**Step 1**

An Indexed Annuity that incorporates zero coupon bonds and options linked to a broad market is a type of annuity contract that offers a minimum return set by the yield of the zero-coupon bonds and variable return determined by the performance of the specified market index (i.e. benchmark). Annuities are one of oldest financial instruments existing which can be traced back to times of the Roman Empire. Even today, the demand for these instruments is significant especially among retirees because annuities provide downside protection while keeping potential for growth through exposure to market index.

Annuities are offered mainly by insurance companies but these can be also provided with employer pension plan. Annuities can be rather complex instruments nowadays but generally the following terms are included in annuity contracts:

Initial Premium – lump sum paid by the contract owner (typically the annuitant, i.e. the person that receives the benefits) on origination.

Participation rate – the percentage of the index’s gain to be received

Cap rate – sets the maximum gain that can be achieved. If the index outperforms your return will be capped

Floor – minimum return (downside protection thanks to the zero-coupon bonds)

Index: Benchmark to which the annuity is exposed (e.g. Eurostoxx 50 or S&P 500)

1. Performance: The return is tied to the Index and based on a formula that considers participation, cap and floor rates. While there is guaranteed minimum return, the potential for growth is also limited compared to direct investment in the index due to cap and participation rate.

2. Fees: Indexed annuities fees depend on the type of contract (variable or fixed) and can come in several layers. Apart from initial lump sum payment, fees can be accumulated through certain period of time before annuity can start paying off. These fees are used by the insurer to hedge market risks and to cover administrative costs. Generally, the competition among insurers influences significantly the fees in different countries.

3. Transparency: Transparency varies among different indexed annuity providers. Some providers may offer clear and detailed information about how the annuity works, including participation rates, cap rates, and any potential fees. However, others might present the information in a less transparent manner, making it important for investors to ask questions and seek clarification on any points they don't understand.

4. Liquidity: Indexed annuities are generally designed as long-term investments. They often come with surrender periods during which withdrawals are subject to surrender charges. These periods can last several years. Additionally, even after the surrender period ends, withdrawals may still be subject to fees. Thus, liquidity is limited and annuities are not advisable for short-term needs.

5. Professional Management: Indexed annuities are managed by insurance companies or government/employer pension funds. The decision of the management can significantly alter the performance of the contract.

6. Investor Protections: Indexed annuities are insurance products, and their regulation falls under state insurance regulations rather than federal securities regulations. This means they may not offer the same level of investor protections as securities regulated by organizations like the SEC and FINRA. However, state insurance departments regulate the sale of annuities and enforce consumer protection laws.

**Step 2**

7. Index annuities carry credit risk to the extent that the insurer might become insolvent in the meantime. However, annuity providers are highly regulated entities as pension funds and insurers can affect the financial stability of a country in case of distress. The regulators set coverage limits and capital requirements to mitigate risks of insolvency (for instance Solvency II is for insurers what Basel is for banks). In addition, just like the FDIC guarantees deposits to certain amount, there is a state-based insurance guaranty association in United States. Furthermore, credit agencies assign corresponding ratings to insurers.

**Relevant questions**: is there specific regulation that covers the insurers activity in selected country. Is there insurance guaranty association? What is the credit rating of the insurer?

8. If market perform badly, the correlation between constituents will likely increase and negatively affect the upside potential of the indexed annuity. However, indexed annuity locks the annuitant into the current yield of zero-coupon bonds thus providing some downside protection. Furthermore, given that the exposure to the index is built through call options, in the worst outcome these options will expire worthless.

**Relevant questions:** Is there any hedging possibility in case of market distress for the mutual fund and the ETF? Is shorting allowed (via CFDs or futures, put options). Is in prospectus determined the minimum duration of the mutual fund (in case of rising interest rates, investors would prefer funds that can reduce duration and even turn it negative if allowed)?

How high is the correlation between index constituents? Is participation rate lower for higher correlation?

9. Indexed annuity has payout similar to that of a bull call spread. It participates to some extent (set by the cap and participation rate) in upside moves whereas it provides guaranteed payoff based on the yield to maturity of zero-coupon bonds (in the case of bull call spread there is cash inflow from sold call options). The participation rate acts as a lever, because the higher the rate, the better the performance of the indexed annuity. The participation rate also provides downside protection (since the rate is less than 100%).

**Step 3**

Indexed annuities are not for everyone.

First of all, as we mentioned these instruments are long-term assets that can span a lifetime. There are surrender periods where withdrawals are possible but subject to penalties to discourage policyholders from removing funds earlier.

Secondly, annuities are not appropriate for risk-seeking investors as their performance is typically capped. In fact, they have also typically lower guaranteed income than pensions. The major issue is that the participation rate is fixed for very long periods and thus, deprive flexibility.

Last but not least, annuities are complex instruments with several layers of fees. These are often not opaque and the total costs over time are not easily to be determined in advance compared to other instruments (like mutual funds or ETFs). A thorough analysis of annuity features is recommended to evaluate the benefits of downside protection with respect to the limit of potential higher returns.