combination of protection and return The product follows clear rules that are applied by financial models. This prevents from emotion-based decisions in the portfolio.

Transparency / Product description / Reporting

For each ZKB Investment Building Block, Zürcher Kantonalbank provides a product reporting. This way, clients can obtain the price change of the product since issue as well as the explanation of the changes.

- Life Cycle Investment

Thanks to the possibility of structuring the product in different ways, the product efficiently addresses needs in different life stages.

Flexibility

The product can be offered in different variations. It is also possible to issue products with very long maturities. Depending on the current interest rate environment, different capital protection levels are possible. The participation rate depends on the maturity, interest rates at issue and the capital protection level.

- Strong local and trustworthy partner Zürcher Kantonalbank successfully issues Structured Products since more than 15 years. The issuer profits from its stable approach by abstaining from short-term trends. With a client-driven approach, Zürcher Kantonalbank successfully differentiates itself from its competitors.

Risks

– Liquidity risk

Zürcher Kantonalbank aims to provide a regular secondary market for the Structured Product. The liquidity of the Structured Product depends on the liquidity of the index members, which is among others also a selection criterion.

- Market risk

The value of the Structured Product is based on the value of the two components capital protection and participation. The indicated capital protection corresponds to the capital protection level at expiry. The product can trade below this level during its term. During the maturity:

- the value of the capital protection increases if interest rates fall and vice versa.
- the value of the participation component increases if the ZKB Dynamic Asset Class Index increases and vice versa.

– Issuer's Risk

Investors bear the risk of Zürcher Kantonalbank Finance (Guernsey) Ltd. as issuer. A Keep-Well Agreement with Zürcher Kantonalbank, Zurich, secures claims from the Structured Product.

Contact

Sales Structured Products Zürcher Kantonalbank Josefstrassse 222 8005 Zurich Tel.: +41 (0)44 293 66 65 E-Mail: derivate@zkb.ch

Annex – Index Guidelines ZKB Dynamic Asset Class Index

ZKB Dynamic Asset Class Index [DACI] (as of: May 11, 2012)

General Information

The ZKB Dynamic Asset Class Index [DACI] is calculated and published by Zürcher Kantonalbank (the "Calculation Agent"). It consists of a number of model-applied financial instruments, fees and other index constituents. The index is a so-called Excess Return Index. The index is regularly adjusted (usually monthly). The selection of investment and hedging instruments lies in the sole discretion of the Calculation Agent and is based on a model-driven approach. The objective of the index is to realise risk control in form of limiting volatility to 9% p.a. and generating returns by means of a trend following model. The index is calculated on a daily basis by the Calculation Agent and published on Reuters or Bloomberg. The Calculation Agent can delegate this task to a third party.

Index Components		Name Index component	Bloomberg	Max. weight
ZKB Dynamic Asset	Equitiy Indices	CAC40 [®] Index	CF Index	20%
Class Index [DACI]		DAX® Index	DAX Index	20%
		EURO STOXX 50 [®] Index	SX5E Index	30%
		FTSE® Index	UKX Index	20%
		Hang Seng® Index	HSI Index	10%
		Nikkei 225® Index	NKY Index	20%
		S&P 500 [®] Index	SPX Index	30%
		SMI® Index	SMI Index	20%
	Commodity Futures	Aluminium	LA Comdty	10%
		Сосоа	CC Comdty	10%
		Coffee	KC Comdty	10%
		Copper	LP Comdty	20%
		Corn	C Comdty	10%
		Cotton	CT Comdty	10%
		Gold	GC Comdty	20%
		Heating Oil	HO Comdty	10%
		Lean Hogs	LH Comdty	10%
		Live Cattle	LC Comdty	10%
		Natural Gas	NG Comdty	10%
		Nickel	LN Comdty	10%
		Palladium	PA Comdty	10%
		Platinum	PL Comdty	10%
		Silver	SI Comdty	10%
		Soybeans	S Comdty	10%
		Sugar	SB Comdty	10%
		Unleaded Gasoline (RBOB)	XB Comdty	10%
		Wheat	W Comdty	10%
		WTI Crude Oil	CL Comdty	20%
		Zinc	LX Comdty	10%
	Bond Futures	Canada Government Bond Future 10Y	CN Comdty	100%
		Euro-Bobl Future 5Y	OE Comdty	200%
		Euro-Bund Future 10Y	RX Comdty	100%
		Euro-Schatz Future 2Y	DU Comdty	500%
		Japan Government Future 10Y	JB Comdty	100%
		Long Gilt Future 10Y	G Comdty	100%
		Short Gilt Future 2Y	WB Comdty	100%
		US Treasury Future 10Y	TY Comdty	100%
		US Treasury Future 2Y	TU Comdty	500%
		US Treasury Future 5Y	FV Comdty	200%
	*The maximum weight of the individual assets	for 2-year US Treasury Futures is 500%. The p to a comparable level.	ourpose of this is to	bring the volatility
Calculation Agent	Zürcher Kantonal	bank, Zurich		
Selection Criteria	The Calculation A	Agent will compose the index sol	ely of financia	al instruments
	as listed under In	dex Components. The selection	of the investm	nent and
	hedging instrum	ants lies in the sole discretion of	the Calculatio	n Agent
Charles of Suralises				n Ayent.
Start of Index calculation	January 01, 2012			
Index start level	100; corresponds to index level t=0			
Index calculation	Index calculation	takes places on every trading da	у.	
Time of publication	The Calculation A	Agent publishes the official index	level on t on	the respec-
	tive following value day (t+1) using the closing prices of the previous day or			
	the last available closing prices respectively			
		size in g prices respectively.		

Place of publication	Reuters, Bloomberg, see also "Publication of data"
Calculation Method	Target volatility 9% p.a. The index level is calculated on each trading day t by the of the sum of all values of the individual index components.
	$I_{t} = \left(I_{t'} + \sum_{k} b_{t'}^{k} * FX_{t}^{k} * (F_{t}^{k} - F_{t'}^{k})\right) * G_{t}$
	where: I_{i} : Index level at date t I_{r} : Index level at the date of last index adjustment t': Any trading day t': Last date of index adjustment $b_{i'}^{k}$: Number of Futures k in the index at date t'. The number of Futures k is calculated according to the following formula:
	$b_{t'}^{k} = w_{t'}^{k} * \frac{I_{t'}}{FX_{t'}^{k} * F_{t'}^{k}}$
	w_t^k : Weight of Future k at date t' FX_t^k : Exchange rate of currency of Futures k against CHF at date s for s = t or t' (1 currency unit corresponds to FX_t^k - number of Swiss Francs) F_s^k : The Futures contract value of index component k, calculated as price of the Futures k at the date s in local currency multiplied by the contract size of the Future. a : Price G(1 - UFC) 108, 00, contract size = 1,000 Parrels
	e.g.: Price CL1 = OSD 108.00, contract Size = 1,000 Barrels $\rightarrow F_s^k = USD 108.00 * 1000 = USD 108'000.00 (Futures contract value), for s = t or t' Gi : Fee factor which represents a fee of 20 basis points per annum (act/360)$
	 Gr. Fee factor which represents a fee of 20 basis points per annum (act/360) The Calculation Agent determines the value of the index components to the best of its knowledge. For this purpose, the Calculation Agent uses next to

best of its knowledge. For this purpose, the Calculation Agent uses next to internal valuation models also valuations which are provided by external data suppliers.

In order to calculate the index level on the official end of day price of the index, the Calculation Agent uses a hypothetical portfolio whose value is scaled to 100 on the first day of index calculation. On all following calculation days, the index develops according to the performance of the corresponding portfolio where transaction costs due to portfolio adjustments are accounted for.

	The index components are solely compiled for the purpose of index calcula- tion. The index implies a hypothetical investment in the index components, however, the Calculation Agent neither intends nor requests an investment in the index components.			
Publication of data	The index level is daily published. The index composition can be enquired at the Calculation Agent and is published on the Website of the Calcu- lation Agent with a delay of 6 months. www.zkb.ch			
Change of index rules	The Calculation Agent can modify the index calculation methodology at its sole discretion.			
Key figures	CH Security Code: 14 717 802 ISIN: CH0147178021			

Disclaimer

Please note that all telephone conversations with trading or sales units of the Zürcher Kantonalbank are recorded. By calling this number you consent tacitly to the recording.

This document does not constitute an offer to buy or sell any security; nor does it contain the basis for a contract or any other kind of obligation. This document is not a prospectus in accordance with articles 652a or 1156 of the Swiss Code of Obligations nor does this document constitutes a Simplified Prospectus in accordance with article 5 of the Federal Collective Investment Schemes Act (the "CISA"). The herein mentioned products do not constitute a collective capital investment as defined in the Federal Law on Collective Capital Investments ("CISA") and therefore are not subject to the protection provisions of the CISA, as well as the approval requirement and the supervision of the Federal Financial Market Supervisory Authority ("FINMA").

Investors should take into account the risk factors. Investors should therefore carefully read the information contained in the brochure "Special Risks in Securities Trading" of the Swiss Bankers Association ("SBA") before considering the purchase of Derivatives and should consult with their own advisers on the implications of an investment in this Derivative.

Zürcher Kantonalbank shall not be responsible for any consequences, in particular losses, which arise or may arise as a result of the use of or failure to use the views and conclusions contained in this document. Past performance and investment prices are no guide to the future development of the investment.

Zürcher Kantonalbank makes no warranty that the implied or specified performance will be achieved. The distribution of this document produced in connection with the issuance of the Structured Products and the offering, sale and delivery of the Structured Products in certain jurisdictions may be restricted by law. The selling restrictions contained are applicable – EEA, U.S.A. / U.S. persons, UK, Guernsey.