LuxembourgforFinance
Agency for the Development of the Financial Centre

CAPITAL MARKETS

CONTENTS

INTRODUCTION

FACILITATING ECONOMIC GROWTH, DRIVING PROSPERITY

Capital markets play a key role in supporting economic growth by allocating capital to projects that help create jobs, provide public services, build infrastructure and drive innovation.

Whether it is an individual buying a home or saving for a pension, a business raising finance to expand or a government seeking to invest in public services, each benefit from a well-functioning capital markets environment.

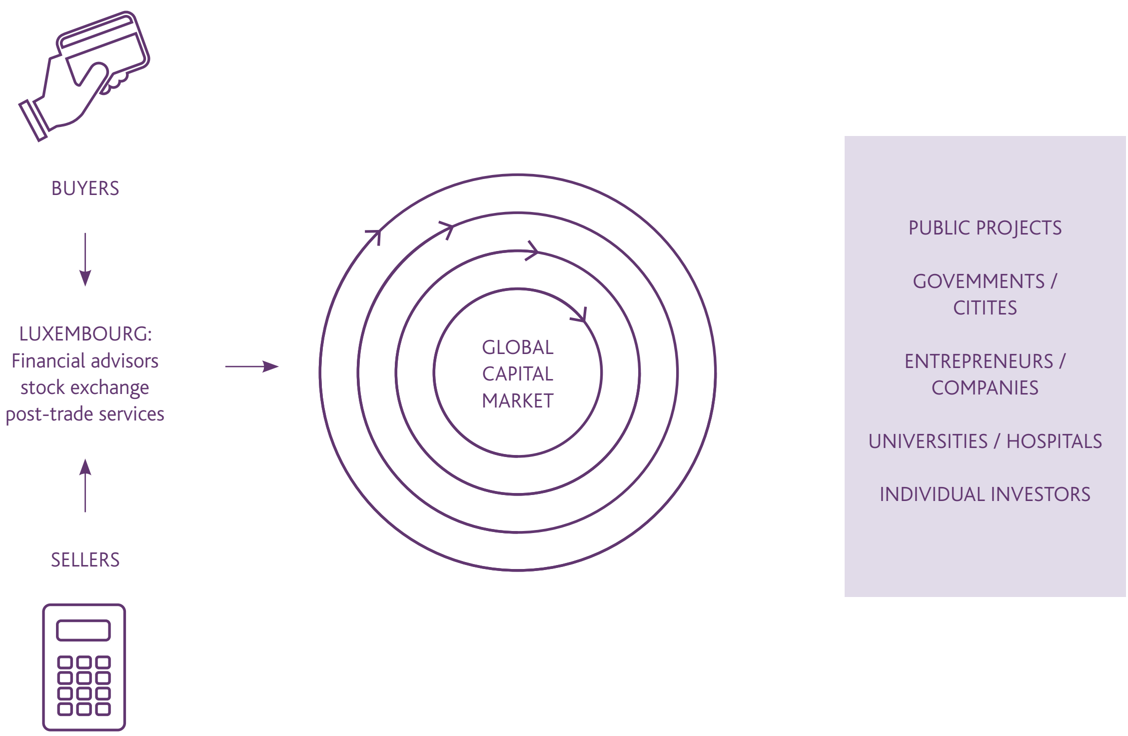
As the leading cross-border financial centre in the eurozone, Luxembourg has developed a comprehensive ecosystem, enabling investors to connect with international markets. The country's capital markets infrastructure and unique international expertise make it the perfect place for companies, ranging from SMEs to multinationals, to finance their European and global activities.

This brochure gives an insight in the multiple solutions offered by the Luxembourg financial centre. This comprises a highly developed market infrastructure, a comprehensive value chain, a large body of service providers, a strong multilingual regulatory framework and a deep talent pool.

Luxembourg is proud of its role as a pioneer. For instance, it is home to Europe's number one stock exchange for international bond listings, the world's first Green Exchange and Clearstream, the international central securities depository. Luxembourg offers the full range of post-trade services including issuance, settlement and custody of securities, as well as investment fund services and global securities financing.

Continuously driving innovation, Luxembourg has grown into an international leader in debt capital markets, a key hub for securitisation and structured finance vehicles, as well as an acknowledged platform for hosting landmark international IPOs.

The high-quality cross-border services provided in Luxembourg have attracted large amounts of business investment and capital to the EU over the past few decades. In doing so, it has played a vital role in the smooth functioning of the European and global financial system, redistributing capital across the continent and boosting prosperity.



01

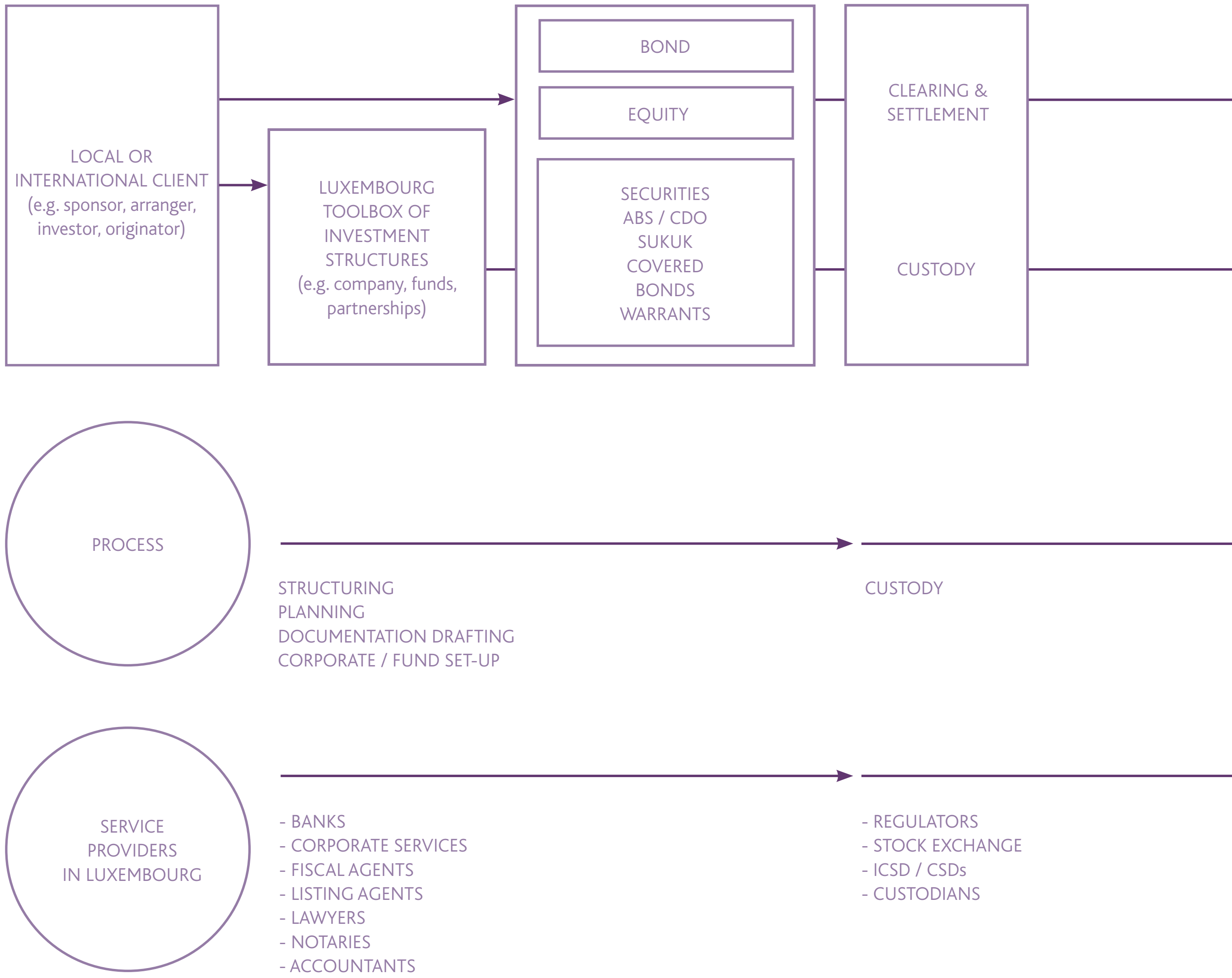
A COMPREHENSIVE CAPITAL MARKETS ECOSYSTEM

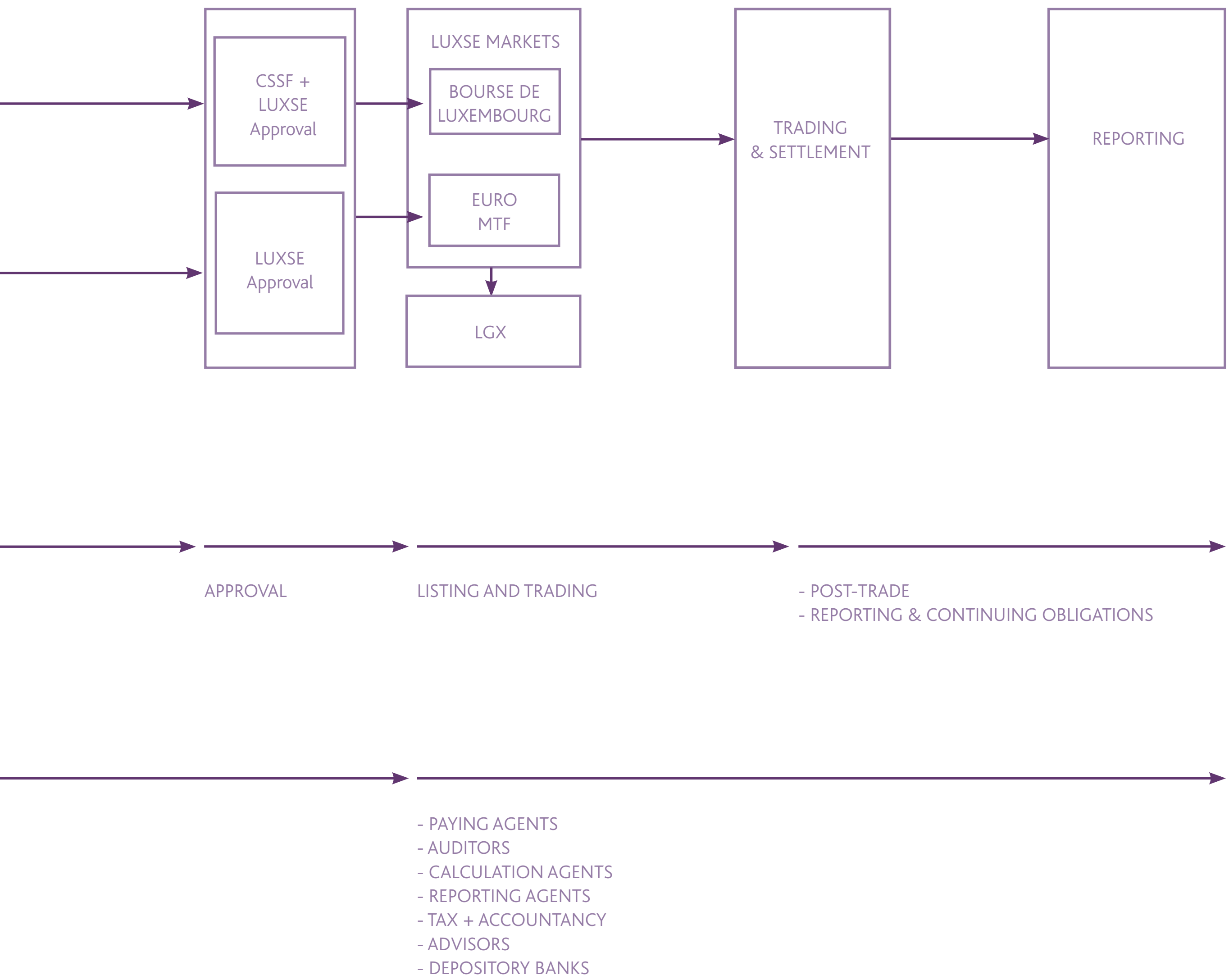
THE LUXEMBOURG CAPITAL MARKETS VALUE CHAIN

Whether a European investor wishes to buy green bonds issued by a Chinese bank or a US private equity firm wishes to invest in European non-performing loans that are acquired through a Luxembourg securitisation company, the Luxembourg capital markets value chain can offer the appropriate solution.

A capital markets transaction can be structured entirely in Luxembourg, making use of the value chain from end to end. This would involve the use of a Luxembourg issuing vehicle and Luxembourg service providers (inter alia the custodian, registrar, paying agent, fiscal agent and calculation agent), with documentation governed by Luxembourg law and admission to trading to Luxembourg markets. Other clients may wish to use the legal framework in other jurisdictions and may only require certain elements of the Luxembourg value chain such as the issuing vehicle, an admission to trading to the Luxembourg market or a bank account.

The advantage of the Luxembourg capital markets offering is that it can be used exactly where it is needed and can blend perfectly into an international structure with non-Luxembourg elements.


LOCAL OR INTERNATIONAL CLIENT (e.g. sponsor, arranger, investor, originator)
LUXEMBOURG TOOLBOX OF INVESTMENT STRUCTURES (e.g. company, funds, partnerships)
BOND
EQUITY
SECURITIES
ABS / CDO
SUKUK
COVERED BONDS
WARRANTS
CLEARING & SETTLEMENT
CUSTODY
PROCESS
STRUCTURING
PLANNING
DOCUMENTATION DRAFTING
CORPORATE / FUND SET-UP
CUSTODY
SERVICE PROVIDERS IN LUXEMBOURG
- BANKS
- CORPORATE SERVICES
- FISCAL AGENTS
- LISTING AGENTS
- LAWYERS
- NOTARIES
- ACCOUNTANTS
- REGULATORS
- STOCK EXCHANGE
- ICSD / CSDs
- CUSTODIANS


CSSF + LUXSE Approval
LUXSE Approval
LUXSE MARKETS
BOURSE DE LUXEMBOURG
EURO MTF
LGX
TRADING & SETTLEMENT
REPORTING
APPROVAL
LISTING AND TRADING
- POST-TRADE
- REPORTING & CONTINUING OBLIGATIONS
- PAYING AGENTS
- AUDITORS
- CALCULATION AGENTS
- REPORTING AGENTS
- TAX + ACCOUNTANCY
- ADVISORS
- DEPOSITORY BANKS

A LEADING EU-HUB FOR INTERNATIONAL INVESTORS

- A **leading financial centre** in the EU, according to GFCI --> **2nd in the EU** after London and 1st in the eurozone (2017)
- A **comprehensive ecosystem** geared towards cross-border financial services and products
- The financial sector regulator accepts **official documentation in English, French or German.** Articles of incorporation can be submitted in English
- A responsive regulator and EU-wide licensing of financial services
- Europe's **leading investment fund centre**
- Consistently rated **AAA** by all three major credit-rating agencies
- **GDP growth** above the EU average, over 4% in 2016 (Statec)
- A politically stable country with very **low public debt** --> 20% of GDP in 2016 (Statec)
- A long track-record of innovation
- The most **multilingual** country in Europe (Eurobarometer), 7th worldwide for English proficiency (EF English Proficiency Index 2017)

Luxembourg's financial centre has four main activities: wealth management and banking (retail, commercial, corporate), capital markets, fund management and insurance. Each of these industries is supported by high-quality advisors. Together with the stock exchange and post-trade services, this diverse ecosystem promotes a holistic approach and a high degree of synergy that facilitate capital markets activities.

"Financial professionals rely on a comprehensive 'toolbox' of instruments provided through a well-designed legal environment. Tailor-made solutions are crafted for the needs of corporates and investors."

Steve Jacoby,
Partner, Clifford Chance (Luxembourg)

A BROAD INTERNATIONAL SERVICE RANGE

Luxembourg is committed to providing the highest level of service and is home to a large body of capital markets service providers, including bankers, administrative agents, domiciliation agents, paying agents, transfer and register agents, lawyers, chartered accountants and tax advisors. These all offer a broad range of services to international clients.

Determining and structuring the optimal issuing vehicle and product	Financial and business due diligence reviews
Analysis of short-and long-term financial needs and capital requirements	Assessment of tax compliance and tax planning advice
Debt / IPO structuring	Listing process in coordination with all stakeholders - CSSF, Stock Exchange, lawyers
Ensure compliance with local & international legislation	Publish and file regulated information
Market assessment / listing strategy	Post-trade services
Preparation of prospectus & required documents	Assistance with ongoing post-issuance reporting and information distribution

"As a cross-border financial centre, Luxembourg offers the perfect framework within which to set up a vehicle for accessing international capital markets, whether for finance purposes of an international group, or for securitisation purposes."

Nicki Kayser,

Partner, Linklaters (Luxembourg)

Banks in Luxembourg have the expertise to advise on the optimal structure and terms of an issue in order for it to trigger investor interest and accompany the issuer in its contacts with investors. Local consultants and service providers will help determine the most effective legal and tax structure, including the corporate structure of the issuer, and can be counted on to ensure that the necessary substance is present in Luxembourg. Local clearing and settlement is available as well as an admission to listing and trading on the Luxembourg stock exchange if required.

All these service providers work together on a regular basis, resulting in efficient, seamless interaction. Testimony to this is the fact that many international companies have set up their group treasury operation in the Grand Duchy, and some even their in-house banks.

Why using Luxembourg law for contracts dealing with financial assets ?

Using Luxembourg law as the governing law for contracts dealing with financial assets is attractive given the very high level protection afforded to pledges and transfers of title for security purposes over claims and financial instruments (e.g. shares, bonds, units, warrants, etc.). Indeed, Luxembourg law offers a special regime for these collateral arrangements with simplified enforcement procedures. Exceptional protection is provided to collateral takers in the case of the collateral giver becoming insolvent. For instance, all national and foreign insolvency law rules are suspended, thus ring-fencing collateral held in Luxembourg from the insolvency estate and rules of the collateral giver.

In practice, this means that zero-hour rules, stay-of-action requirements and voidance rules (e.g. hardening period rules) will be without effect on the collateral held in Luxembourg, thus enabling the collateral taker to realize its collateral notwithstanding the insolvency of the collateral giver. Similarly, netting agreements with respect to claims or financial instruments are enforceable notwithstanding the existence of national or foreign insolvency proceedings initiated against the defaulting party, attachments or other measures such as criminal confiscation, and do not constitute an obstacle to the enforcement and to the performance by the parties of their obligations thereunder.

Choosing Luxembourg law and courts means guaranteeing that potential legal disputes will be heard by a judicial system and in a legal framework that will remain stable and predictable.

Source: Arendt & Medernach. The Arendt Eye on Brexit

"National courts are multilingual (French, German and English) and Luxembourg is home to a number of international law firms with expertise in commercial contracts and associated litigation. This also means that courts and lawyers alike have significant experience in dealing with contracts governed by different legal systems."

François Warken,
Partner, Arendt

HIGHLY DEVELOPED MARKET INFRASTRUCTURE

From listing and trading, to clearing and settlement, Luxembourg offers a solid capital markets environment within a highly developed market infrastructure. The Luxembourg Stock Exchange (LuxSE) is a global specialist in the listing of international securities and is well known for its fast, transparent and customer-focused listing process. For more than fifty years the Exchange has helped companies, institutions and governments around the globe access international capital markets. Furthermore, by listing new products such as green bonds, dim sum bonds and sukuk, it has actively contributed to innovation in the financial marketplace.

THE LUXEMBOURG STOCK EXCHANGE (LUXSE): AN EXCHANGE UNLIKE ANY OTHER

- **1st** for international bond listings in Europe
- World's **1st** Green Exchange
- **36,000** + securities listed
- **100** + jurisdictions
- **2,500** + issuers
- **68** sovereigns
- **13** supranationals
- **5,600** + share classes of UCIs listed
- **10,162** new listings in 2016
- Listings in **54** currencies

In order to serve more than 2,500 listed issuers from over 100 countries, LuxSE offers a broad range of instruments. The majority of business activity revolves around listing debt securities, investment funds, warrants, GDRs and equities.

TWO MARKETS

The Luxembourg Stock Exchange offers issuers two markets: the **Bourse de Luxembourg** market, which is regulated by European rules and the **Euro Multilateral Trading Facility (Euro MTF)**, the biggest MTF market in Europe, regulated directly by LuxSE.

Bourse de Luxembourg: EU-regulated market

- European passport
- 25,000 + listings
- Approval by the Luxembourg financial regulator, the CSSF
- Established since 1929
- IFRS or equivalent

Euro MTF – Exchange Regulated Market

- The largest MTF in the EU
- 11,000 + listings
- Approval by LuxSE
- Fast-growing market established in 2005
- National GAAP, IFRS or equivalent

LUXEMBOURG GREEN EXCHANGE

Exchanges – today more than ever before – play a crucial role in supporting and nurturing growth of the green bond market. In this spirit, in September 2016 the Luxembourg Stock Exchange introduced the Luxembourg Green Exchange, or LGX, the world's first platform that exclusively displays securities that raise proceeds for projects that are fully aligned with international green taxonomies.

Out of all exchanges, LuxSE is the green-finance market leader – it is home to more than 50% of all listed labelled green bonds globally*. With the creation of LGX, LuxSE has become the first exchange to establish a dedicated service that bridges investors' need for increased transparency and issuers' commitment to assure quality of reporting. This innovative mind-set in developing new tools in the sustainability space and will channel more funds to the green bond market.

LGX is so far an unmatched concept. It is the first platform that makes industry best practices for green securities, in particular ICMA Green Bond Principles and the Climate Bond Initiative's standards, a mandatory requirement. To be accepted and displayed on LGX an issuer must provide at least one form of a robust external review. A second admission criterion is the commitment to post issuance reporting. The introduction of these requirements has been an important contribution to the market, and a warmly welcomed one, as information about the factual allocation of proceeds is vital to investors.

Six months after its launch, LGX is the worldwide leader in green bonds listings. The 109 instruments issued by 26 entities and denominated in 18 currencies represent a combined value of €51 billion. Since the launch, the issued amount of green bonds displayed on the platform has risen by 30%. The world's first sovereign green bond, issued by the Republic of Poland, joined LGX in late 2016.

* In terms of the value of the instruments, source: Bloomberg

INTERNATIONAL RECOGNITION

International issuers, asset managers, law firms, listing agents, banks and investors recognise the advantages that the Luxembourg Stock Exchange has to offer. These include:

- A fast, customer-minded and secure listing process
  - the prospectus is reviewed in less than 3 days;
  - 99% of all securities are listed in less than 2 days
- Pre-listing advisory services
- Access to international investors
- Competitive pricing:
  - lowest listing costs compared to other markets for the majority of financial instruments;
  - no additional fees for prospectus publication;
  - preferential fees for subsequent listings (all issuers) and supranational issuers
- Automatic admission to trading for all listed securities
- Access to an advanced trading and post-trading infrastructure relying on Euronext's UTP platform for trading and LCH.Clearnet, Euroclear bank and Clearstream Banking for clearing and settlement
- One-stop-shop for regulatory reporting - a unique full service process not matched by any other security exchange
- Highly transparent listing process
- Easy access to information – integrated market and investor information; free access to prospectuses and securities-related documentation.

LEADING THE WAY IN THE DIGITAL AGE

The Luxembourg Stock Exchange offers issuers, or their representatives, a regulatory-required document filing service. The documents are then disseminated to interested parties, centrally archived and accessible to the general public on the Exchange's website.

To ensure the highest transparency and security standards, in 2016, the Exchange introduced blockchain into its reporting services. By combining the security benefits of the blockchain with the electronic signature of the certification authority, LuxSE created a decentralised infrastructure to store information relating to the "proof of existence" of such documents indefinitely.

The continuous revalidation process of the blockchain certification makes it virtually impossible to hack into the documents.

LUXEMBOURG POST-TRADE SERVICES

The listing and trading of securities is usually the most familiar part of the value chain. Less well-known is the area of post-trade, whereby, after listing and trading have been carried out, the buyer ultimately receives securities and the seller receives cash. Post-trade services are an indispensable part of the transaction and value chain.

Post-trade processes include:

- Clearing – the process of managing the actions between trade date and settlement date

- Settlement – the process whereby the buyer receives the purchased securities and the seller receives the corresponding cash for those securities

- Custody – the safekeeping of assets by intermediary banks, brokers and CSDs on behalf of investors

- Asset servicing – income collection, corporate action processing, tax reclamation and proxy voting services

The securities servicing industry is supported by a sophisticated intermediation structure that brings investors, issuers, and, trading parties together.

In recent years, Luxembourg has strengthened its position as a leader in securities services.

Today it is home to:

- Clearstream, an international central securities depository;
- LuxCSD, belonging to Clearstream International and the Luxembourg Central Bank;
- VP Securities; a subsidiary of the Danish VP group;
- globeSettle, a Central Security Depository of the London Stock Exchange Group, registered in Luxembourg;
- REGIS-TR, a European Trade Repository for reporting trades and transactions across multiple product classes and jurisdictions.

Their combined services include the issuance, settlement and custody of securities, as well as investment fund services and global securities financing.

CLEARSTREAM

The rapid growth and development of Eurobonds in the 1960s meant that Luxembourg needed to move into international clearing and settlement. The result was the creation in 1970 of the Centrale de Livraison de Valeurs Mobilières, better known as CEDEL.

Today, the organisation is known as Clearstream Banking, one of only two international central securities depositories (ICSDs) worldwide. With €13.4 trn in assets under custody (on a yearly average), Clearstream ensures that cash and securities are promptly and effectively delivered between trading parties, as well as managing and administering the securities that it holds on behalf of its customers. Clearstream's Global Issuer Hub also helps issuers reach investors worldwide at the lowest financing cost in almost 100 denominations.

Over 300,000 domestic and internationally traded bonds, equities and investment funds are currently deposited with Clearstream. The organisation maintains relationships with around 2,500 customers in over 110 countries. Its global network extends across 56 domestic markets and 98 currencies, settling more than 250,000 transactions daily.

Clearstream also offers collateral management, securities lending and borrowing services gathered under the Global Liquidity Hub. It provides a deep pool of liquidity through links to agent banks, trading platforms, clearing houses and other market infrastructures, helping to streamline and optimise post-trade processes.

LuxCSD

Alongside the ICSD, Clearstream also runs the central securities depository in Luxembourg, LuxCSD, which is co-owned by the Central Bank. LuxCSD offers direct access to the European Central Bank (ECB) TARGET2-Securities facility thus allowing participants to perform their transactions in central bank money with a de facto guarantee on the cash side. LuxCSD also acts as a provider of Local Entity Identifier (LEI) codes – a requirement for all EU counterparties entering into derivative trades under the European Market Infrastructure Regulation (EMIR).

VP LUX

The business model of VP LUX is to ensure investors easy, secure and cost-effective distribution of securities to all relevant European markets. VP LUX has therefore established direct access to Clearstream, Euroclear Bank, the Italian CSD (Monte Titoli) and VP SECURITIES A/S, and indirect access to other markets. All links from VP LUX are approved for the securitisation of bonds up to the best possible pledgeable limit in the Eurosystem.

The European integration and development of the business associated with the eurozone attracted the Danish issuers of mortgage bonds to Luxembourg. This is the reason for the inception of the third Luxembourg CSD, VP LUX, subsidiary of the Danish CSD VP SECURITIES. VP LUX is fully integrated in the European market and was the first Luxembourg CSD to become a direct participant of T2S. VP LUX's primary focus continues to be on debt issuance of instruments eligible for T2S settlement as well as on investment funds. Securities are distributed both internally and externally; ICSDs, VP SECURITIES as well as Monte Titoli being participants of VP LUX. Securities issued within VP LUX are eligible for collateral in the Eurosystem (CCBM). Settlement services are offered in EURO central bank money.

REGIS-TR

Luxembourg is also home of one major Trade Repository infrastructure, REGIS-TR.

REGIS-TR is a European Trade Repository for reporting trades and transactions across multiple product classes and jurisdictions. The Trade Repository is open to financial and non-financial institutions, and services all of the major regulatory reporting obligations in Europe.

REGIS-TR collects and administers details of trades and transactions reported by its clients in order to give market participants and regulators an aggregated view of their positions in compliance with relevant regulations. In addition to its core services, REGIS-TR is already progressing towards its goal of becoming a one-stop-shop for regulatory reporting requirements.

Entities such as REGIS-TR are moving to centre stage of the financial architecture because they allow markets and authorities to shed light on financial transactions, today for derivatives (in the context of EMIR) and tomorrow in the context of MIFID II and SFTR (Securities Financing Transactions Regulation). That activity makes Luxembourg a cornerstone of EU financial services.

REGULATION AND POST-TRADE SERVICES

Although the European Union’s Single Market and currency have delivered many advantages, its financial infrastructure remains largely fragmented. This is particularly noticeable within the post-trade arena of securities settlement, safekeeping and asset servicing. In this context, Luxembourg CSDs assist their international clients and continuously look for smart ways of making cross-border investment easier.

Regulation has made the use of post-trade service providers a necessity for many market participants that would never have considered using them before.

In Europe, these regulations are primarily manifested in the Markets in Financial Instruments Directive II and Regulation (MiFID II/MiFIR) and the European Market Infrastructure Regulation (EMIR), which demands greater market transparency through reporting requirements and standardisation rules on regulated trading venues.

In addition, a new European security settlement engine, TARGET2 Securities (T2S), centralises delivery-versus-payment settlements across European securities markets. Market participants will have to ensure compliance with these new regulations, and for many small and midsized players, compliance will prove extremely difficult. Luxembourg is well positioned to help those that are actively seeking solutions that can meet their needs across multiple geographies and asset classes.

Luxembourg's CSDs and their clients benefit from growth in the capital markets, not only when it comes to their settlement volume but also with regard to their collateral management services. EMIR and the Capital Requirements Directive 4 are increasing the need for collateral in the market.

The Luxembourg sovereign sukuk was the first EUR-denominated Shariah compliant sovereign bond. On settlement date, 7 October 2014, LuxCSD successfully handled the issuance and delivery-versus-payment (DVP) settlement in EURO central bank money during the night, giving issuers access to their funds at the central bank in the early morning.

CMU: MAKING EUROPEAN CAPITAL MARKETS MORE EFFICIENT

In 2015, the European Commission put forward an action plan to strengthen Europe's financial markets and relevant cross-border capital flows in the wake of the international financial and euro area sovereign debt crises.

The Capital Markets Union (CMU) proposal is aimed at integrating markets across Europe. The project recognises the fact that, despite the single market, the European Union is also made up of 28 different jurisdictions with different rules and regulations as well as tax laws.

This has created hurdles for companies and investors working across these different jurisdictions.

Luxembourg has specialised in helping clients to manage this complexity notably by having developed an unrivalled expertise in “translating” financial products and services into a European context, without sacrificing the legal certainty that goes with it. Financial institutions and service providers in Luxembourg are familiar with the technical, legal and fiscal requirements in other EU member states.

Given this unique cross-border expertise, Luxembourg is taking part in all future efforts to further integrate the EU financial markets. The largest industry of the financial centre, the fund industry, already benefits from longstanding European legislation ensuring an open EU market.

The current regulatory agenda within the CMU action plan provides for additional incentives for listing private bonds, boosting the flow of asset backed securities and promoting increased efficiencies and cost savings for the documentation to be produced prior to a listing. The Luxembourg Stock Exchange, with its specialisation in specific areas notably international bonds is perfectly placed to support these initiatives.

New chair in Capital Markets and Post-Trade

In 2016, the University of Luxembourg established a new funded Chair in Capital Markets and Post-Trade in cooperation with seven partners from the financial and legal services sector.

The Chair will be located at the Faculty of Law, Economics and Finance. Research and teaching activities in the field of capital market infrastructures, with a focus on post-trade finance, will be carried out at the Luxembourg School of Finance (LSF), in interdisciplinary cooperation with the Research Unit in Law. It is foreseen that a new Master in Post-Trade Finance, offered at the LSF, will be developed as a result of this partnership.

02

INTERNATIONAL PIONEER IN DEBT CAPITAL MARKETS

Over the past few decades, the Luxembourg financial centre has developed a comprehensive range of services to meet the growing demands of debt capital markets and connect international investors and borrowers.

Luxembourg is home to Europe's primary stock exchange for the listing of international bonds and in 2016, some €1,188 billion of debt was issued in the country through a range of different instruments. These include corporate bonds, high-yield bonds, Eurobonds, indexed bonds, green bonds, sukuk and dim sum bonds.

HIGHWAY TO SUCCESS

To trace the roots of debt capital markets in Luxembourg, one would need to go back to 1963, when Autostrade, the builder and operator of the Italian motorway network, launched a €15m, 15-year, 5.5% bond deal through SG Warburg, Banque de Bruxelles, Deutsche Bank and Rotterdamsche Bank. This was guaranteed by the Italian State Holding Company.

This transaction, which was issued by an Italian company, denominated in US dollars and based on English law, became the first ever Eurobond issuance. Both the London and the Luxembourg Stock Exchanges had been considered to host the historic bond listing, but in the end, Luxembourg was chosen because of its wide-ranging experience of dealing with foreign currencies and its reputation for innovation.

The Eurobond market was an instant success, growing to an estimated €830m over the following 18 months. It was also instrumental in establishing Luxembourg as the go-to centre for investors and borrowers in the debt capital markets – a position it still holds today.

- LuxSE is the global leader for listing international bonds
- **40%** of all international bonds on European markets are listed in Luxembourg
- More than **70 countries** have at least one issue of their sovereign debt listed in Luxembourg.
- **26,000** debt securities were oustanding in Luxembourg in 2016
- More than **1,200** bonds are quoted daily in Luxembourg
- The **13 leading supranational debt issuers** listing in Luxembourg include the European Investment Bank, World Bank, European Bank for Reconstruction and Development, African Development Bank and the Asian Development Bank

A VITAL SOURCE OF FINANCE FOR BUSINESSES AND GOVERNMENTS

Governments across the EU funded 72% of their debt finance through bonds in 2015, many of them choosing Luxembourg as their centre of choice.

Still however, financial corporations were the biggest users of bonds in 2015, with 69% of the overall issuance coming from banks and other financial institutions. For these companies, bonds provide an important source of funding, which can also be used as regulatory capital. In turn, this enables banks to loan money to businesses, organizations and households in the wider economy.

Low interest rates across the world have also created market opportunities with corporates becoming more interested in debt issuance as it provides low-cost external financing. At the same time, investors are increasingly interested in corporate bonds as they provide an avenue for capturing higher yields and access to more finance pools via diversified instruments.

HIGH-YIELD BONDS

The Luxembourg Stock exchange is one of the most popular places for listing of high-yield bonds. Luxembourg vehicles are regularly used because of Luxembourg's attractive corporate law and the legal certainty and robustness offered by Luxembourg financial collateral arrangements.

High-yield bonds are issued by operators for financing, refinancing and are also commonly seen in the context of acquisition financing transactions in combination with more traditional bank funding.

REASONS TO ISSUE HIGH-YIELD BONDS

"Luxembourg's collateral laws are efficient and robust, which is of particular importance in complex, multi-tier financing structures where high-yield bonds are used."

Philippe Prussen
Partner, Elvinger Hoss Prussen

LISTING

LuxSE is the leading European exchange for high-yield bonds and, today, more than 50% of European high-yield bonds are listed there.

- LuxSE became the first exchange in Europe to offer a regulated market listing high-yield bonds in 2006, publishing the first EU guidance and rules for high-yield bond listing in cooperation with European High Yield Association in 2006.
- LuxSE offers maximum transparency and access to high-yield bond security data online, including daily closing prices.
- The creation of the Euro Multilateral Trading Facility in 2005 was another important step for LuxSE as it provided issuers with a competitive and flexible alternative to regulated markets (within the framework of MiFID). The Euro MTF has seen a double-digit growth since 2013.

The open-minded attitude of the regulator and the international, service-oriented approach of LuxSE to new issuers are just some of the factors contributing to the growth of the high-yield bond market in Luxembourg. As a result, numerous multinational groups have chosen Luxembourg as their issuing and listing location for high-yield bonds.

High-yield bond listings on LuxSE include

COLLATERAL ARRANGEMENTS

High-yield bonds generally benefit from a security package, which will be determined in each specific case and will include guarantees and collateral over the issuing group's assets. Since investors in the bonds take a financial risk on the guarantors, such entities must be adequately disclosed in any offering or listing documentation. The general rule under the prospectus directive and the internal rules of the Luxembourg Stock Exchange is that a guarantor needs to be described as if it were the issuer itself.

This can be unduly burdensome in some circumstances, mainly in the context of the disclosure of financial information. Here both the CSSF and the Luxembourg Stock Exchange may provide certain exemptions: for instance, they may (under certain specific conditions) permit that only the consolidated financial statements of the parent company are presented. Considering that otherwise the financial statements of the last two or three years of the issuer and each guarantor would need to be provided, this approach has often helped issuers in the past.

Record high yield in Luxembourg

LuxSE listed and admitted to trading a $5.2 billion bond from Numericable-SFR S.A in 2016, the largest single high-yield bond ever issued.

The bond was listed on the Euro MTF market and the proceeds of the issue were used for refinancing existing debt.

Numericable-SFR, part of the Altice group, is France's second largest telecoms operator and has major positions in all segments of the French market. The bond followed on from the group's record breaking multi-tranche issue in 2014, which was also listed in Luxembourg.

Company acquisition

In 2015, LuxSE listed and admitted to trading a high-yield bond issue from Swissport, the world's largest provider of ground and cargo handling services in the aviation industry.

Swissport was in the process of being acquired by HNA Group, owner of China's fourth-largest airline. The proceeds of this bond were used to finance the acquisition of Swissport by HNA Group. The refinancing of certain existing indebtedness of the target and its subsidiaries (i.e. Swissport) was part of the transaction.

Four other bonds from Swissport companies have been listed on the Luxembourg Stock Exchange since 2011.

GREEN BONDS

Green bonds
Green bonds are debt instruments that have been issued to fund projects that have positive environmental or climatic impact.

2007
The Luxembourg Stock Exchange was the first stock exchange in the world to list a green bond, it was issued by the Luxembourg-based European Investment Bank.

First green exchange in the world
The Luxembourg Green Exchange (LGX) now lists 109 green bonds over €51 billion.

Following the Paris COP 21 Agreement in 2015, which set a framework for tackling climate change across the world, greater focus has been placed on the role of Climate Finance; a form of finance that is likely to require trillions of dollars of investment every year ($5 trillion by 2020, according to the International Energy Agency). Although some of this will come from the public sector and traditional bank loans, green bonds are expected to become a dominant source or funding and make up a larger share of the $100 trillion global debt market.

Launched in 2016, the Luxembourg Green Exchange (LGX) is the first platform dedicated exclusively to green securities. It provides issuers and investors an environment where they can come together and fulfill their green objectives.

LGX is the first exchange to translate industry best practices for green securities into mandatory requirements. Its entry requirements are in line with industry standards for green securities and recognise several broad categories of eligibility for green projects.

"There is no doubt that new issuance of green securities has taken off since COP21 and there now seems to be a real desire for change. The green market has enormous potential but this needs to be matched by interest from investors. By setting strict standards for 'green' securities, LGX aims to create an environment that will allow the market to prosper in a secure and transparent way."

Robert Scharfe,
CEO, LuxSE

IMPORTANT DRIVERS FOR ISSUING GREEN BONDS ARE:

- They attract environmentally-conscious investors who may not otherwise invest in a company.
- They satisfy stakeholder demands for responsible business practice.
- They help project companies as environmentally-conscious organisations, thereby enhancing their brands.
- They are an accessible and powerful instrument for financing a sustainable, low-carbon economy.
- They are an economical and convenient financing model for project developers.
- Almost all green bonds issued in the past have been oversubscribed.

Source: EY

BEYOND GREEN BONDS

Luxembourg has an impressive track record in developing Climate Finance tools.

- 67% of AuM in European impact funds are domiciled in Luxembourg, as well as 37% of funds with environment strategies, representing Europe's largest market share.
- Over 60% of assets in micro-finance investment vehicles (MIVs) worldwide are in Luxembourg domiciled funds.
- Luxembourg funds account for*:
  - 69% of AUM in renewable energy funds in Europe
  - 69% of AUM in water funds in Europe
  - 63% of AUM in remaining ecological investment strategies in Europe.
- The Luxembourg Finance Labelling Agency (LuxFLAG) has launched a new Climate Finance label that is granted to eligible investment funds financing climate change mitigation and/or adaptation measures. One of the primary eligibility criteria of the label is that the applicant fund must dedicate at least 75% of assets under management to investment in climate change mitigation and/or adaptation activities.

* KPMG : KPMG Responsible Investing Fund Survey, LuxFLAG.

Pioneering Green Bond programme in Luxembourg by Bank of China

In July 2016, the Luxembourg Stock Exchange (LuxSE) listed, and admitted to trading on its Euro MTF market, four green bonds issued by Bank of China (BoC). With a total issue amount of $2.8 billion, it is the first green bond issued by a Chinese financial institution in continental Europe.

Proceeds raised from the issuance of these green bonds are being used to finance projects that will promote renewable energy, pollution prevention, clean transportation and sustainable water management.

BoC has already listed its "Schengen" bond on the Luxembourg Stock Exchange in 2014 , becoming the first Chinese financial institution to list an offshore Renminbi Bond in the eurozone. Continuing its Schengen bond series, BoC set a new standard for the global Green Bond market and became the first bank to list multiple green bond tranches simultaneously under a single programme.

"The 'Green Schengen Bond' is an excellent demonstration of Bank of China's determination to promote the green bond market development in Europe through its Luxembourg branch and our bank's strong wish to continuously support Luxembourg as it strives to remain the leading green bond listing centre."

Zhou Lihong,
CEO at Bank of China.

First sovereign green bond

Poland, one of the leading sovereign issuers listed on the Luxembourg Stock Exchange, chose LuxSE as the listing venue for the first sovereign green bond in international capital markets in 2016. The €750 million green bond is displayed on LGX.

The proceeds of the sovereign green bond were used for renewable energy projects, clean transportation, sustainable agriculture operations, afforestation, national parks and reclamation of heaps. Other sovereigns have already publicly indicated that they will join the green bond issuance trend, already well advanced among corporate issuers and development banks.

"LuxSE is one of the biggest stock exchanges for international bonds in Europe, and a very innovative one. The recent implementation of the Green Exchange is a proof of an open-minded approach towards the needs of financial markets. On top of that, we received strong recommendations from market participants to list there."

Piotr Nowak,
Deputy Minister of Finance of Poland.

DIM SUM BONDS

Dim sum bonds, which are also known as offshore renminbi (RMB) bonds or CNH bonds, are fixed income instruments denominated in offshore RMB that trade and settle outside of mainland China. These relatively new instruments have represented a growing portion of China's total currency debt since their creation in 2007. The dim sum bond market is attractive to both issuers and investors as it helps diversify their sources of funding and portfolio of investments.

The first issue was made by the China Development Bank in July 2007. Since then the dim sum bond market has become more international following a decision by the Chinese authorities in 2010 to relax the rules for issuance. This opened the door for other foreign financial institutions and corporates to raise renminbi on the offshore markets and created momentum for international stock exchanges to list dim sum bonds.

EUROPE'S PREMIER DIM SUM BONDS LISTING VENUE

LuxSE ranks first in the eurozone and fourth globally in terms of global dim sum bond listings. In this sector it is only surpassed by the Asian exchanges, Hong Kong and Singapore.

Today, many established international companies issue dim sum bonds as part of their global funding programmes, diversifying their base of investors. Many of these institutions already list debt securities in other currencies on LuxSE and continue to use its quick and efficient processes for RMB denominated listings.

The first RMB denominated fixed income security to be listed in Europe was issued by Volkswagen in May 2011; it was listed on LuxSE. Since then, business volumes have grown substantially. Today, more than 160 dim sum bonds have been listed in Luxembourg raising a total amount of CNY 72.1 bn.

STRENGTHENING TIES WITH GREATER CHINA

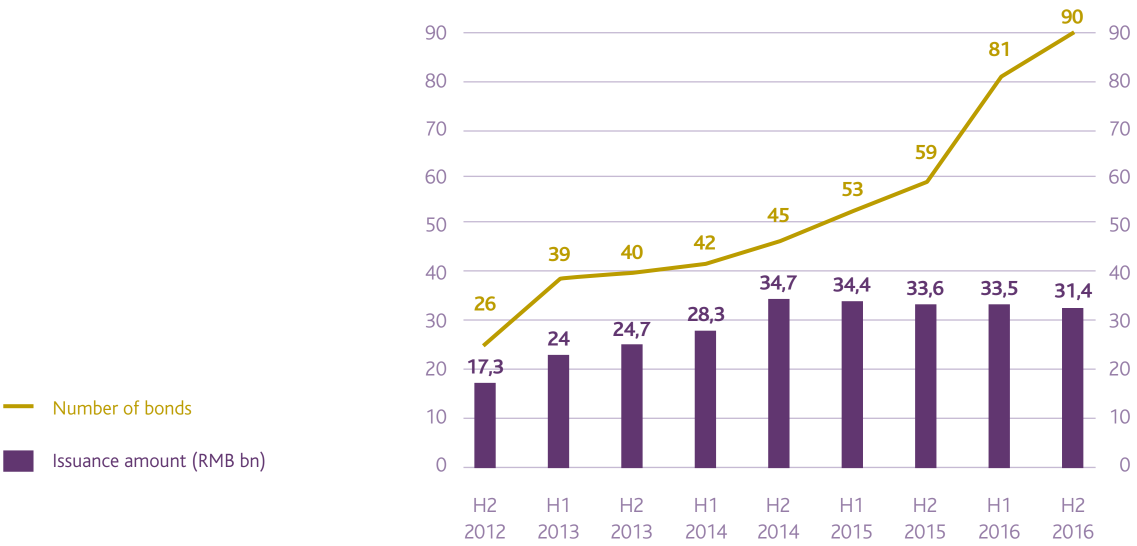
In order to sustain close collaboration with its partners, LuxSE has signed memoranda of understanding with a number of exchanges and banks, including:

- Shanghai Stock Exchange
- Bank of Communications (BoCom)
- China Merchants Bank (CMB), Qianhai Financial Holdings
- HKEX
- Shenzhen Stock Exchange
- Taipei Exchange.

BEYOND BONDS

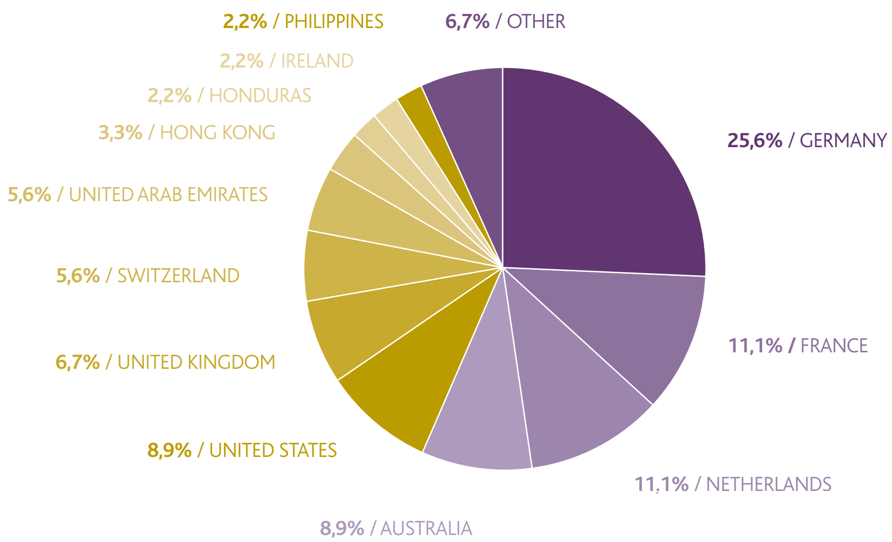
- In 2015, Luxembourg welcomed the first Chinese high-yield bond issuer, Hainan Airlines.
- Luxembourg is the continental hub for major Chinese banks: Bank of China (BoC), Bank of Communications (BoCom), Industrial and Commercial Bank of China (ICBC), CCB (China Construction Bank), Agricultural Bank of China (ABC), and China Merchants Bank (CMB).
- Listings of RMB denominated investment funds are strongly developing.
- The number of dim sum bonds listed on LuxSE has increased tenfold over the past five years.
- Luxembourg funds currently account for 23% of global assets and 65% of European assets invested in Mainland China.
- With more than 550 warrants issued by Chinese companies and other China related instruments, LuxSE is a major listing venue for this type of securities. 47 out of 50 issuers included in the Shanghai Stock Exchange Index (SSE50) are also present on LuxSE as underlying warrants.

Evolution of RMB listed bonds in Luxembourg Q4 2016



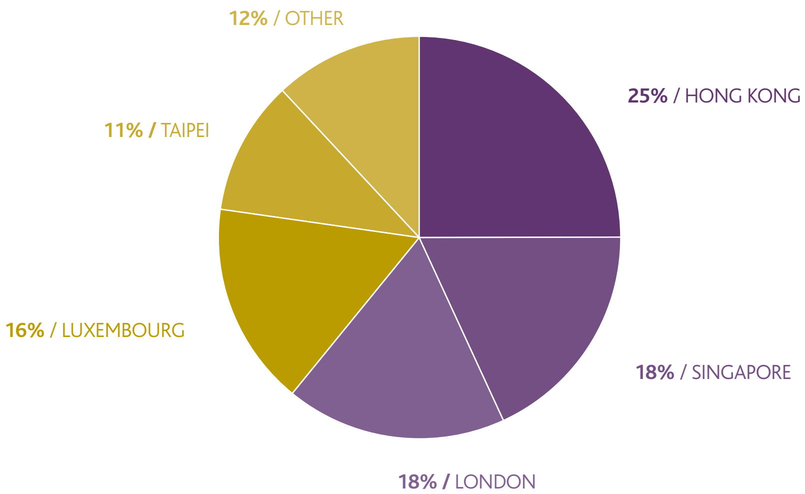
Source: Luxembourg Stock Exchange

Origin of rmb bond issuers in Luxembourg Q4 2016
(% by number of bonds)



Source: Luxembourg Stock Exchange

Dim sum bonds listed worldwide



Bloomberg, LuxSE & LSE

PRIVATE LOAN FUNDS

Corporate finance in Europe is currently undergoing a significant transformation. With banks in the process of deleveraging and burdened by additional capital requirements, debt funds have stepped in and are increasingly provided funding to small- to medium-sized enterprises, either through direct lending or through loan acquisition/participation.

CORNERSTONES OF A HARMONISED EUROPEAN FRAMEWORK

In order to keep pace with this market development from a regulatory perspective, the European Securities and Markets Authority (ESMA) published its opinion on 'Key principles for a European framework on loan origination by funds' at the European Commission's request. In doing so, the ESMA took stock of national practices with regard to loan origination by investment funds and proposed the cornerstones around which a harmonised European framework on loan origination could centre.

In response to this, the Commission de Surveillance du Secteur Financier (CSSF) published an update of its AIFM Law FAQ in June 2016, where it officially confirmed that Luxembourg-based AIFs may engage in loan origination, loan acquisition or loan participation activities, subject to specific organisational and operational requirements.

LUXEMBOURG MARKET READINESS

Luxembourg has been hosting loan (origination and participation) funds for many years, leveraging on the legal and regulatory framework while developing operational tools and expertise.

Among the most commonly used vehicles, the Luxembourg specialised investment fund (SIF) has shown a great deal of flexibility to accommodate loan fund structuring. Since its inception in 2007, new types of vehicles were added to the Luxembourg toolbox, some of them such as the EuVECA and the ELTIF, being driven by European legislative initiatives. Others, such as the reserved alternative investment fund (RAIF) were added to the Luxembourg toolbox to allow a quicker time to market.

Market players have also adapted to this growing trend, developing expertise and know-how specific to the PE debt asset class in term of operations (e.g. cashflow reporting, trade processing), valuation or risk management.

Sources: LPEA, Deloitte, KPMG

With a number of loan fund managers already operating Luxembourg AIF and some of them transferring their middle office in the Grand Duchy, the financial centre has successfully positioned in a new industry and provides a well-regulated environment for this growing segment.

LISTING OF FUNDS

The Luxembourg Stock Exchange is the listing venue of many investment funds. The Luxembourg Stock Exchange has deep understanding of the characteristics of investment funds and has helped to design a set of procedures for promoters listing an investment fund, whether it be a domestic fund or incorporated abroad, as part of an IPO or at a later stage.

One of the main reasons why a fund may wish to be listed is to broaden the scope of its potential investors. Institutional investors, such as pension funds, insurance companies and UCITS funds, have to include a percentage of listed securities in their securities portfolio. At a time when regulators and investors are requesting more transparency, listing on a stock exchange is considered as a way of improving access to financial information, liquidity and valuation of the securities.
Luxembourg's leading position in the investment fund industry also gives listings a competitive advantage and more visibility.

A wide range of investment funds are accepted on both markets:
- Foreign and domestic funds
- Exchange traded funds, UCITS and alternative funds
- Open and closed-ended
- Multi-class or multi sub-fund

Trading:
- Continuous trading in real time without delays
  - Fund prices are calculated on a continuous basis
  - Investors can trade their funds at actual market prices
- Transparency
  - Possibility to find in real time all pre-trade and post-trade information
- No minimum investment
- A regulated and monitored market place
- Principle of independence
  - Prices are set by specialists who are not in contact with managers
- Optimized post-trade processes
- Guaranteed execution

03

SECURITISATION

BRIDGING THE GAP

Securitisation plays an important role in the functioning of financial markets and the modern global economy. It can lower funding costs, benefitting businesses and citizens, and can help issuers and investors diversify and transfer risk across different asset classes, geographies, industries, instruments, and credit risks. According to the EU Commission, securitisation also remains a significant source of company financing as it plays a key role bridging the gap between deleveraging banks and investors seeking to diversify their portfolios in Europe's bank-dominated financial system.

Things have not always been so smooth for the industry, however. Following the US sub-prime mortgage crisis, securitisation issuance in Europe dropped from €594 billion in 2007 to €216 billion in 2014. SME securitisation issuance dropped from €77 billion to €36 billion over the same period. As a direct consequence of this, various laws and regulations were passed to make the securitisation industry safer and simpler.

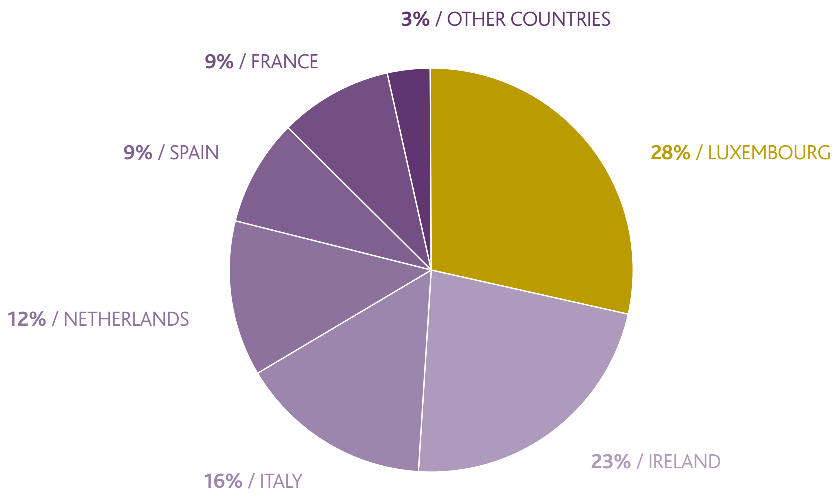
Throughout the years, Luxembourg has maintained its position as one of the leading centres for securitisation and structured finance vehicles. One of the main reasons for this position is the existence of a dedicated securitisation law which ensures innovation and legal certainty in securitisation structures.

For example, Luxembourg securitisation companies are allowed to create more than one compartment, meaning they can structure more than one transaction within a single legal entity. In January 2017, around 1,114 vehicles were in existence in Luxembourg.

Overall, the outlook for Luxembourg's securitisation industry is strong, particularly in context of the Capital Markets Union and the on-going redevelopment of the European securitisation market, which Luxembourg is expected to make an important contribution to over the coming years.

Country market share

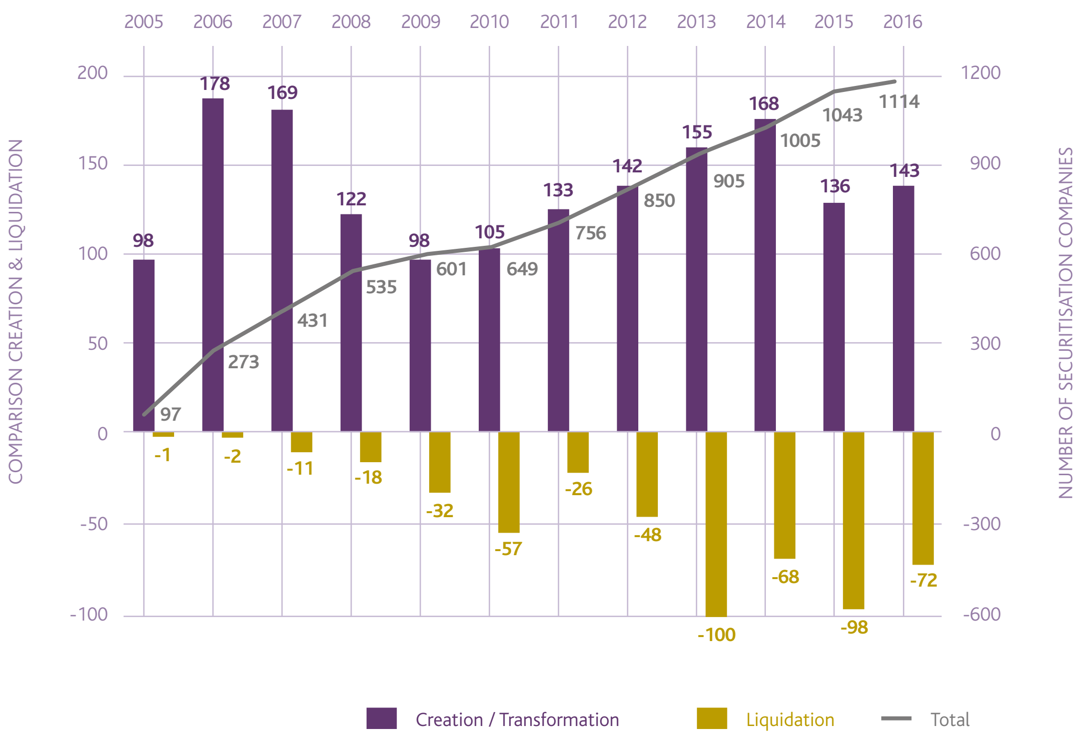
2016



Source: EY

Evolution of Luxembourg securitisation companies

January 2017



Source: Securitisation in Luxembourg PwC

BENEFITS OF SECURITISATION

Assigning assets to a securitisation company can offer a range of advantages, such as access to capital at a reduced cost, without the need to take out a bank loan or issue more shares. Securitisation also allows non-liquid assets to be converted into cash, cut the cost of financing and transfer risks to external investors.

Efficient access to capital
Diversification
Reduce funding cost
Convert illiquid assets to cash
Raise capital without prospectus (subject to certain conditions)
M&A activity
Transfer risk to third parties

A WIDE VARIETY OF ASSETS

Although the most commonly cited example of securitisation is a portfolio of loans from a financial establishment, securitisation activity in Luxembourg is much broader.

Under Luxembourg law, an extremely wide range of assets can be securitised: securities (shares, loans, subordinated or non-subordinated bonds), risks linked to debt (commercial and other), movable and immovable property (whether tangible or not) and, more generally, any activity that has a certain value or a future income.

There are 3 types of asset-backed securities (ABS):

1 • Mortgage-Backed Securities: residential and commercial mortgages
2 • Collateralised Debt Obligations: corporate risks such as loans, assets or credit derivatives
3 • Other Asset-Backed Securities: all other assets such as consumer loans, credit card receivables, student loans, etc...

Main asset classes securitised through Luxembourg

Securitisation vehicles are also used within Islamic finance, private equity structures and hedge fund transactions.

FLEXIBILITY AND PROTECTION

FLEXIBILITY	INVESTOR PROTECTION
• Securitisation law • Eligibility of all asset classes, all investors and all types of instruments to be issued. • Multi-compartment structures: assets and liabilities can be split, each of the compartments can be liquidated separately without any negative impact on the other compartments. • Multi-level structures: ◦ In a dual structure, the acquisition vehicles can be established in the country of the originator or in the country where the transferred assets are located ◦ No requirement for arrangers, managers or agents to be based in Luxembourg. • No requirement for risk diversification.	• Segregation between compartments • Investors and creditors may: ◦ Subordinate their rights to payment to the prior payment of other creditors or investors (subordination provision), which gives strong legal basis to tranching in securitisation transactions, when required. ◦ Waive their rights to request enforcement (non-recourse provision) or to initiate a bankruptcy proceeding against the securitisation vehicle (non-petition provision).

STRUCTURING CDOs (COLLATERALISED DEBT OBLIGATIONS) THROUGH LUXEMBOURG PLATFORMS

A CDO is a repackaging of a portfolio of financial assets. CDOs are issued (either on a stand-alone basis or under repackaging programmes or specially tailored CDO programmes) by SPVs investing in a portfolio of assets or entering into multiple credit default swaps. To fund the investment in the assets, the SPV borrows money by issuing notes to investors, who will be repaid from the cashflows received from the portfolio of assets.

When CDOs were first developed in the mid-1990s, they could be split into two main types:

- CBOs (or Collateralised Bond Obligations); and
- CLOs (or Collateralised Loan Obligations).

In CBOs, the underlying portfolio of assets consists of bonds and the primary purpose of a CBO is to make a profit out of the difference between the returns received by the SPV on the assets in the portfolio and the SPV's funding costs.

In CLOs, the underlying portfolio of assets consists of loans, and the primary purpose (as with a traditional securitisation) is to raise finance for the originator (which was usually a bank) whilst at the same time removing the loans from its balance sheet (in order to improve its capital adequacy ratios).

Current terminology to describe the type of deal focuses instead on a number of features, including the purpose for which the CDO is set up, how the SPV's liabilities are funded, and the nature of assets. Consequently, CDOs can be either cash or synthetic, balance sheet or arbitrage, static or managed, and cashflow or *market value*.

CDOs can be issued by Luxembourg SPVs organised (either as regulated or unregulated entities) under the Luxembourg securitisation law and benefit from the unique features of that legislation.

The Luxembourg law on securitisation recognises “segregation and ring fencing”, “limited recourse”, “non-petition”, “non seizure of assets” and “subordination” provisions, which are key to structure a robust, insolvency remote transaction. It also allows for compartmentalisation where each compartment forms an independent part of the issue. These features are particularly important for rating agencies when rating these types of transactions.

CROSS-BORDER SECURITISATIONS

According to Luxembourg law, a securitisation vehicle can be constituted either as a **company or a fund.** The law also distinguishes between regulated and unregulated securitisation undertakings. A securitisation undertaking must be authorised by the CSSF and must obtain a licence if it issues securities to the public on a continuous basis.

SECURITISATION COMPANY

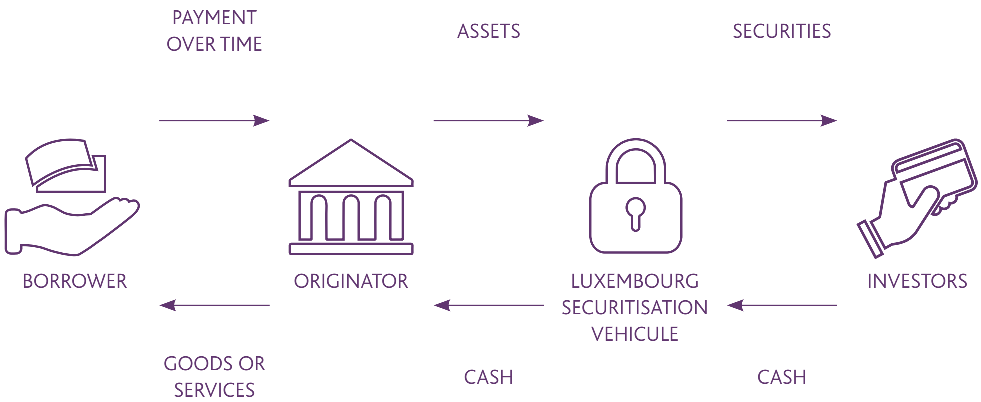
A securitisation company **takes the form of public limited company, a joint stock company, a private limited company or a cooperative with limited liability.** Nearly all securitisation vehicles are set up in the form of securitisation companies. They can benefit from EU directives and double tax treaties.

A securitisation transaction consists of 2 parts :
1 • the acquisition or assumption of assets and risks
2 • the issuance of securities

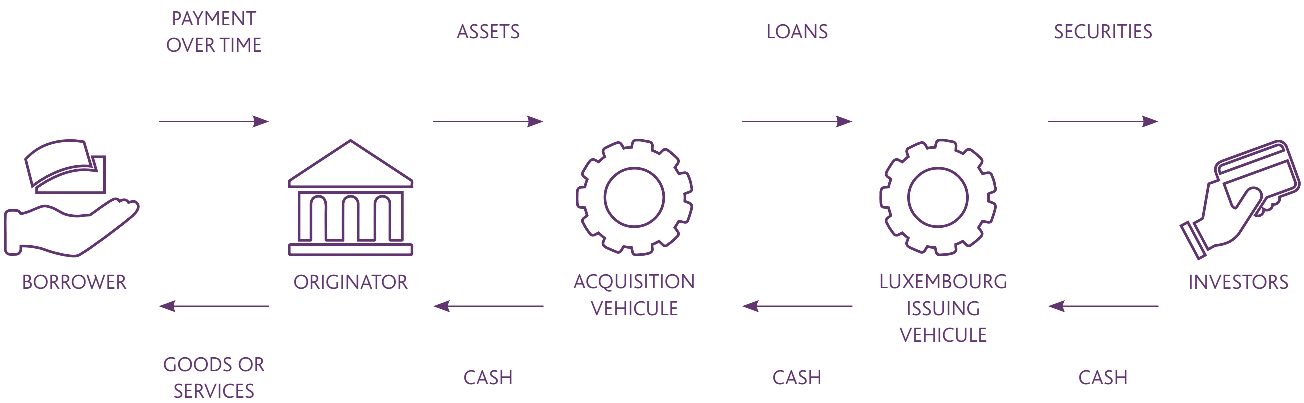
The securitisation does not have to be carried out through one securitisation undertaking only. Luxembourg allows that assets or risks might be acquired or assumed by one undertaking (the acquisition vehicle) which is separate from the undertaking in charge of issuing securities (the issuing vehicle). The advantage of a dual structure is that the acquisition vehicle is not required to have its registered seat in Luxembourg. Only the issuing vehicle needs to qualify as a Luxembourg securitisation undertaking.

This is particularly useful in supporting the set-up of cross-border securitisations where the country of origin restricts the sale of assets to entities in the same country and sales to foreign entities are not possible.

Single structure



Double structure



SECURITISATION FUND

A securitisation fund has no legal personality and must be **managed by a management company,** which itself has to be a commercial company. It is formed from one or several joint ownership organisations or one or several fiduciary estates. In the former case, the fund is under a co-ownership regime and with the latter is governed by trust and fiduciary contract legislation.

ASSET-BACKED SECURITIES LISTING

With more than 30 years of expertise in handling asset-backed securities (ABS), the Luxembourg Stock Exchange is a prime venue for the listings of these instruments.

All listed ABS are automatically admitted to trading on the Euronext UTP platform (Universal Trading Platform).
The listing process is fast (a maximum three business day commitment for prospectus comments on the Euro MTF market), cost-efficient, and provides issuers with one of the most competitive fee structures for standard ABS listing in Europe.

The Luxembourg Stock Exchange has a leading position in terms of listing ABS, which are eligible as collateral at the European Central Bank. The ECB-eligibility process is automatically initiated by LuxSE for all listed securities.

FIDUCIARY ISSUES AND NOTES

A fiduciary contract is an agreement whereby the principal (that is, the investor or *fiduciant)* confers ownership rights over specific assets (the fiduciary assets) to a fiduciary, subject to the obligations set out in the fiduciary contract. The fiduciary obtains legal title over the assets designated in the fiduciary contract. Upon the termination of the agreement, the fiduciary assets are transferred back to the fiduciant or to a third party beneficiary.

Typically, fiduciary transactions are structured either through fiduciary deposits or by way of the issue by the fiduciary of fiduciary notes (in this case the fiduciary contract takes the form of transferable securities – a note or certificate – issued by the fiduciary to the fiduciant).

One of the key features of a fiduciary structure is that the fiduciary assets entrusted with the fiduciary are held by the fiduciary in segregated fiduciary estates.

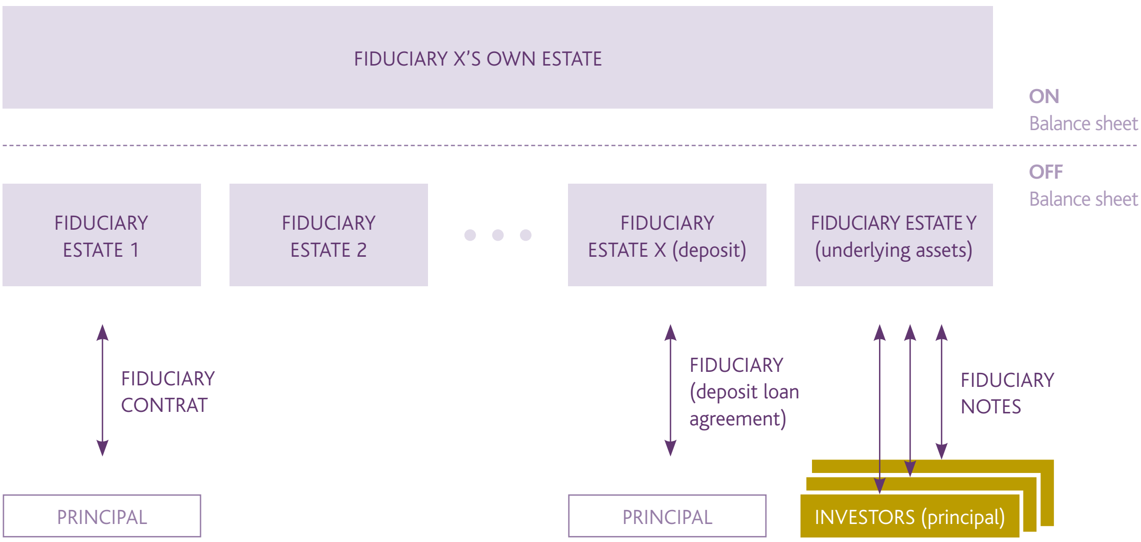
As a consequence:
- the fiduciary estates are recorded off balance sheet by the fiduciary;
- the fiduciary estates do not form part of the fiduciary's own estate;
- the fiduciary estates do not have a separate legal personality; and
- a fiduciary may create several independent fiduciary estates.

In addition, the fiduciary assets may only be seized by creditors holding rights deriving from the fiduciary assets and the fiduciary estates are not affected by insolvency proceedings opened against the fiduciary. It is therefore possible to isolate the fiduciary assets from the credit risk linked to the issuer, which is not possible under a classical bond issue (where the credit risk of the issuer cannot be isolated).

There is no restriction on the way payments should be made to the fiduciant in relation to the underlying fiduciary assets: for instance, this could either be a fixed or floating interest or a pass through instrument where the fiduciant has a direct interest in the performance of the underlying fiduciary assets.

As regards fiduciary notes, they could be issued in a private placement or through a public offering, on a stand-alone basis or by way of issuance programme by the fiduciary. Such fiduciary notes can be publicly offered and admitted to trading, for instance, on the Euro MTF market or on the Luxembourg Stock Exchange's regulated market. A public offer and admission to trading of fiduciary notes is subject to the same prospectus and ongoing disclosure requirements as those applicable to ordinary transferable securities. Fiduciary structures being commonly used in Luxembourg, the financial sector supervisory authority, the CSSF, as well as the Luxembourg Stock Exchange are both experienced in approving prospectuses for issuances of fiduciary notes.

Fiduciary X (e.g a luxembourg credit institution)



Fiduciary contracts can be structured in multiple ways, for instance as a fiduciary deposit, where the fiduciant deposits assets (e.g. cash) with the fiduciary and the fiduciary is obliged under the fiduciary contract to return the deposit at a specified date.

COVERED BONDS: FLEXIBLE & SAFE

Covered bonds – called *Lettres de Gage or Pfandbriefe* – are debt instruments secured by a cover pool of mortgage loans (property as collateral) or public-sector debt to which investors have a preferential claim in the event of default.

Governed by specific legislation and issued by dedicated specialised banks, Luxembourg covered bonds offer impressive flexibility to issuers and a high level of protection to investors.

Covered bonds are increasingly used in the marketplace as a funding instrument and play an important role in the financial system. The issuance of covered bonds enables credit institutions to obtain a lower cost of funding in order to grant mortgage loans for housing and non-residential property as well as to finance public debt and other types of assets.

Four different types of covered bonds can be issued in Luxembourg:

1 • The mortgage bond, covered by mortgage loans secured on industrial, commercial, professional or residential property;
2 • The public covered bond, covered by loans to public sector entities;
3 • The movable asset covered bond covered by mortgage loans on movable assets such as aeroplanes, ships, trains, etc.
4 • The mutual covered bond, covered by claims on other credit and financial institutions qualified by law.

These cover assets have to be held on the balance sheet of the covered bond issuer in separate registers.

These assets may be located in any member state of the European Union, the European Economic Area (EEA) and the OECD as well as in any other country with a high quality rating by recognised rating agencies.

Both the Luxembourg financial regulator, the CSSF, and a trustee, closely monitor the issuer's activities in order to ensure that there are always sufficient assets in the cover pool to service the obligations resulting from an outstanding covered bond.

A loan-to-value limit for immovable and movable assets of 60% (80% for residential property) of the estimated realisation value and a mandatory permanent minimum over-collateralisation level of 2% on both a nominal basis and a net present value basis further enhance the safety of Luxembourg covered bonds.

In case of an insolvency of the covered bond issuing bank, holders of covered bonds enjoy preferential treatment. The cover assets in the various cover pools are then separated from the bank's other assets and liabilities, so that they do not participate in the insolvency proceedings with respect to the bank's assets.

"Luxembourg covered bond banks may not only lend to states and regional entities but also to public undertakings where a state or regional or local authorities exercise a direct or indirect influence. This is important, because it means that the Luxembourg covered bond banks can reach a different segment in the world of public finance. As a result, a Luxembourg covered bond bank may practise an international diversification policy, meaning that Luxembourg covered bonds are less vulnerable to the risk of downgrading of sovereign ratings. Cover pools in Luxembourg are therefore extremely dynamic and can be directed to target risk minimisation."

Henri Wagner,
Managing Partner, Allen & Overy

SAFETY PILLARS OF LUXEMBOURG COVERED BONDS

- Specific covered bond legislation
- Specialised banking principle – the credit institution has a specialist banking licence
- Supervision and control by regulator and independent trustee
- Preferential claims of covered bond holders guaranteed by law
- Dynamic and transparent cover pools

A PRIME LOCATION FOR SUKUK

Luxembourg has positioned itself as a leading centre for originating, structuring and distributing both short and long-term sukuk certificates in the international markets.

The Luxembourg Stock Exchange was the first European stock exchange to enter the sukuk market in 2002. This pioneering issue by the state of Malaysia was followed by further sovereign and corporate sukuk from Malaysia, Saudi Arabia, the United Arab Emirates, Pakistan and other countries.

Luxembourg offers a variety of investment vehicles that may be considered suitable for the issuance of sukuk. The Securitization Law is particularly beneficial for the creation of innovative sukuk structures due to the nature of these instruments/contracts. The law also enables the establishment of sukuk issuance platforms, with multiple market participants, both Islamic and conventional, becoming originators and issuing Islamic and traditional products.

In 2014, the Luxembourg Parliament approved a law on a sale and buy-back transaction of real estate assets necessary to issue an Islamic finance bond. This enabled the country to issue the first Euro-denominated Sovereign sukuk. This represented a landmark step in establishing Luxembourg as the global hub for Islamic Finance outside of the Islamic world. The sukuk issue financed the transfer of buildings from the State to a newly created entity and the rental income from the buildings constituted the profit paid to the sukuk investors.

In the same year, the LuxSE listed and admitted to trading a sukuk al-wakala structure, issued by Goldman Sachs, which invested in Sharia-compliant commodities and comprised $500m of trust certificates. The Republic of South Africa followed with a $500m sovereign sukuk.

Expanding Europe's investment horizons

In 2015, Crosslend set up a regulated securitisation company in Luxembourg under the supervision of the Commission de Surveillance du secteur financier (CSSF). Unlike traditional companies in this area, the company takes an innovative approach to securitisation; converting single loans and splitting them up into notes that are then made accessible to retail and institutional investors across Europe.

As Europe's investment horizons have expanded, investors have discovered the potential of a whole new asset class – one that was almost exclusively accessible to banks and institutional investors until now: consumer loans.

Seizing on this trend, CrossLend developed a cross-border marketplace lending platform that enables people to invest in consumer loans from different European countries through the purchase of Borrower Payment Contingent Notes. CrossLend's idea was to be more than an ordinary peer-to-peer lending platform and to create a cross-border capital market product that is more liquid than a direct investment into loans.

Rather than funding an entire loan directly, all loans are converted and split up into Notes allowing investors to diversify their investments across multiple loans and jurisdictions.

Prorated investments starting from €25 are possible via CrossLend's platform. The structure of the Notes not only offers investors more security, but also provides a convenient way for them to diversify their investments.

CrossLend GmbH has a subsidiary, CrossLend Securities SA, which operates under the laws of the Grand Duchy of Luxembourg and is a regulated securitisation vehicle licensed and supervised by the CSSF. It is the Luxembourg-subsidiary that issues the Notes. The Notes receive an ISIN number and are issued and deposited by Clearstream Banking Frankfurt, Germany. The company decided to be regulated in Luxembourg because of Luxembourg's expertise in securitisation as well as the accessibility and responsiveness of the CSSF.

CrossLend's securitisation structure enables an investor from Germany to invest easily in Spanish, German and Dutch loans via one structure. This way investors can benefit from a diverse portfolio of consumer loans and a cross-border capital market product that is available Europe-wide.

04

INITIAL PUBLIC OFFERINGS (IPOs)

Going public is a transformational event. To do so successfully, a company or its sponsors must navigate a long, complex process involving, inter alia, aspects relating to strategy, tax, accounting, reporting standards, treasury and financial risk management and governance. In the course of this process the company or its sponsors will be confronted with a number choices and will have to take decisions.

Some of these choices relate to the targeted markets for flotation or the jurisdiction where the company will be established upon completion of its IPO. Depending on the decision taken by the company or its sponsor, this may in turn have a more or less far reaching impact on one or other aspect of the aforementioned process.

One of the key decisions to be made when going public consists in identifying the market or the markets on which to launch the IPO. Another decision, which is often related to the preceding choice, is to select the venue, or venues, where the shares (or other securities) are to be traded subsequently. In this respect, the choice may vary between a domestic trading venue or a listing abroad, an admission to trading on a regulated market or a multilateral trading facility, an admission to trading in an EU Member State or a listing on a third country exchange, a single listing or a dual listing, knowing that each trading venue or exchange may have its own distinctive regulatory regime and its own rules and regulations.

The Luxembourg Stock Exchange offers a regulated market, Bourse de Luxembourg, and a multilateral trading facility, the Euro MTF. The regulated market is eligible for the European passport. The same rules and regulations apply to both markets and they both operate on the UTP (Universal Trading Platform) hosted by Euronext's European cash markets. The system is capable of handling exceptionally large volumes rapidly. Major multinational companies such as ArcelorMittal, RTL Group and SES have chosen to list on the Luxembourg Stock Exchange. In the course of the preparation of an IPO, the establishment of a newly formed holding company over an existing operational group may often be observed. This entails another key decision to be made in the process of an IPO as regards the choice of the jurisdiction in which to establish the IPO vehicle. Particular care should be brought to choose the right jurisdiction as the jurisdiction of incorporation determines the law governing the issuer's articles of incorporation, including matters such as its governance, its share capital and the rights attaching to the shares, and, more generally, the rights of the shareholders.

Choosing Luxembourg as the jurisdiction of incorporation for the IPO vehicle does not limit the subsequent choice of listing venue, regardless of whether an application for listing is to be made on the Luxembourg Stock Exchange or on a foreign stock exchange.

LUXEMBOURG LAW INCORPORATED IPO VEHICLES

Over the past 10 years, there has been a steady interest in Luxembourg-based vehicles for carrying out an international IPO. For instance in 2014, no less than 8 international IPOs were carried out with Luxembourg law incorporated IPO vehicles.

Luxembourg corporate law offers a wide range of modern, flexible solutions that enable the sponsor to shape the articles of association and corporate governance of an IPO vehicle to the specific needs of the transaction, combined with a high degree of legal certainty. The financial sector regulator accepts official documentation in English, French or German. Articles of incorporation can be submitted in English.

The *société anonyme* (joint stock corporation) is probably the legal form which is most frequently used in an IPO. However, Luxembourg corporate law provides for alternative legal forms that are suitable for a public company, in particular the *societas europaea* and the *société en commandite par actions* (partnership limited by shares).

In line with international market practice, shares can be issued in bearer (under certain conditions), registered or dematerialised form. A company may issue different categories of shares with specific rights attaching to each category of shares. Following a recent reform, Luxembourg corporate law allows for the issuance of shares having different nominal values, thus offering additional structuring options.

In addition to shares, a Luxembourg company may issue preference shares and various other equity-like instruments, with or without voting rights.

An IPO can be conducted by way of the placement of shares or the placement of certificates over shares or depository receipts, depending on the requirements of the transaction.

A Luxembourg company may have an authorised share capital with the possibility for the management to increase the issued share capital on one or more occasions up to an amount as specified in the company's articles of association. The articles of association may also authorise the board to withdraw or restrict the existing shareholders' preferential subscription rights in relation to an increase of capital made under the authorised capital. No consultation or approval of the current shareholders will be required for the implementation of a share capital increase under the authorised share capital and no specific restrictions apply as regards the amount of the authorised share capital or the situations in which additional shares may be issued under the authorised share capital.

Luxembourg law provides for a one-tier (board of directors) or two-tier (management board and supervisory board) management structure. Daily management can be delegated to a single executive or an executive committee. Moreover, the administrative and management bodies of a Luxembourg company may appoint special committees with advisory or decision making powers.

Equally, it is possible in the articles of association, to provide for decisions on pre-defined reserved matters, management would have to obtain the prior approval or seek directions from the general meeting of the shareholders.

There are no specific requirements according to which the members of the management bodies must be Luxembourg nationals or must reside in Luxembourg. There is also no quota requirement for independent directors.

Luxembourg corporate law also offers numerous possibilities to implement efficient take-over defenses.

This vast range of structuring options and the flexibility that derived from them have proven to be particularly attractive to private equity sponsors in IPOs as a means of exiting an investment, and to public companies when performing a corporate spin-off, as these types of transaction typically require bespoke models which not every jurisdiction or legislation are able to accommodate.

WIDE ACCEPTANCE BY MAJOR INTERNATIONAL EXCHANGES

Luxembourg companies are not only suitable for preparing a domestic IPO but such companies have also been widely used in international IPOs or related capital markets transactions. As such, it is worthwhile mentioning that one can find Luxembourg incorporated issuers listed on all the major international stock exchanges within the EU or the EEA, such as on Euronext Amsterdam, Euronext Paris, the Frankfurt Stock Exchange or the London Stock Exchange. Other Luxembourg issuers have chosen to be listed on the Madrid Stock Exchange, the Oslo Stock Exchange or the Warsaw Stock Exchange. In third countries, Luxembourg companies have been listed i.a. on the New York Stock Exchange or the NASDAQ in the United States, the Buenos Aires Stock Exchange, the Hong Kong Stock Exchange and the Toronto Stock Exchange, following their successful IPO.

This is evidence that Luxembourg corporate law not only offers a vast choice of innovative options for structuring an IPO vehicle or putting in place bespoke corporate governance models but that, in addition, they are fully compatible with the requirements of any major international stock exchange.

In short, the use of a Luxembourg incorporated company to conduct an IPO has been widely accepted by the market, wherever the market for the placement of the shares or other securities being the subject of the IPO may be located.

REGULATION

As a founding member of the European Union, Luxembourg adheres to the EU regulatory framework. It offers a legal environment that supports growth and innovation – especially in terms of corporate law. EU directives are implemented quickly and in a business-oriented way.

The CSSF is a priori the competent authority for the approval of an IPO prospectus (except for IPOs being conducted outside the European Economic Area). The application file including the draft prospectus can be submitted in English, German or French and the CSSF will correspond in any of these three languages as chosen by the applicant.

The review process of the IPO prospectus is fast and efficient and the first full set of comments is usually given within less than 10 working days. Comments on subsequent reviews are given within a few days.

'Same-day' passporting notifications can also be sent from Luxembourg to 3rd party public offer and listing jurisdictions.

HIGHLIGHTS

1953 – First listing of supranational institution issue – World Bank

1962 – First listing of an investment fund – Finance-Union

1963 – First listing of a Eurobond – Autostrade

1964 – First listing of a depositary receipt – Toray industries

1966 – First listing of an EIB Bond

1981 – First listing of a bond denominated in ECU – SOFTE

1987 – First listing of a US dollar Euro Medium term Note – Pepsico

1988 – First listing of a global bond – World Bank

1990 – Listing of the first Global depositary receipt – Samsung

1993 – First listing of a Luxembourg Government Linear Bond Programme

1997 – First listing of a bond denominated in euro – EIB

2002 – First listing of a sukuk – Malaysia Global sukuk

2007 – First green bond listing worldwide

2008 – First Masala bond listing

2011 – First listing of a dim sum bond in Europe – Volkswagen International finance

2014 – First listing of an offshore RMB bond, or Shengen bond, in the eurozone

2014 – First euro denominated sovereign sukuk

2016 – First Green Exchange worldwide

2016 – First listing of a sovereign green bond - Poland

USEFUL CONTACTS

Ministry of Finance
www.mf.public.lu

Luxembourg for Finance
www.luxembourgforfinance.com

Luxembourg Financial Sector Regulator (CSSF)
www.cssf.lu

Luxembourg Stock Exchange
www.bourse.lu

The Luxembourg Bankers' Association (ABBL)
www.abbl.lu

Association of the Luxembourg Fund Industry (ALFI)
www.alfi.lu

Central Bank of Luxembourg
www.bcl.lu

Luxembourg Association of Corporate Service Providers
www.limsa.lu

Luxembourg Bar Association
www.barreau.lu

Luxembourg House of Training
www.houseoftraining.lu

The University of Luxembourg
www.uni.lu

ACI Luxembourg, the Financial Markets Association
www.acilux.com

Clearstream
www.clearstream.com

LuxCSD
www.luxcsd.com

VP LUX
www.vplux.lu

REGIS-TR
www.regis-tr.com

Luxembourg Private Equity and Venture Capital Association
www.lpea.lu

ABOUT LUXEMBOURG FOR FINANCE

Luxembourg for Finance (LFF) is the Agency for the Development of the financial centre. It is a public-private partnership between the Luxembourg Government and the Luxembourg Financial Industry Federation (PROFIL). Founded in 2008, its objective is to promote the expertise of the financial centre and the diversification of its services abroad through different communication channels.

The agency continuously monitors global trends and evolutions in finance to identify development opportunities for the Luxembourg financial centre and to serve different target markets and target groups. It is also the first port of call for foreign journalists.

In cooperation with the various professional associations, LFF develops documentation on products and services available in Luxembourg and their relevant legal and regulatory framework. Furthermore, LFF organises seminars in international business locations and takes part in selected world-class trade fairs and congresses.

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