Crypto Assets in Unit-Linked Life Insurance

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This article deals with the question why establishing of cryptocurrencies as a direct asset class in unitlinked life insurance has not been possible so far. Similarly, crypto ETFs have played only a minor role in unit-linked life insurance to date.

Unit-linked life insurance could benefit from immense return opportunities as well as tax ad-vantages by incorporating crypto assets. However, on the one hand, the cryptocurrency market is hardly regulated worldwide thus far, which runs counter to the current legal requirements for unit-linked life insurance. Listed crypto ETFs are still in their infancy, and they have not yet been approved in the European Union.

It can be assumed that cryptocurrencies will only gain relevance as direct investments of unit-linked life insurance once the legal regulation of this market has been completed. Until then, insurance companies will probably rely to a greater extent on crypto ETFs and crypto ETNs to realize the return opportunities associated with cryptocurrencies.

Keywords: unit-linked life insurance, crypto, investment, PPLI

INTRODUCTION

Digitalization has also led to profound changes in the insurance industry. Disruptive trends in the industry, have so far been discussed primarily in terms of changes to the sales model. In this dimension, there is a clear trend toward online insurance sales. Influencing factors in this context are changing customer expectations and innovative technologies. The technological drivers of disruptive change in the insurance sector today also include new forms of automation such as artificial intelligence, the Internet of Things and blockchain (Svoboda, 2021).

Blockchain technologies have so far been viewed primarily from the perspective that they have the potential to revolutionize the insurance industry and the financial sector. Conventional con-tract models are thereby transferred into a peer-to-peer concept based on smart contracts. In property and damage insurance, it is possible, at least in theory, to move the entire contract processing to the blockchain and to develop new insurance models on this basis. In perspective, blockchain can become the technological basis of trust-based digital ecosystems to realize holistic, cross-industry service concepts. However, corresponding practices are currently at an early stage of development - including the clarification of regulatory issues (Püttgen & Kaulartz, 2017).

The rise of cryptocurrencies must also be considered as another aspect of digitalization in the financial industry. Cryptocurrencies were the original and first application area of blockchain technology. The

Bitcoin blockchain, published in early 2009 by Satoshi Nakamoto, was the first decentralized system developed natively on the Internet and functioning without institutional or personal intermediaries, in which digital money could be created and financial transactions processed (Narayanan et al., 2016; Sixt, 2017). The background for this was, among other things, the dislocations in the global markets triggered by the financial and economic crisis from 2007 on-wards and a profound loss of confidence in the established financial systems. Bitcoin triggered a development that today has a direct impact on the capital market. There are now over 12,000 cryptocurrencies with a market capitalization of around USD 2.8 trillion (status December 2021). The ranking of digital currencies is still led by Bitcoin and Ethereum, but the top ten cryptocurrencies also include various newcomers. (coinmarketcap, 2021). Currently, Bitcoin and Ethereum are fighting for dominance in this market - both cryptocurrencies experienced another strong up-swing in 2021 with permanently high volatility of exchange rates. In general, cryptocurrencies are gaining importance both as a means of payment and as investment assets. In the insurance industry, they are of particular interest as a new asset class for unit-linked life insurance policies. How-ever, the industry has so far faced various difficulties in developing appropriate investment strategies and insurance products, due to regulatory requirements: Cryptocurrencies as an asset class in an insurance policy have so far not been permitted by law, despite the associated potential re-turns. Unit-linked life insurance policies based on cryptocurrency ETFs (exchange-traded funds) are permissible - but the range of such funds on offer has been extremely limited to date.

This article explores the question of why the direct implementation of cryptocurrencies in unit-linked life insurance has not yet been possible, what opportunities alternative products based on crypto ETFs offer, and what regulatory requirements are currently relevant for this market segment. The European regulations as well as current amendment efforts of the European Commission regarding crypto assets are here of particular interest.

METHODOLOGICAL APPROACH

A literature analysis was conducted as the basis for this article and to answer this question. Sources published between 2010 and 2021 were consulted. In addition to academic and industry-related publications and regulatory documents, publications from the daily press were also reviewed. Regarding the sources, it must be considered that no case studies or systematic analyses exist to date on the topic of cryptocurrencies as a component of unit-linked life insurance policies that could be used as a basis for discussion.

After a brief presentation of the general principles of unit-linked life insurance, the article discusses current trends in the cryptocurrency market, their relevance for the insurance industry, the regulatory framework, and prospects for the implementation of cryptocurrencies in unit-linked life insurance.

UNIT-LINKED LIFE INSURANCE – FUNDAMENTALS AND RELEVANCE

In general, unit-linked life insurance policies are fully or partially based on the special assets of an investment company. Compared to conventional endowment policies with - today only exceptionally low - guaranteed interest rates, they allow for a significantly higher increase in value, but also carry the risk of loss of value due to negative developments on the capital market (Lindmayer & Dietz, 2020, p. 336). Originally, insurance companies offered only unit-linked life insurance based on equity, real estate, bonds, or money market funds. From around 2010, private equity investment models have been added to these categories (Bernhard, 2010, p. 1). ETFs have so far played only a minor role in unit-linked life insurance. By selecting the insurance partner and the fund type, investors can help decide on the risk profile of their investment. Products based on equity funds, ETFs or private equity currently offer the best return opportunities compared with other higher-risk investment models (Lindmayer & Dietz, 2020, p. 337).

Bohnert (2013, p. 556-258) states for Germany that against the backdrop of demographic developments and resulting new consumer preferences, innovations in life and pension insurance are of crucial importance for the insurance industry. The focus today is on hybrid products offered in the form of so-called deferred annuity contracts. Such products combine the advantages of traditional participating life insurance policies and unit-linked products to benefit from positive capital market returns. Typically, the capital base of such policies is periodically switched between the insurer's policy reserve with guaranteed interest, a guaranteed fund and/or an equity fund with unhedged performance (constant proportion portfolio insurance strategy) to diversify the investment risk and allocate it between risk-free and risky assets. Alternatively, risky assets can be hedged by financial derivatives and options - but speculative investments in such assets are not permitted by law (Lindmayer & Dietz, 2020, p. 323).

The general legal framework for the distribution of unit-linked life insurance policies is specified throughout Europe by the so-called Solvency II Directive of the European Parliament and the European Council. Key points here are the specification of the funds in which investments are made, the exact breakdown of the assets underlying a unit-linked policy, and the communication of information that enables the policyholder to assess the contract-specific risk (Solvency II, 2009, p. 164 f.).

CRYPTOCURRENCIES AS INVESTMENT OBJECTS

Cryptocurrencies have increasingly become investment objects in recent years. Various aspects play a role here. In the case of classic cryptocurrencies and here in particular Bitcoin, the focus is on exchange rate speculation - in a short- and medium-term framework, but also as a long-term investment. The first known exchange rate of Bitcoin was 0.008 US dollars, on February 09 it reached the value of one US dollar for the first time, and the 10,000 US dollar mark was exceed-ed on February 29, 2017 (Stuttgart Stock Exchange, 2021). After a previous all-time high of 66,97.83 U.S. dollars on 9 November 2021, the bitcoin price has settled for the time being at values around 47,000 U.S. dollars shortly before the end of the year. Considerable fluctuations in the price can also occur within one trading day (coinmarketcap, Bitcoin, 2021). As with other cryptocurrencies, the Bitcoin price is not calculated, but arises from supply and demand within the decentralized structure of the blockchain economy. On the trading venues, buyers and sellers find a common equilibrium price on this basis, which results in the respective current Bitcoin price. In addition, political decisions - for example, threatened or realized bans on cryptocurrencies in important countries, but also investments by celebrities or the entry of large companies - influence the exchange rate, which can fall or rise significantly in the short term as a result (Stuttgart Stock Exchange, 2021).

The cryptocurrency Ethereum/Ether is also one of the big winners on the cryptocurrency market in 2021. On 1 January 2021, the exchange rate of Ether was at 730.37 US dollars, at the end of the year after an all-time high of 4,812.09 USD on 08 November 2021 at values around 4,000 US dollars (coinmarketcap, Ethereum, 2021). Unlike Bitcoin, the objective of Ethereum and other blockchains (for example, also Ripple XRP or IOTA) from the outset was also to develop new digital business models (Sixt, 2017, 11). The Ethereum blockchain, for example, is based on a technology that makes it possible to set up so-called smart contracts for a wide variety of fields of action and processes on a decentralized basis; transactions are processed in the cryptocurrency Ether. Among other things, the platform has played a significant role in recent years in the issuance of new cryptocurrencies in the context of so-called Initial Coin Offerings (ICOs) (binance vision, Ethereum, 2018; BTC Direct, 2019). For digital currencies such as Ether, the importance of the respective blockchain for applications in the economy also influences the exchange rate.

In general, the exchange rates of cryptocurrencies are highly volatile - valid forecasts are only possible to a limited extent. Added to this is the fact that trading in them is currently unregulated worldwide. The European Union is currently the first major economic area that wants to develop a financial market regulation for cryptocurrencies and could thus set standards for the global regulation of cryptocurrencies. The basis for this is the European Commission's proposal for the so-called MiCA Directive (Regulation on Markets in Crypto Assets, MiCA). The proposal has now been adopted by the European Parliament, but the corresponding legislative process at European and national level is still in its infancy. It is not primarily classic cryptocurrencies such as Bitcoin that are to be regulated, but in particular tokens that serve to represent tangible assets or are used as an equivalent for services, as well as so-called stable coins with fixed exchange rates to regular money, which are currently important as an "alternative currency" in social networks, but can also be issued by large companies (München & Bayer, 2020; Grabitz, 2020). However, the MiCA draft uses a broad definition of Crypto Assets, which can be applied to all fields of action related

to cryptocurrencies. Accordingly, a crypto asset is a "digital representation of value or rights which may be transferred and stored electronically, using distributed ledger technology or similar technology" (München & Bayer, 2020, p. 7).

CRYPTO ETFS AND CRYPTO ETNS

Crypto ETFs have so far been issued and traded mainly over the counter. Corresponding financial investments can be direct investments in cryptocurrencies or so-called blockchain ETFs, which invest in companies involved in the development of blockchain technologies (etf.capital, 2021). An officially listed bitcoin ETF was registered on the New York Stock Exchange in October 2021, after the U.S. Securities and Exchange Commission had repeatedly rejected such applications before. However, the bitcoin ETF does not invest directly in bitcoins, but in bitcoin futures that speculate on the future value of bitcoin. Listed bitcoin ETFs have previously opened in Canada, with more funds likely to follow in the U.S. in the near future (Raskopf, 2021). In Europe, there are no listed crypto ETFs yet for regulatory reasons - legislation here prohibits index funds based on only one component. However, European investors can use so-called crypto ETNs here. Exchange Traded Notes (ETN) are exchange-traded bearer bonds - the providers usually hold larger stocks of the respective cryptocurrency. A mix of different crypto assets is not provided for in this form of investment, unlike with classic ETFs, which has consequences in terms of investment risk (Fidor AG, 2021).

TAX TREATMENT OF CRYPTOCURRENCY ASSETS

Cryptocurrencies are currently not considered a regular currency under EU law, but as a digital representation of value that is not issued or guaranteed by any central bank or other public body, is not necessarily pegged to an official currency established by law and does not have legal currency status. However, these digital representations of value are accepted by individuals or entities as a medium of exchange (Lindmayer & Dietz, 2020, p. 164). However, according to the German financial supervisory authority BaFin, cryptocurrencies are financial objects or - if securities rights are represented by them - securities. Classification as a security is possible if a token is transferable and can be traded on the financial market, embodies rights through shareholder rights or claims under debt law, and does not have to be classified as a pure payment instrument - these requirements must be met in full (Lindmayer & Dietz, 2020, p. 143 f.).

When it comes to the tax classification of cryptocurrencies, sales tax, corporate income tax as well as income tax are relevant: Currently, trading in cryptocurrencies within the European Union and consequently also in the national law of the member states is exempt from VAT, but corporate income tax and trade tax can be levied on them. Private sales transactions with cryptocurrencies are subject to income tax if the respective currency is held for less than one year (Lindmayer & Dietz, 2020, p. 145 f.). In general, due to the so far ambiguous tax classification of investments in cryptocurrencies compared to other investment objects, companies/institutional investors can also claim tax advantages. For example, even in a corporate context, it is currently possible that the taxation standards for private sales transactions apply (Himmler, 2017). At least in Ger-many, the option of tax exemption for income from physically deposited crypto ETFs and crypto ETNs is currently under discussion under tax law (Baudzus, 2021).

CONCLUSION

Based on the analysis presented here, cryptocurrencies are currently of interest for unit-linked life insurance, both because of the associated return opportunities and from a tax perspective. De facto, however, the currently applicable legislation places tight limits on the development of insurance products on this basis. With regard to direct investments in cryptocurrencies in the con-text of unit-linked life insurance, the fact that the risks of the investment must be borne exclusively by the policyholders and that the cryptocurrency market has been unregulated overall to date is particularly significant here - in addition to the very limited possibility of defining the solvency margins prescribed by EU law and setting up corresponding provisions for insurers (Solvency II, 2009, p. 111 et seq.) due to the strong price volatility. The draft MiCA regulation indicates what the legislator is concerned with - comprehensive regulatory rules are envisaged for the involvement of insurance companies in cryptocurrencies, aimed at both establishing transparency and limiting risk. Among other things, providers of crypto services are to insure the financial risk of these services with a separate policy (MiCA, 2020, Article 60).

It can be assumed that cryptocurrencies will only gain importance in unit-linked life insurance in the European Union once the development of the regulatory basis for dealing with this asset class has been completed and binding regulations for it exist. However, during regulation, tax ad-vantages from which providers of unit-linked life insurance could theoretically still benefit at present could also be lost. Currently, it is to be expected that the commitment of insurers and consumers will focus on listed ETFs and ETNs due to the expected return opportunities.

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