Introduction to Investment Funds

Link’n Learn

31 May 2018
Speakers

Brian Jackson
Partner – Financial Services
Deloitte Ireland

Julie Farren
Manager – Financial Services
Deloitte Ireland

Derina Bannon
Senior Manager – Financial Services
Deloitte Ireland

Paola Draper
Senior manager – Financial Services
Deloitte Luxembourg
Agenda

1. Introduction
2. General principles
   - How an investment funds works
   - Different structures
   - Parties involved
3. Regulatory evolutions
4. Market trends
Introduction
Asset Management Industry

“The asset management industry plays a distinctive role in capital markets by pooling the savings of investors and investing them strategically in financial instruments and other assets with the aim of generating returns.”

**Economic function of asset management industry:**

- Facilitate participation of small investors in financial markets (and sometimes offering a form of capital protection)
- Participate in both primary and secondary equity markets
- Providing short and long term credit to corporates, financial institutions and governments
- Participate in price discovery

**Asset managers interact with banks and insurers in different ways, e.g.:**

- Through commissions for managing their portfolios
- Presence in banking groups and corporate ownerships
- Sourcing of leverage through prime-brokerage agreements
- Distribution agreements
Introduction
Role of investment funds in the Asset Management industry

Investors

Retail
HNWI
Households

Institutional
Pension Funds
Insurance companies
Banks
Other

Discretionary Mandate
Private Banker
Investment management company
Depositary Bank

Investment fund
ManCo

Fund Administrator

© 2018 Deloitte. All rights reserved
General Principles
How an investment fund works
Who creates investment funds?

- Fund Manager
- Investment Manager/Investment Adviser
- Distributor
What is a Investment Fund?

The term “Fund” covers a number of terms including mutual funds, collective investment undertakings, collective investment schemes or pooled investment vehicles and these terms are generally used interchangeably.

A fund can be classified in various ways e.g. by its structure, its investment strategy or its regulatory status.

• An investment fund is an entity that pools investors’ money to provide the investors with professional investment management.

• Typically an investment fund sells its shares to the public, invests the proceeds, mostly in securities, to achieve the investment objectives, and will either retain or distribute to its shareholders the net income and net gains.

• Diversification of investment risk of the individual shareholder (spreading the risk of a fall in value of a single investment amongst a number of investors, and also has the benefit of reduced broker costs (transactions or buying/ selling costs, due to the economies of scale).
To sell shares to investors

To invest the proceeds in a way that provides a good return to investors while at the same time complying with investment objectives

Investment Funds are designed to meet various investor needs:

- Income maximisation (funds that pay high dividends)
- Capital appreciation (growth funds)
- Balanced (combines both capital appreciation and income maximisation)
- High Yield
- Geographical markets (global funds, emerging market funds)
- Speciality Funds (invest in a specific industry, commodity or security)
- Short-Term V Long – Term
- Leverage (getting the max benefit from an upturn in a particular market)
Terminology

○ Prospectus:
  ○ Contract between investor and mutual fund
  ○ Publicly available

○ Determines:
  • Parties involved
  • Investment strategy of the compartment
  • Fee structure

○ Key Investor Information Document (KIID):
  A stand-alone, pre-contractual, 2-page document containing the essential features of the fund and is to be systematically provided to investors before they decide to invest
Terminology

- Net Asset Value (NAV):
  - Intrinsic value of fund
  - Usually expressed per share outstanding

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>1,000</td>
</tr>
<tr>
<td>Cash at Bank</td>
<td>200</td>
</tr>
<tr>
<td>Debtors</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Creditors</td>
<td>30</td>
</tr>
</tbody>
</table>

| Total Net Assets | 1,220 |
| Number of shares outstanding | 100   |
| NAV per share    | 12.2   |

**Importance of the NAV:**
All open-ended Investment funds must stand ready to redeem shares upon demand by the shareholder. The fund may also want to accept new capital. In order to complete either of these transactions without disadvantaging either the existing shareholders (be they continuing or cashing out) or the new shareholders, the NAV per share must be calculated.
Different structures
Different structures

Many distinctions are possible between types of investment funds, based on:

- **Legal criteria**
  - Mainly dependent of country of origin

- **Organisational criteria**
  - Fund of funds, Master/Feeder, closed ended funds, ...

- **Regulatory regimes**
  - UCITS, AIFMD

- **Investment policy**
  - *We refer to the next slides for further details*
What would be examples of categories of investment?

<table>
<thead>
<tr>
<th>Fixed Income: Deposits, Bonds, Money Market Instruments</th>
<th>Equities: including shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivatives: including Futures, Options and Swaps</td>
<td>Others: including currencies and commodities</td>
</tr>
</tbody>
</table>
Risk and reward potential for types of funds

- Three basic types can be identified: stock (also called equity), bond and money market.
- Depending on the underlying investments of the fund, the risk and reward profile will also be different (at least in theory).
Types of Regulated Funds in Ireland and Luxembourg

The two main types of regulated fund which can be set up are:

1. Undertakings for Collective Investment in Transferable Securities ("UCITS")
2. Alternative Investment Funds

Both are authorised and supervised by the financial regulator in Ireland the Central Bank of Ireland ("CBI") and in Luxembourg the financial regulator the Commission de Surveillance du Secteur Financier ("CSSF")

What is the difference between a UCITS and an Alternative Investment Fund?

- Investment Restrictions
- Borrowing
- Marketing
- Reporting
- Open / Closed Ended Funds
Parties involved
Roles of key participants

**Regulator**
- Authorisation
- Supervision

**Custodian**
- To ensure the safe-keeping of investments
- Ensures that the sale and the purchase of shares is made in accordance with the investment policy
- Execute the requests of the management company or the management of the fund in relation to the above

**Prime Broker**
- The services provided under prime brokering are securities lending, leveraged trade execution, and cash management
- Global custody
Roles of key participants

**Investment Manager**
- Responsible for establishing the fund
- Often located in fund centres such as London and New York
- Vary in size from boutique firms to global players
- Markets the fund to investors (often works with distributors to market funds across multiple jurisdictions)
- Manages portfolio of investments and makes investment decisions (portfolio management may be undertaken by a separate investment advisor)

**Administrator**
- Calculation of Net Asset Value (NAV).
- Maintaining and updating the portfolio of investments
- Pricing of assets
- Calculating fees and expenses
- Preparing interim and annual accounts
Roles of key participants

Transfer Agent

- Processes subscriptions and redemptions including the collection and payment of cash
- Completes Know Your Client (KYC) and Anti-Money Laundering (AML) procedures
- Maintains shareholder register
- Manages shareholder communications
- Processes dividends/distributions

Board of Directors

- Ultimate responsibility for the governance of the fund and for safeguarding the interests of investors
- Also responsible for approving the fund documents, the financial statements and the appointment of the service providers
Parties in Investment Fund Industry
Inter-Relationship between the parties

**OVERSIGHT ROLES**
- Depositary
- Directors
- Regulator
- Trustee
- Stock Exchange
- Management Company
- Auditors
- Prime broker

**OPERATIONAL ROLES**
- Investors
- Distributors
- Transfer Agent
- Investment Manager
- Counterparty
- Fund Administrator

Note: depending on the fund structure not all parties will be involved
Regulatory Evolutions
General topics regulatory horizon
2018-2023

2018

2019

2020

2021

2022

2023

AML V: Expected finalization and transposition of the directive for 2019

BMR: Applicable to user as of January 2018; Applicable to all benchmarks as of January 2020

BREXIT: Transitional period planned to start as of March 2019

Cross-border Distribution: Expected finalization of the regulation proposal by Q2 2019

CSDR/ Internalized settlements: Reporting start date for settlement internaliser is 10 March 2019

EMIR II: Estimated Start of EMIR II reporting requirements for Tier 2 Financial Counterparties based on the assumption that EMIR II is adopted in Q2 2018

GDPR and ePrivacy: GDPR application starts by mid-2018 - Expected finalization and transposition of the e-privacy directive for 2019

Green Finance: Commission expect to modify guidelines on DNFI for Q2 2018 and adopt regulation on taxonomy for climate change activities (incl. measures on prudential requirements for Q3 2019

SFTR: Transaction reporting for investment firms & credit institutions estimated to begin Q2 2019

SHRD: Transposition deadline for member states & application of the text set for June 2019

CMU: Implementation of the CMU program by end 2019

IDD: Application starts by end of 2018

PRIIPs review: Expected finalized proposition for a review of PRIIPs regulation by end of 2018

MMF: Applicable to new funds as of July 2018 – Applicable to old funds as of January 2019
Focus on cross-border distribution of collective investment funds

Regulation proposal

**Background**

On 12 March 2018, the European Commission adopted a package of measures to deepen the CMU including a proposal for a Directive amending the UCITS and AIFMD Directives to facilitate cross-border distribution of collective investment funds.

Through new elements or amendments, the proposal is expected to reduce costs by the creation of a more integrated market, as today only 37% of UCITS and 3% of AIFs are distributed in more than three countries. Harmonization of the marketing communication requirements is also key for the facilitation of the cross-border passport mechanism.

<table>
<thead>
<tr>
<th>Proposed amendments</th>
<th>AIFMD</th>
<th>UCITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amending Directive 2009/65/EC (UCITS) and Directive 2011/61/EU (AIFMD)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addition of definition of pre-marketing</td>
<td></td>
<td>Harmonization of requirements for marketing communication, irrespective of fund type</td>
</tr>
<tr>
<td>Addition of conditions under which an EU AIFM can carry out pre-marketing activities</td>
<td></td>
<td>Provision of new procedures and rules on transparency of national laws and the requirements applicable to marketing communication</td>
</tr>
<tr>
<td>The procedure and conditions for the cessation of marketing by AIFMs in a host member state will be defined</td>
<td></td>
<td>Facilities for investors will still be required to be made available in each host member state but fund managers would be permitted to use electronic or other distance communication means with investors</td>
</tr>
<tr>
<td>Facilities for investors (e.g. to make subscriptions, payments or repurchase/redeem units/shares) should be made available in each host member state in order to allow marketing of an AIF to retail investors</td>
<td></td>
<td>National procedures applicable to changes to the notification procedures will be aligned for UCITS across fund types and Member States</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Addition of rules regarding the de-notification of marketing of a UCITS</td>
</tr>
</tbody>
</table>

**Target Impact**

Deadline for feedback on the proposal was 10 May 2018. We expect finalization of the project by Q1 2019.
Beyond regulatory trends horizon
What does the future hold?

With the forthcoming changes at the European Commission at the end of 2018, there is uncertainty as regards some major EU financial policy package despite the paramount importance of these initiatives.

**EPT**
European work on post-trade Capital Market Union
This initiative to harmonize post-trade activities in the EU aims to remove the remaining barriers to cross-border financial activities.

**ESAs review**
EU Commission Draft Regulation on new organization and powers of European Supervisory Authorities
ESMA will be given increased powers to regulate directly certain sectors of capital markets across the EU.

**EU Digital**
EU initiatives on European digital single market
In addition to the digital frameworks launched in 2015, new issues are now on the EU radar:
- FinTech
- Cryptocurrency / Initial coin offerings (ICOs) / Blockchain
Market trends
Worldwide Fund Distribution Landscape
Luxembourg and Ireland are the top 2 European domicile

Top domiciles of worldwide investment fund assets (As of Q4 2016)

- United States 47.6%
- Europe 33.2%
- Other Domiciles 19.2%

Total AuM (€ Bn) and market share of European domiciles (As of Q4 2016)

- Luxembourg 3,701 26.2%
- Ireland 2,085 14.7%
- Germany 1,886 13.3%
- France 1,784 12.6%
- United Kingdom 1,457 10.3%
- Others 3,229 22.8%

- Australia
- Brazil
- Japan
- Canada
- China
- India
- South Africa
- Etc.

© 2018 Deloitte. All rights reserved
Luxembourg and Ireland are leading domiciles for cross-border distribution with funds distributed worldwide.

The number of funds and registrations overall is growing...

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of cross-border funds</th>
<th>Number of cross-border registrations</th>
<th>Average registrations per true cross-border fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>8,511</td>
<td>65,931</td>
<td>7.7</td>
</tr>
<tr>
<td>2012</td>
<td>9,436</td>
<td>72,264</td>
<td>7.7</td>
</tr>
<tr>
<td>2013</td>
<td>9,869</td>
<td>76,500</td>
<td>7.8</td>
</tr>
<tr>
<td>2014</td>
<td>10,430</td>
<td>83,505</td>
<td>8.0</td>
</tr>
<tr>
<td>2015</td>
<td>11,222</td>
<td>91,027</td>
<td>8.1</td>
</tr>
<tr>
<td>2016</td>
<td>11,732</td>
<td>96,548</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Additionally, Luxembourgish and Irish funds are distributed in every corner of the globe...

... and they are primarily domiciled in Luxembourg, followed closely by Ireland.

<table>
<thead>
<tr>
<th>Country</th>
<th>Share of Domicile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>24%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>64%</td>
</tr>
<tr>
<td>Others</td>
<td>4%</td>
</tr>
</tbody>
</table>

... with the world’s biggest fund managers using Luxembourg and Ireland as their distribution hub.
There are several macro trends impacting the cross-border distribution landscape...

<table>
<thead>
<tr>
<th>Macro Trends Impacting Demand</th>
<th>New international pools of wealth</th>
<th>New Asset Classes (e.g., PE/RE)</th>
<th>New distribution platforms</th>
</tr>
</thead>
</table>

**Demand trends**

- New pools of wealth (e.g., Asia, LATAM) - AM ✓ Distributor ✓
- New asset classes (e.g., PE/RE) - AM ✓ Distributor ✓
- Direct distribution and proximity to end client (web distribution, etc.) - AM ✓ Distributor ✓
- Access to mass retail (cfr. Robo-Advisory) - AM ✓ Distributor ✓
- Rationalization and simplification of fund ranges - AM ✓

**Local specificities**

Breakdown of distribution channels per country of distribution for the retail investors:

<table>
<thead>
<tr>
<th>Type of Actors</th>
<th>Retail</th>
<th>Wealth</th>
<th>Insur.</th>
<th>IFA</th>
<th>Instit.</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>28%</td>
<td>12%</td>
<td>21%</td>
<td>4%</td>
<td>26%</td>
<td>11%</td>
</tr>
<tr>
<td>Germany</td>
<td>47%</td>
<td>12%</td>
<td>18%</td>
<td>12%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Italy</td>
<td>67%</td>
<td>7%</td>
<td>13%</td>
<td>9%</td>
<td>1%</td>
<td>7%</td>
</tr>
<tr>
<td>Spain</td>
<td>68%</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>UK</td>
<td>8%</td>
<td>6%</td>
<td>16%</td>
<td>48%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>

**Other**

- Market infrastructure (e.g., CSD model)
- Approaches towards KYC/AML handling
- Investor support
- Regulatory cost

Demand trends impact the nature of cross-border fund distribution...

...whereas local specificities remain a challenge for fund distribution
... especially the emergence of a new world of distribution platforms...

<table>
<thead>
<tr>
<th>Macro Trends Impacting Demand</th>
<th>New international pools of wealth</th>
<th>New Asset Classes (e.g., PE/RE)</th>
<th>New distribution platforms</th>
</tr>
</thead>
</table>

### Old world

**Business situation**
- Disconnect between Asset Managers and end investors

**Operating model**
- Fund distribution through intermediaries (distributors)
- Client relationship monopolized by distributors

**Result for Asset Managers**
- Low leverage on branding
- Little insight into distribution dynamics
- No direct distribution network management

### New world

**New world**
- Asset Managers stand in direct contact with end investors
- Asset Managers re-appropriate distribution management
- Asset Servicers wishing to expand their Distribution Services by acquiring or launching distribution platforms

**Operating model**
- Fund distribution through D2C distribution platforms
- Disintermediation through use of DLT
- Social media presence of Asset Managers
- Launch of Robo-advisers to optimize costs

**Result for Asset Managers**
- Active brand management and review of competitive positioning
- Access to distribution analytics
- Active distribution channel management
Disruptive technologies
The Asset Servicing Industry today

- Approximately 200,000 people worldwide in asset servicing today
- Many providers are still constrained by the legacy of acquisitions, poor integration, multiple technology platforms, and a high level of customised manual activity
- Some of the technology platforms still in use date back twenty years or more!
- Investment managers and asset servicers still receive tens of millions of instructions by fax, and cut thousands of cheques every year
- Investment management and service providers continue to perform manual, repeatable tasks

- The value of assets under management have been rising over the past two years
- However the market hasn’t always been able to keep expenses under control which are on the rise again
- While technology has evolved, the industry has failed to keep pace
- New technologies can replace back and middle office repetitive, manual and cost-inefficient processes, with improved process automation - delivered on a continuous basis
Secular Trends Driving Transformative Change

New generation of investors
- Shifts in product mix
- Tailored & multi channel advice
- Digital front-end
- Stay in control (do it yourself)
- Peers and social networks
- Downside protection, hedging
- Yield and service of WM clients
- Socially responsible investing

Complex and evolving regulatory landscape
Now
- MIFID II
- GDPR
- AMLD IV
- IMR
- PRIIPS
- Solvency II

Tomorrow
- Shared ledger
- Smart contracts
- Online payment
- Cybersecurity

Technological innovations
- Blockchain
- Robo-advice
- Robotic process automation
- Machine learning
- Digital payments
- Digital platforms
- P2P lending

Data surge
- Growing quantity sources and data
- Need for powerful data processing
- Allow for real-time information
- Shifting mix of required analytical capabilities
  - Algorithmic
  - Predictive
Disruptive Technologies – RPA, Cognitive & Blockchain
Three disruptive technologies that have the potential to disrupt and transform areas of the industry value chain

### Robotic Process Automation
- RPA could replace much of the manual work involved in processes such as transaction processing, reconciliation and reporting
- The average cost savings expected is between 30-40%, with growth absorption / capacity creation of between 50-70%
- There are also non-financial benefits too – RPA is designed to be more predictable, consistent and less prone to errors thus reducing operational risk
- Whether this is a threat or an opportunity for low cost offshore service providers remains to be seen

### Cognitive Technology
- Natural language processing, computer vision, speech recognition, OCR, ICR
- Investment management firms use intelligent automation to review and analyse portfolio data, documentation and contracts to determine meaningful metrics and generate natural language reports for their clients and stakeholders
- Assets under management by robo-advisers are estimated to increase 68% annually to about $2.2tn in five years
- 55% of Investment Managers recently surveyed said Robo and AI technologies will have the greatest impact on their business

### Blockchain
- The World Economic Forum has forecast that by 2025 at least 10% of global GDP will be stored on Blockchain platforms
- A highly secure, tamper proof, shared online ledger enabling the exchange of value, storage of data and usage of smart contracts with no third party involvement
- Typically contains a validated list of digital assets and instruction statements such as transactions made, their amounts and the details of the parties to those transactions
- Focus beginning to narrow down e.g. KYC, distribution and reporting

### Activities Impacted

#### Front Office:
- Product Management (Product pricing)
- Distribution (Contracting)
- Trading (Pre-trade compliance)
- Risk Management (Market and Credit)

#### Investment Ops:
- Trade Support
- Market and Reference Data
- Derivatives / Collateral Management

#### Governance:
- Data Management and BI (Data Admin, Delivery, QA)

#### Accounting & Admin:
- NAV Dissemination
- Valuation & Pricing
- Fee Billing
- Regulatory Reporting
- Client On-boarding
- Client Reporting

#### TA and Fund Distribution Solutions
- Document Management
- Onboarding / KYC
- Risk Management
- Asset Accounting
- Trade and Cash Management
- MIS
- Client and Regulatory Reporting

© 2018 Deloitte. All rights reserved
Disruptive Technologies – Possible Outcomes

### Scenario A

**Incremental Change**
- Slow and incremental change
- It is thought that blockchain is not disruptive because it’s going to take time and as such cannot be classified as “disruptive”
- Improved customer experience, efficiency and cost savings will be felt across the industry
- Robots and back and middle-office workers work in unison, however robots will not entirely replace humans
- Asset managers will continue to develop advice capabilities to be delivered both B2B as well as D2C

### Scenario B

**Disruption to value chain**
- The value chain will be disrupted by new technologies
- Costs will be reduced because of streamlining the older processing costs through automation
- New entrants to the arena such as start ups will likely change the industry as we know it today and create a more varied and disrupted industry
- Back and middle-office tasks will no longer be offshored, rather taken back in-house and replaced with new technologies
- Senior executive members possess a strong understanding of current technology developments in this area

### Scenario C

**Disintegration of value chain**
- The value chain in its current state will disintegrate with significant disintermediation occurring
- Leading asset management firms will reallocate operating capital aggressively from outmoded business lines
- New workforce tailored to maintaining this technology. Blockchain will replace the need for intermediaries
- Self-sufficient investors will no longer require asset servicers to meet their investment needs, consequently service providers will need to enhance their offerings in order to retain clients

- Most likely outcome is whereby the industry will be disrupted, but will not disintegrate entirely
- In order to capitalise on the upward growth trend and increase profits, firms will need a clearly defined technology strategy and invest in new technology to meet the need of their evolving client base
Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) for a more detailed description of DTTL and its member firms.

At Deloitte, we make an impact that matters for our clients, our people, our profession, and in the wider society by delivering the solutions and insights they need to address their most complex business challenges. As one of the largest global professional services and consulting networks, with over 220,000 professionals in more than 150 countries, we bring world-class capabilities and high-quality services to our clients. In Ireland, Deloitte has over 2,000 people providing audit, tax, consulting, and corporate finance services to public and private clients spanning multiple industries. Our people have the leadership capabilities, experience, and insight to collaborate with clients so they can move forward with confidence.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte Network") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

© 2018 Deloitte. All rights reserved