

Investment Products



Investment Products

Learning outcomes.....

- **Compare** and **Contrast** investing through direct investment in securities and assets, and investing through indirect investments
- **Distinguish** the features, risks, and benefits of unit trusts, investment trusts and open-ended investment companies
- **Identify** the key features and objectives of exchange traded funds (ETFs) and exchange-traded commodities (ETCs)
- **Identify** the advantages and disadvantages of investing in ETFs

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Learning outcomes.....continued

- **Explain** the features and objectives of private client funds, structured products and wraps
- **Identify** the characteristics and advantages of life assurance-based investments
- **Identify** the characteristics and advantages and disadvantages of defined contribution (DC) versus defined benefit (DB) pension arrangements from the perspective of both the sponsors and beneficiaries
- **Describe** the characteristics of execution-only investment platforms

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Learning outcomes.....continued

- **Identify** how the appropriateness of different investment products may vary according to portfolio liquidity

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Direct and Indirect Investing

- Direct investing is a small proportion of lending because
 - mismatch between needs of borrowers (illiquid, could be high risk) and preference of savers (liquid, low risk)
 - higher transaction costs such as search, monitoring, due diligence and enforcement.
 - Asymmetric information due to borrowers having better information about risk and return compared to the lenders
- Hence financial intermediaries can solve some of the above issues though at a cost.

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Direct and Indirect Investing: Types of Financial Intermediary

- Depository institutions such as Banks which lend to borrowers.
- Contractual savings institutions such as pension and life funds.
- Investment intermediaries such as unit trusts and hedge funds.

Transformations brought in by financial intermediaries between savers and borrowers:

- **Size transformation:** Small sums of savers converted into large investments / loans
- **Maturity transformation:** Short term to long term
- **Risk transformation:** Portfolio diversification and investment analysis

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Advantages of collective investment vehicles

- ▶ The pooling of investments enables the investment vehicle to make investments at lower cost compared to an individual investing directly.
- ▶ The investments are professionally managed by fund managers – this brings greater expertise and saves the individual investor time and effort in monitoring.
- ▶ As the number of investments in the collective vehicle will be large, greater diversification benefits will be achieved.
- ▶ It is possible to achieve specialisation.
- ▶ It is possible to gain exposure to foreign investments, which may be costly for an individual investor.

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Advantages of collective investment vehicles

Disadvantages of collective investment vehicles

- ▶ The individual cannot choose the individual investments in the collective investment.
- ▶ Fund manager performance varies widely across particular funds and over time.

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Types of collective investment

- **Open-ended investment companies (OEICs) Or Investment companies with variable capital (ICVC):**
 - Open ended means they can issue new units at the same price as exiting units or shrink when unit holders sell their units back to the managers of the fund.
- **Unit Trusts:** They are also open ended.
- **Investment Trusts:**
 - Closed-ended funds. It means they cannot increase size of funds. Investors must buy shares in the investment trust from other investors who wish to sell.
- **Life assurance-based schemes:**

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Collective investment schemes

- The collective investments schemes are regulated by Financial Conduct Authority (FCA).
- Investors invest in such 'funds' to receive income from such schemes.
- If located outside UK, they are called 'offshore funds'.

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Regulated and Unregulated Collective Investment Schemes / Unit Trusts

➤ **Regulated Unit trust types:**

➤ ICVC / OEIC

➤ An authorized unit trust: It is authorized if constituted under a trust and has a separate trustee.

➤ A recognized scheme permitted to operate in UK: It is an overseas scheme recognized by FCA and marketed in UK.

➤ **Unregulated Unit trust types:**

➤ Unit trust that does not meet the conditions of authorization is called unregulated unit trust.

➤ Cannot be marketed to retail investors

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Authorized Schemes:

- An Undertaking for Collective Investment in Transferable Securities (UCITS) scheme
 - Must meet all conditions of the UCITS directives
- A qualified investor scheme
 - Only for professional investors
- A non-Undertaking for the Collective Investment of Transferable Securities (non-UCITS) retail scheme.
 - Relatively few non-UCITS schemes

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Institutions involved in activities of unit trust:

- Unit trust manager
 - Defines terms of trust, markets trust, appoints the trustee, requests trustee to create and redeem units, receives payments from investors
- Trustee
 - Usually, a trust corporation such as a bank or insurance company, trustee owns and holds investments
- Investment manager
 - Arranges for purchase and sale of securities and provides valuations for the trustee.

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Units creation:

When an investor subscribes to a unit trust, the money is sent to the unit trust manager, who credits the investor with units held in a box (or inventory) of units. If no units are held or additional units are required for inventory purposes, the manager requests the trustee to create units.

If units are created, the trustee authorises the investment manager to purchase the required volume of securities that underlie the new units. If the trustee believes that it is not in the best interest of the investors to create or cancel units, they can refuse to do so. The trustee must give notice to the investment manager to be relieved of the duty of creating or cancelling units. This would only really occur if the trustee suspected or knew that the manager had made a serious breach of the regulations, the Conduct of Business Sourcebook (COBS) rules or the terms of the trust deed.

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Units pricing:

- Authorized unit trusts may choose single or dual pricing of units
 - Dual pricing:
 - Investors can buy at higher price (Ask) and sell at lower price (bid).
 - The price depends upon value of securities held in the trust, though there can be a gap of 9% between bid and offer price due to commission, dealing charges, stamp duty, VAT etc.
 - Single pricing:
 - Investors pay none of the dealing costs and thus, save half of the dealing price spread.
 - If buyers match sellers, then this is not a problem. However, if the buyers or seller dominate, then the existing unitholders subsidize the net purchases or net sales.

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Conditions to be fulfilled for an authorized unit trust:

➤ The manager and trustee must:

- ▶ be independent of each other;
- ▶ each be a company incorporated in the UK or other state within the European Union (EU);
- ▶ each have a place of business in the UK; and
- ▶ each be an authorised person.

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Regulation of an authorized unit trust:

The regulation of authorised unit trusts is the responsibility of the FCA, which sets the rules covering:

- ▶ the constitution of the trust;
- ▶ restrictions on managers;
- ▶ meetings of holders;
- ▶ the manager's investment and borrowing powers;
- ▶ the issue and redemption of units; and
- ▶ the pricing of units.

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Regulation of an authorized unit trust:

The FCA may revoke the authorisation of an authorised unit trust on the grounds that:

- ▶ any of the requirements for authorisation are no longer satisfied;
- ▶ it is undesirable in the interests of the participants that the trust should continue to be authorised; or
- ▶ the manager or trustee has contravened any provision of the FCA.

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Open-ended Investment Companies (OEICs):

- OEICs have features of both units trusts and investment trusts
 - Similarity with unit trust: Number of units may change day-to-day, and the price directly reflects value of fund's portfolio.
 - Similarity with investment trust: They have a company structure and assets of fund are looked after by a depository not a trustee.

A depository must be a firm (usually a bank) authorised by the FCA and must be independent of the OEIC. The OEIC's investments are held by the depository, which has legal title to them. However, unlike unit trusts, there is a single price at which shares are bought and sold, and so OEICs will attract both entry and exit management charges. Other charges must be set out clearly; as with unit trusts, annual management charges (AMCs) will be levied on a percentage basis, reflecting the value of the portfolio under management.

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Collective Investment Schemes: Investment and Borrowing Powers

1. The property (investments) of a scheme must usually consist of:
 - a. transferable securities;
 - b. approved money-market instruments;
 - c. units in collective investment schemes;
 - d. derivatives and forward transactions;
 - e. deposits; and
 - f. for an ICVC scheme, movable and immovable property.

Transferable securities are defined as securities to which title can be freely transferred, such as shares, debentures, government or public securities, warrants or certificates representing securities. Therefore, a security that can only be transferred with the consent of a third party would not be considered to be a transferable security. In addition, a transferable security is an approved security if it is admitted to the Official List in a Member State of the EU or is traded on an eligible market.

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Collective Investment Schemes: Investment and Borrowing Powers

2. Up to 5% of the investments of the scheme may consist of transferable securities or approved money-market instruments issued by one issuer. This figure may be increased to 10% in respect of up to 40% of the value of the fund (i.e. up to four holdings with up to 10% each).
3. There is no limit on the amount invested in government and public securities, provided that no more than 35% of the scheme's assets are invested in the issues of one body. A scheme may breach the 35% limit for a single issuer, providing:
 - a. the fund manager consults first with the depositary;
 - b. no more than 30% of the scheme is invested in a single issue;
 - c. the scheme's assets comprise at least six different government and public securities issues from issuers; or
 - d. relevant disclosures are made.

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Collective Investment Schemes: Investment and Borrowing Powers

4. A scheme may only borrow up to 10% of the **net asset value (NAV)** of the fund.
5. Up to 100% of the value of the investments of the scheme may be in other collective investment schemes. No more than 20% of the total investments can be in any one scheme.
6. To avoid the risks that arise from overconcentration, a scheme may not hold more than:
 - a. 10% of the non-voting shares issued by a body corporate;
 - b. 10% of the debt securities issued by a single issuer;
 - c. 10% of the money-market instruments issued by a single body; and
 - d. 25% of the units in a collective investment scheme.

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Exchange Traded Funds (ETFs)

- These are funds traded on exchanges, in UK they trade on LSE.
- ETF assets mirror the price movements of underlying index (say FTSE 100), sector or commodity (say Gold).
- They are liquid, provide access to investors to inaccessible markets, low-cost option to build institutional quality portfolio, highly transparent investment holdings and strategy.
- Like a mutual fund: Investor in ETF shares owns a proportion of pool assets. ETFs are governed by FCA. They are managed by investment manager for a fee.
- Unlike unit trusts / mutual fund: Traded on exchanges like a stock. Continuous price and liquidity available during trading hours of exchange.

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Exchange Traded Funds (ETFs)

- ETFs are similar to tracker funds, in that they try to mirror an underlying index.
- However, tracker funds can be traded only at one point in the trading day, unlike ETFs.
- ETFs disclose their holding typically at the start of trading day.
- Specialist traders can create and redeem shares for NAV ensuring that ETF market prices are closer to fair value.
- ETFs incur few charges. No stamp duty for ETFs, unlike for tracker funds. Moreover, there are initial and AMCs for tracker funds.
- After making sure it is UCITS-compliance, FCA grants recognition status to ETF. This status allows the fund to be marketed to private investors.

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Exchange Traded Funds (ETFs): Advantages

- ▶ Diversification can be obtained with a single ETF transaction. There is now a wide range of ETFs covering a range of asset classes. Although best known as equity investing vehicles, there is a fast-growing universe of fixed income, commodity, currency and alternative ETFs.
- ▶ Although ETFs represent interests in a basket of investments, they are traded like a share. This means they can be sold short and bought on margin.
- ▶ ETFs trade throughout the day at market prices rather than once a day at closing market prices. They therefore offer greater liquidity than unit trusts. Of course, closed-ended funds offer similar characteristics, but with a key difference: ETFs trade close to their true NAV throughout the day. This is because investors can arbitrage between the ETF itself and the underlying securities. Indeed, this facilitates price discovery for the ETFs, as a variety of intermediaries use them for arbitrage and hedging purposes.

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Exchange Traded Funds (ETFs): Advantages

- ▶ ETFs are low-cost investments – they are usually passively managed, though this is changing. For example, according to Morningstar, the average mutual fund expense ratio is 1.25%, whereas the average ETF expense ratio is 0.44%. With mutual funds, the fund management firm has to deal with a large quantity of investors and the cost of distribution and record-keeping. The ETF manager deals with a limited number of counterparties.
- ▶ Transparency is greater for ETFs than for traditional unit trusts, who only have to disclose their holdings with a considerable time-lag.

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Exchange Traded Funds (ETFs): Disadvantages

Disadvantages of ETFs

- ▶ ETFs can take investors into new asset classes and there may be a lack of understanding of the drivers of risk and return.
- ▶ They may offer leveraged investments, which are not that well understood by investors.
- ▶ Investors need to understand the different costs associated with ETFs, such as bid-offer spreads, commissions and the possibility of premia and discounts to the NAV.

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How ETFs work?

- ETF shares can be created or redeemed only by Authorized participants (APs) who are market makers authorized by the ETF issuers.
- They create new shares with the ETF manager / sponsor.
- 'Creation basket' is announced every day by the ETF manager which includes the list of securities it wants to own in the fund. AP goes to market or from its inventory it provides the required number of shares which are delivered to ETF manager in exchange for equal value of shares in ETF. These ETFs are then sold investors in open market.
- The process can also work in reverse if AP has ETFs to get rid of. In that case, the AP presents ETF shares for redemption to ETF manager, who in turn releases underlying shares. These are sold in open market by AP.
- Thus, the process of redemption and creation keeps ETF prices close to NAV.

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ETFs: Factors determining trading range around NAV and width of bid-ask spread

- ▶ the cost of buying and selling the securities (arbitrage);
- ▶ the volatility of prices; and
- ▶ the liquidity of the markets for these securities.

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Synthetic ETFs:

- These do not involve actual buying of underlying assets.
- These involve a commitment by an investment bank to meet the returns on a chosen index using derivatives.
- The ETF manager then holds basket of assets as collateral which could be different than the benchmark that ETF is tracking.
- These ETFs have a cost advantage over conventional ETFs and are especially popular for tracking less liquid benchmarks such as emerging market equities.
- These have been criticized as a source of systemic risk during financial stress since they use complex instruments.
- Also there is less investor monitoring and they are less transparent.

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ETFs:

- Overall ETFs have changed the face of investing.
- Starting from well-known investment indices, now ETFs have expanded to new asset classes and strategies facilitating 'smart beta' investing.
- However, especially in case of fixed-income space, ETFs are criticized due to developing as a source of systematic risk.

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Exchange Traded Commodities: ETCs:

- ETC is an exchange-traded note (ETN) that tracks individual commodities or indices.
- In general, issued by a single bank and listed on exchange, ETN is a senior debt instrument.
- Bank agrees to pay return of a reference benchmark less fees. Thus, investors have credit risk from the bank in case of ETNs.
- ETNs can be collateralized or uncollateralized.
- ETCs can be physically backed by underlying commodity or may track commodity futures. They can also be collateralized.

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Investment Trust Companies (ITCs)

- These are limited liability companies, listed on LSE, offer investors a convenient way to purchase a diversified portfolio of securities.
- ITC is a bundle of securities, overseen of its BOD who determine its investment strategy which is carried out by the management.
- They are closed ended and can raise capital by rights issue or borrowing.
- A fee of approx. 1.2% is charged for management of fund.
- Objective of ITC BOD is maximize value of portfolio and increase the share price.

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Fund Charges

- The introduction of Markets in Financial Instruments Directive (MiFID) II requires fund managers to disclose full charges, including 'un-bundled' charge for research. This provides greater transparency.
- The ongoing charges figure (OCF), known earlier as total expense ratio (TER), represents ongoing costs to funds including,
 - The AMC
 - Other charges for administrative services
- But it does not include
 - Performance fees or trading costs. This means a low-cost OCF fund could be a high cost one if it does lot of trading.

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Fund Charges

- MiFID II introduced total cost of investing (TCI) in a fund that includes
 - Ongoing charges including all recurring charges along with service costs
 - Transaction costs, including broker commissions and stamp duty
 - Any one-off charges along with incidental costs (such as performance fees)
- However, regulators have allowed fund providers to use several different methods to calculate funds' transaction costs.

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Fund Charges

A particular problem arises with existence of 'implicit' costs arising from the market response to a trade or the timing of a trade, including:

- ▶ **market impact** – moving the market price with a large trade so the price obtained is different from what was expected;
- ▶ **delay in executing a trade** – this results in the price being different from when the order was placed; and
- ▶ **opportunity cost** – if a trade is partially executed, it runs the risk of missing out on favourable movements in the market and so, missing out on a potential gain, which is seen as a potential cost.

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Private Client Funds

➤ Provided by stockbrokers to individual investors

- ▶ **Execution-only services** involve no advice or recommendations to the client, and simply offer a means of buying or selling assets for a commission. This type of service might suit two types of client: either an investor with a small amount of privatised shares that they wish to sell and for which a full brokerage service would be too elaborate; or an experienced financial investor who has the time and expertise to control their own investment portfolio and strategy.
- ▶ **Advisory dealing services** involve the stockbroker executing business on behalf of a client, but in addition can involve advice about the proposed transaction. In other words, the client could ask the broker for advice about the prospects for a particular share. On receiving this advice, the client could then decide to buy or sell the stock based on the broker's recommendation.

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Private Client Funds

➤ Provided by stockbrokers to individual investors

- ▶ The next level of service provided is a **portfolio advisory service**. This service usually begins with the broker trying to identify the client's overall financial position and needs. Following this, the broker proceeds with giving advice about the construction of a portfolio of assets for the client along with an appropriate investment strategy. Although the broker is at liberty to call their client with advice about certain investment opportunities, the client still has the final say about the portfolio.
- ▶ Finally, stockbrokers can offer a **portfolio discretionary service** to private fund clients. With this service, the stockbroker has responsibility for the portfolio and is at liberty to buy and sell assets on behalf of the client according to market conditions. The advantage of this service over the advisory service is that the broker does not have to waste potentially valuable time in seeking the client's permission to act on a piece of market information.

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Private Client Funds

- Apart from the services mentioned on earlier slides, many other services such as limit order service, nominee account facility etc. are offered.
- The objective and structure of a private client fund depends upon circumstances of client.
- Since objectives may differ, it is difficult to find suitable market index to compare performance.
- However, such indices have been created such as Asset Risk Consultants (ARC) Private Client Indices and MSCI Personal Investment Management and Financial Advice Association (PIMFA) Private Investor Index Series.

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Private Client Funds: Indices

The composition of these indices represents their inventors' idea of the typical asset mix of a private client fund. The ARC Private Client Indices are a set of risk-based indices designed to be used by private clients and their advisers in assessing the performance of any discretionary portfolio with a non-specialist mandate. They cover four risk categories, as shown in [Table 16.1](#).

ARC PRIVATE CLIENT INDICES

Private Client Index	Index-relative risk to equity market
ARC Cautious PCI	0 to 40%
ARC Balanced Asset PCI	40 to 60%
ARC Steady Growth PCI	60 to 80%
ARC Equity Risk PCI	80 to 120%

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Private Client Funds: Indices

➤ PIMFA indices include

- ▶ the Private Investor Conservative Index;
- ▶ the Balanced Index;
- ▶ the Income Index;
- ▶ the Growth Index; and
- ▶ the Global Growth Index.

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Private Client Funds: Indices

The indices are useful as:

- ▶ a measure for comparing the performance of income, growth, conservative and balanced funds;
- ▶ a basis for reviewing the asset allocation and structure of a portfolio with fund managers or stockbrokers; and
- ▶ a benchmark for assessing and comparing the performance of discretionary fund managers.

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Structured Products

- Structured product is an investment with a well-defined objectives in terms of risk and return, which is usually with reference to a specific underlying asset such as FTSE 100 index.
- It is also for a specific time period generally between 3 to 6 years in UK.
- Reference assets could be stock indices, commodity prices, or even transparent and replicable investment strategies.
- These products are created using derivatives.
- Three types of structured products are given on next slide:

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Structured Products

1. **Structured deposits** refer to fixed-term deposit accounts, with the 'interest' being determined by reference to the performance of an underlying asset. This is often based on an investment index, with at least the initial investment guaranteed at maturity. If the issuer is a deposit-taker (as is common) then the deposit is also secured by the usual bank deposit insurance. As such, there are two distinct parties involved in the creation of a structured product: a plan manager who takes care of product creation, selling and marketing; and the counterparty or deposit-taker who supplies the underlying investment.

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Structured Products

2. **Structured capital** protected products are similar to structured deposits, except they do not offer the benefit of the guarantee of the insured deposit if the counterparty/provider defaults.
3. For **structured capital-at-risk products**, the full original investment capital sum is at risk if certain levels of the underlying asset(s) are breached at certain points or over certain periods of time. For example, if the reference asset is the FTSE 100 index, then the terms may state that capital returned will be reduced if the index falls by, say, 40% at any point during the life of the product and fails to recover by maturity.

The ongoing solvency of the counterparty is an issue for both structured capital protected and structured capital-at-risk products. Effectively, any investment in these structures is being loaned to the counterparty. To reduce the chance of an investor suffering loss, some products offer collateralisation held by a separate custodian, often in the form of government securities.

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Structured Products: Key dates / Terms

- Product is offered around 1 to 2 months before the strike date.
- Strike date: Investment goes live, and capital is at risk.
- Strike level: Relevant index value from which change is measured.
- Investment term: Life of investment
- Final Index date: Final reference level of index is calculated
- Maturity date: Date on which clients receive money which is often two weeks after final index date.

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Structured Products: Terms

- Structured products are generally subject to Capital Gains Tax.
- Structured products may guarantee return of capital sum which is achieved as follows:
 - PV of guaranteed sum is invested in zero-coupon bond
 - Remainder is invested in call option on underlying index
- Overall, structured products can be used as complementary to other assets in the portfolio.

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Wrap accounts and other platforms

- A platform is a software to simplify administration, management and reporting of investments.
- They are databases holding information on investors, investments and tax wrappers that envelop those investments.
- They also provide means to buy and sell investments.
- Cash and investments are held by third-party custodians to protect clients from business risk of platforms.
- Common reports include portfolio valuation, asset allocation, dealing history, advisor charging, performance related to benchmark etc.

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Wrap accounts and other platforms

Platforms vary in the access they offer to the investment universe. 'Open-architecture' platforms, for example, offer access to a wide range of investments across all major asset classes, including cash, shares and managed funds such as OEICs, ETFs and investment trusts. As such, investors or their financial advisers can use them to facilitate the creation of a suitable investment strategy.

Often platforms seek to offer investors favourable terms on investing in managed funds by negotiating discounts with fund managers. This has typically involved reducing or removing the initial charge on a fund and seeking a rebate on part of the AMC.

Since April 2016, all platform pricing has had to be fully unbundled – meaning that adviser, fund and platform charging must be separately and clearly itemised.

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Wrap accounts and other platforms

Given that many investors use tax-efficient vehicles to hold investments (e.g. ISAs, SIPP), it is natural for platform providers to offer 'tax wrappers' as a way to hold investments on a platform. However, it is also common to have 'off-platform' tax wrappers where a third-party provider offers that service and is accessed from the original platform.

A generic term for investment accounts held on a platform is a 'wrap account'; in addition the term 'fund supermarket' is used for a type of electronic platform that facilitates the purchase, sale and management of collective funds online. These may include tax-efficient holding vehicles such as ISAs.

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Wrap accounts and other platforms

NS&I

NS&I, a state-owned savings bank, is an agency of the His Majesty's (HM) Treasury and as such aims to attract funds from individual savers in the UK to help Government funding needs. It offers savings products, often with tax-free elements, with a 100% guarantee from HM Treasury. These include ISAs, inflation index-linked savings certificates, fixed-interest certificates, income bonds, premium bonds and guaranteed equity bonds. All products carry a 100% backing from the HM Treasury.

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Life assurance and defined contribution pensions

- Life assurance is a mix of life insurance and long-term savings.
- In whole life policy, a lump sum is bought which is payable at the time of death, and in case of endowment policy, a capital sum is payable at the end of a period of time. In both cases, premium is paid by the purchaser.
- The premiums paid by the policyholders are invested by insurance companies in long-term assets.
- In Defined Contribution, the contribution is fixed but benefits depend upon investment performance.
- At retirement, an accumulated sum is converted into annuity which makes regular payments to the beneficiary.

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Life assurance and defined contribution pensions

- In US and UK, there is a shift from Defined Benefit to Defined Contribution plans. In defined benefit, the employer guarantees pension to beneficiaries.
- In DC, the investment risk is on employee.
- Liabilities of DB scheme are liabilities of the employer. If interest rates go down, liability increases in value.

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Executive-only investments

- Execution-only is a trading service limited only to execution of trades without any investment advice.
- This is for range of securities.
- Such services are internet or telephone based, suitable for experienced investors.
- Improvement in trading technology has reduced transaction costs.
- Nominee account services are also provided.
- Its cost is a small fraction of costs of a full-service brokerage or even many discount brokers' cost.

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Liquidity and Investment Products

- Portfolio liquidity is defined as the ability to adjust a portfolio in response to flows or changing market conditions or satisfying redemption requests of investors without fundamentally and structurally changing portfolio exposures.
- Investment products may differ in their liquidity and hence this choice is important.

Key questions regarding liquidity in the portfolio include:

1. Does taking illiquidity risk provide better risk-adjusted returns for a portfolio?
2. Does the investment portfolio provide sufficient liquidity to meet ongoing investor cash needs?
3. Are the underlying investments able to support investor liquidity demands?

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Liquidity and Investment Products

Aligned with these issues, there are three main motivations for maintaining portfolio liquidity in highly liquid assets:

1. Commingled or mutual funds must be prepared to meet potential client redemption requests on demand.
2. Portfolios must be prepared to meet potential collateral or margin call needs for derivative or forward settling positions.
3. Portfolios should be in a position to take advantage of potential market dislocations, i.e. having so-called 'dry powder' to buy 'cheap' assets in market stress scenarios.

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Liquidity and Investment Products

- There is a trade off between liquid asset buffer and objectives of portfolio
- Derivatives can be used as a liquid substitute.
- Liquidity in derivatives may improve in stressed market conditions but managing derivatives and counterparty risk is a challenge.
- Long term investors may be able to capture 'illiquidity' premium. However, some investors carry excess liquidity in portfolio affecting the returns.
- Investors may be willing to provide 'gating' which limits the liquidation or asset drain of a fund made of low liquidity assets. For example, hedge funds.

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Liquidity and Investment Products

In conclusion, investors can minimise liquidity risks in portfolio construction by considering two key aspects:

1. maintaining sufficient liquid assets (either cash or cash-like assets), subject to:
2. making sure their investment strategies, fund constraints and asset class characteristics are in alignment with portfolio objectives, while including safeguards such as restricting liquidity, investment gating and period lockups, as well as constraining investor access to capital.