

CORPORATE

THE FINANCIAL CENTRE DEVELOPMENT AGENCY

CONTENT

Depending on its size and international scope, the financial needs of a company can be very different during the phases of its life cycle. Therefore, we have chosen to take a holistic view and to adopt a wide definition of "corporate finance", including not only financing of internationations of the properties of the

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USEFUL CONTACTS



CONNECTING INTERNATIONAL BUSINESS AND FINANCE

CROSS-BORDER EXPERTISE

Guardian Industries, Ferrero, Amazon, ArcelorMittal, SES, Goodyear, DuPont de Nemours, RTL, Skype and Delphi are just a few examples of the international groups that have chosen Luxembourg to house their European or global headquarters.

These businesses were attracted by different factors: the country's central location in Europe providing easy access to a single market of 500 million inhabitants, the availability of a highly skilled multilingual workforce, the modern legal and regulatory framework, as well as the excellent quality of life.

Perhaps more than anything else, international companies have turned

to the Grand Duchy to find a European financial centre that specialises in serving international clients and investors across multiple countries.

In Luxembourg, banks and financial service providers match the international DNA of their clients by offering pan-European products and services that facilitate foreign trade and investment. They work together on a regular basis, resulting in efficient interaction. Service providers in Luxembourg can offer complete end-to-end solutions to companies or can blend seamlessly into an international service-chain.

A STABLE COUNTRY WITH A STRONG ECONOMY

As one of only 12 countries in the world with a AAA rating from the three major rating agencies, Luxembourg provides an economically, socially and fiscally stable environment where international businesses thrive.

With its open and diversified economy, Luxembourg – the fifth most globalised economy in the world – has consistently outperformed overall GDP growth in the EU over the last decade, while employment has doubled over 20 years.

A WIDE RANGE OF CORPORATE FINANCE ACTIVITIES

Now, more than ever, businesses operate in a global and rapidly changing environment. Corporates need access to professionals who can evaluate the company's financial needs, raise the appropriate type of capital and advise on the optimal source of funding and capital structure.

In order to meet their international clients' needs, major international banking groups from Europe, North America, Asia and Latin America have established a base in Luxembourg. They offer the full scope of corporate finance services, typically using a centre of excellence or team of international experts in Luxembourg to coordinate with global banking partners.

In addition to eurobonds and international loans (bilateral and syndicated), financing of all types is available, including working capital lines, acquisition finance, asset finance, project finance and green loans, as well as factoring, receivable finance, fiduciary finance, leasing, supply chain finance and capital markets transactions.

When financing a major investment or implementing large international projects, it can be advantageous to use a tailored structure. In this context, a wide range of special purpose vehicles can be used. Moreover, some industrial groups, such as Danieli and John Deere, have acquired a banking licence to operate their international financing activities out of Luxembourg.

Companies also find in Luxembourg an ideal platform to meet their sustainable development targets. In recent years, the Luxembourg financial centre has developed an ecosystem that is uniquely suited to raising international capital for sustainable investment.

In today's world, where treasurers generally operate on a global scale in an ever-expanding number of currencies, the need for control, visibility and optimisation are crucial. While the fundamental role of the treasurer remains the same, treasury models are being reevaluated.

Banks in Luxembourg play a critical role supporting corporate treasurers in meeting these objectives. Luxembourg is a prime location for core cash services, often combined with treasury, finance and accounting as a shared service hub.

Risk management is a road full of pitfalls and surprises to which companies have to adapt continuously. When it comes to choosing the best place for locating decision-making centres, companies place a high premium on stability and regulation. Over the years, insurers and risk management professionals in Luxembourg have developed unrivalled expertise to identify, assess, manage, report and limit risk.

Global corporations are also looking increasingly at their international retirement schemes, seeking solutions that consolidate these plans and make them portable across multiple countries. The Grand Duchy has been a pioneer in this field, being one of the few countries open to cross-border plans and pan-European pension funds.

Looking ahead, the financial centre has fully embraced the opportunities of the digital age. Some of the world's largest FinTech pioneers, such as PayPal, Amazon Payments and Rakuten, have chosen Luxembourg to offer regulated financial products and payment services across the EU. A growing number of financial institutions are testing blockchain solutions and have engaged in partnerships with FinTech companies. Corporate finance teams also use robotic process automation and data analytics. Moreover, sectors such as the automotive and lodging industry (Volkswagen, Airbnb) have started setting up their own payment service platforms in the country.

HISTORIC MILESTONES

Corporate finance lies at the heart of the Luxembourg financial centre. Over the last century, the banking industry grew out of a need to serve companies operating internationally and to facilitate foreign trade and cross-border investment in a multi-currency environment.

1856

Banque International de Luxembourg (BIL), a private bank, is founded to finance the railways and the rapidly expanding steel industry. The same year, the Luxembourg government establishes a savings bank, the Banque et Caisse d'Epargne de l'Etat (BCEE).

1949

The United States begins investing in Europe after WW2. When Goodyear decides to locate its production base in Luxembourg, the American tyre producer encourages Kredietbank, their main bank for doing business in the Benelux countries, to set up a branch in Luxembourg. Goodyear sets up in Colmar-Berg and Kredietbank funds the factory loading bay, an enormous investment project at that time.

1963

Luxembourg starts to play an important role in the development of a pan-European financial services market that can compete with the US. In 1963, when the United States decides to levy a 15% tax on interest earned by US investors on US dollar bonds issued by foreign borrowers, the unintended consequence is the creation of the Eurobond market. The Luxembourg Stock Exchange (LuxSE), founded in 1928, is the first exchange to list a Eurobond on behalf of Autostrade, the Italian motorway company, in July 1963. The legendary banker S. G. Warburg asks the London and Luxembourg stock exchanges whether he can list this new product. Based on its readiness to deal with foreign currencies and aptitude for innovation, the LuxSE is selected for this historical event: a bond issued by an Italian company, denominated in US dollars, governed by an issuance contract based on English law and listed in Luxembourg.

1893

SOGENAL (today Société Générale) is the first foreign bank to open a branch in Luxembourg.

1952

When Luxembourg is chosen as the location for the headquarters of the European Coal and Steel Community (ECSC), the forerunner of the European Union, the need emerges for a broader banking sector to service cross- border flows of capital. Luxembourg banks start to focus their efforts on the international commercial operations sector. Multi-currency cash management becomes a signature activity. Supported by their international networks, they expedite transfers and address payment circuits that are frequently slow, complex, costly and entailing exchange risks.

1970s-1980s

As commercial opportunities expand in Luxembourg, so does the financial community. Lenders from Germany, the US, Switzerland, Japan, Scandinavia and many other countries choose Luxembourg as an international base and by 1970 there are 37 banks operating in the country. By 1980, the number has grown to 108, with the Bank of China establishing its first foreign branch (since the creation of the PRC) in Luxembourg, just a year earlier.

THE LUXEMBOURG FINANCIAL CENTRE TODAY

The financial centre has four main activities: banking (wealth management, corporate, commercial and retail), fund management, insurance and capital markets. Each of these industries is bolstered by high-quality support services, offering audit, legal, tax and other

advisory services including management consulting, financing and regulatory advice. They are accustomed to handling every size of client, from smaller local and regional entrepreneurs to multinational companies operating worldwide out of Luxembourg.



There are **125** international banks of which a significant number have established their EU hubs or competence centres in Luxembourg.

40

Around **40** of them offer commercial and corporate banking services.



Solvency ratio: **24%** (EU minimum is 8%)

45%

Reserves grew by **45**% in 10 years: **€32 bn**



Total own funds: **€50 bn**, of which **€49** bn are Tier 1 (highest quality)



Banks' total balance sheet: **€889 bn**

Capital grew by **51%** in 10 years:

1.4% Lov

Lowest rate of non-performing loans 1.4%

Source: Statista, September 2020

Second-largest fund centre in the world after the US

Courts and lawyers can deal with contracts governed by different legal systems, including common law

A comprehensive toolbox of instruments designed for the needs of corporates and investors $\,$

A strong working relationship between the public and private sector

 $\label{lem:lembourg} \textbf{Stock Exchange: the global leader in international securities listings}$

The location of choice for responsible finance

Europe's leading cross-border insurance centre

Home to Clearstream, the leading international post-trade service provider, and four Central Securities Depositories

CLIENTS

Financial service providers in Luxembourg serve the needs of a wide range of clients:

CORPORATES

> Mid-sized corporates

- > Companies based in Luxembourg and active internationally
- > Subsidiaries of a European or other foreign group

> Large corporates

- > Companies with a head office and/or treasury centre in Luxembourg
- > Listed companies
- > Subsidiaries of a multinational

FINANCIAL INSTITUTIONS

> Investment funds

- > Banks
- > Asset managers
- > Insurance companies

REAL ESTATE

International real estate developers and investors

PROFESSIONAL INTERMEDIARIES

Professional intermediaries approved by the CSSF

- > Auditors and accountants
- > Tax advisors
- > Law firms
- > Trust offices
- > Private equity companies and real estate funds with substance in Luxembourg

LUXEMBOURG, WHERE **BUSINESS MEETS FINANCE**

CONNECTING INTERNATIONAL **BUSINESS WITH EUROPE AND THE** WORLD

Comprehensive business environment geared towards cross-border services and products.

most globalised economy in the world.

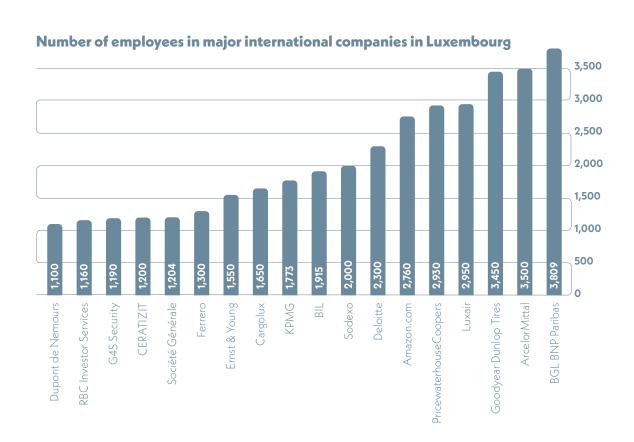
Ranking based on cross-border trade, Luxembourg is the 2nd financial investment and revenue flows in relation to centre in the EU, and 5th globally in GPD and the impact of restrictions on trade sustainable depth and capital transactions.

Source: EPFR Global, 2020

Source: Global Financial Centre Index, March 2021 & Global Green Finance Index, October 2020

Key business sectors





SOLIDLY ROOTED, NATURALLY INNOVATIVE

Investors who set up their business in Luxembourg find a strong and reliable partner for international growth.



GDP growth in Luxembourg is consistently above the EU average with **3.2**% from 1995 until 2020.

Source: Statec



A politically stable country with **very low public debt** at **24.9**% of GDP.

Source: Statec



Consistently rated **AAA** by all three major credit-rating agencies.



An internationally competitive **tax environment**.



An international financial centre with a long track-record **innovation**.

WORLD-CLASS INFRASTRUCTURE AND CONNECTIVITY



28 international fibre routes to main European hubs.



23 data centres, including 8 with



HIGHEST density of TIER 4 data centres in Europe.

HUMAN SCALE, GLOBAL SKILLS



- > Luxembourg is the **most multilingual country** in Europe with Luxembourgers speaking 3.6 languages on average.
- > 11th worldwide for English language proficiency.

Source: EF English Proficiency Index 2020



- > Extensive European **talent** pool: 4 milion people within 1 hour commute of Luxembourg city.
- > Attractive tax regime on salaries.
- > 1st Largest share of high-skilled workers in the world.

Source: WEF



- > The financial sector regulator accepts official **documentation** in English, French or German.
- Company statutes and articles of incorporation can be submitted in English.



> A comprehensive toolbox of instruments designed for the needs of corporates and investors.



> Luxembourg ranks 1st in the world for attracting talent and 6th in the world for retaining talent.

Source: INSEAD Global Talent Competitiveness Index 2021



Courts and lawyers have experience in dealing with contracts governed by different legal systems.



> Employee productivity is the 2nd highest in the European Union.

Source: Eurostat productivity index 2020

GROW YOUR BUSINESS, LIVE YOUR LIFE

Lux-Airport provides direct flight service to 87 destinations.



The airport is **15 minutes** from the city centre.

Luxembourg ranks No. 1 in efficient and helpful administrative services.

Source: Mercer's Quality of Living Survey 2019



Familiy-friendly environment with a broad choice of private, public and **international schools**.



Best tax-friendly city worldwide to live for a family.

Source: Knight Frank's Global Lifestyle Review 2016 **1**st

Luxembourg ranks **No. 1** in the world for personal safety with 10 out of 10 for its low crime rate.

Source: Mercer's Quality of Living Survey 2019

for expats to build their careers

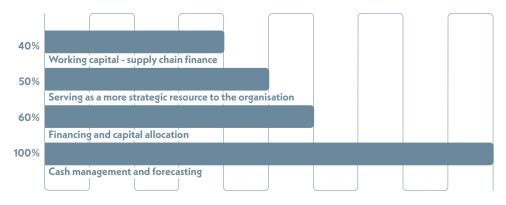


Ranking based on cross-border trade, investment and revenue flows in relation to GPD and the impact of restrictions on trade and capital transactions.

Source: EPFR Global, 2020

MAIN OPERATIONS OF LUXEMBOURG TREASURY CENTRES

Focus areas of the treasury function



Source: ATEL-KPMG Survey, 2016

What do corporates gain by having their treasury centre in Luxembourg?

> Efficiency

Standardisation

> International expertise

> Rationalisation

> Long-term, stable solutions

> Reduced costs

"The treasury association, ATEL, has over 300 members. This is another asset that reflects the comprehensiveness of the Luxembourg package. The association serves its members and is a member of the European Association of Corporate Treasurers. There is real expertise here in treasury and banking, which is a key asset for multinational companies or groups looking for the best place to set up a centralised treasury HQ in Europe."

François Masquelier,

Founder and CEO of Simply Treasury and Chairman of ATEL, Association of Treasurers in Luxembourg



FINANCING

Since the development of the eurobond market in the 1960s, Luxembourg has established itself as an international hub for bilateral and syndicated loans in the eurozone and beyond. Corporate banks in Luxembourg offer the full scope of corporate finance services, typically using international expert teams in Luxembourg to coordinate with clients and global banking partners.

Financing of all types is available, including working capital lines, acquisition finance,

asset finance, project finance and green loans, as well as factoring, receivable finance, fiduciary finance, leasing and supply chain finance and capital market transactions.

When financing a major investment or implementing large international projects, it may be necessary to use a tailored structure. In this context, Luxembourg offers a wide range of bespoke entities and special purpose vehicles which are fit for purpose.

SYNDICATED AND BILATERAL FINANCE

The majority of corporate loans in the Grand Duchy are extended on a cross-border basis.

For syndicated, i.e. multipartite, corporate loans, several entities are involved. In addition to the borrower, multiple lenders and arrangers, work closely together to locate lenders. These loans are most commonly used by large companies as working capital or for projects that require substantial financing. These include infrastructure loans, greenfield projects, and large equipment leasing or merger and acquisition financing on behalf of companies active in transportation,

petrochemicals, telecommunication, power and other industries.

With a bilateral corporate loan, the only parties involved are the lender and the borrower. These loans are most commonly used by owner-led or privately held corporates, or by businesses in start-up or expansion phase. Due to Luxembourg's unique specialisation in serving international clients across multiple jurisdictions, loans can be denominated in USD, EUR, RMB, GBP and other currencies. Multiple currencies can even be used in a single loan at the request of the borrower.

CORPORATE BORROWER BANK SYNDICATE BANK 1 SYNDICATE BANK 2 CORPORATE BORROWER AGENT BANK SYNDICATE BANK 3 SYNDICATE BANK 4

CASE STUDY: BGL BNP PARIBAS

In 2017, BGL BNP Paribas arranged a syndicated facility for Solution 30, a fast growing company with headquarters in Luxembourg and activities in six European countries.

The bank was mandated to arrange the deal by providing recommendations on the debt structure, simulating all possibilities (tranches, sizes, maturities, associated covenants, and size of the banking pool), as well as coordinating the implementation of a Club Deal financing of €77 million, in various tranches with six relationship banks.

Hence, from the analysis to the arrangement of the structure and the syndication, the whole process was executed out of the bank in Luxembourg.

The global financing deal was finally structured in three tranches, each with a different purpose:

- > The first tranche was a refinancing deal: an amortising term loan used to refinance the client's existing debt on better conditions.
- > The second tranche was an acquisition purpose credit facility designed to finance the external growth projects of the company while respecting certain conditions.
- > The third tranche was a revolving credit facility used mainly to top up working capital.

BGL BNP Paribas employs 90 people dedicated to its corporate platform called "Banque des Entreprises". This includes a credit expert team that handles origination, credit analysis, credit structuring, decision and execution. In recent years, the bank has played a central role in a variety of large financing deals, be they bank loans or capital market transactions.

INTERNATIONAL COORDINATION

As a result of the financial crisis, regulatory requirements and the complexity of complying with them have increased considerably. Fewer banks are in a position to grant loans on a bilateral basis resulting in a preference for syndicated loans.

In the case of syndicated loans, one bank is usually appointed as the agency bank to manage the loan on behalf of the syndicate members. During implementation of the loans, the borrower does not need to deal with all members of the syndicate, and relevant withdrawal, repayment of principal with interest and other management work related to the loans are carried out by the agency bank.

Extensive work is consolidated by the agency bank. Syndicated loans often include dozens of banks from multiple countries in different time zones. Several hundred parties can be involved. Information flow, processes and payments need to be organised efficiently. During the life of the loan (typically 5-10 years or more) many things can happen. The borrower or a lender may become distressed or two banks that are part of a syndicate may merge together causing a change in risk exposure. Any such event can affect the multipartite process, requiring coordination by the agency bank. Whereas 20 years ago the documentation for a typical loan might be 20 pages, the same document today can easily run to over a 1,000 pages. Luxembourg is perfectly equipped to manage this level of complexity.

CASE STUDY: DEUTSCHE BANK

When founded in 1970, Deutsche Bank Luxembourg S.A. was the first foreign subsidiary of Deutsche Bank AG to be established after the signing of the Treaties of Rome (1957).

Initially, the bank concentrated on the European foreign exchange and Euro loan business. Deutsche Bank Luxembourg S.A. acts as the centre of excellence and lending hub for syndicated and large-scale bilateral loans in the EMEA region and beyond. International wealth management forms a second pillar of activity in addition to its activities as corporate and investment bank.

The bank's focus in Luxembourg lies in the support for, and management of, international tailor-made financing solutions offered by Deutsche Bank Group to its major clients, also including medium-sized and owner-led businesses throughout Europe.

As agency bank, Deutsche Bank Luxembourg collaborates closely with the business units responsible for the respective client coverage and interaction and is involved as early as the generation of the financing offers (term sheet). Later, loan documentation for financing is also drawn up in close coordination with the respective client and business division, as well as internal or external lawyers. Once contracts have been signed, Deutsche Bank Luxembourg is responsible for the comprehensive coordination of all relevant parties involved. These tasks include among others maintaining the central register of loan underwriting shares, routing capital and interest payments, managing the information flow including correspondence, contract modifications and managing possible contract violations.

"2020 presented us with a number of challenges, specifically our commitment to support our clients during exceptionally challenging times. To do so, we have teams of highly experienced individuals in our International Centre for Expertise. There will undoubtedly be changes to the way we work and interact with clients, but technological advancements and increased digitalisation will never entirely replace personal interactions. Our teams of experts have built relationships with our clients based on trust and extensive experience and they continue to be there to serve our clients in the future."

Frank Rückbrodt,

CEO Deutsche Bank Luxembourg S.A.

Two distinct loan finance teams in Deutsche Bank Luxembourg S.A. work closely together throughout the life cycle of the loan. The Portfolio Services Team is involved during the origination and structuring phase, covering the documentation and signing of the loan agreement and coordinating contractual adjustments during the lifetime of the transaction. The Loan Services Team is in charge of setting up and closing the transaction in the loan administration system, processing cash-flows (principal, interest, fees) and managing other events (e.g. pre-payment, margin increase, extensions, secondary trading).

HEIDELBERGCEMENT - €3 bn SYNDICATED CREDIT FACILITY

HeidelbergCement is one of the world's largest integrated manufacturers of building materials with leading market positions in aggregates, cement, and ready-mixed concrete. The company employs some 60,000 people at more than 3,000 locations in around 60 countries. In January 2018, HeidelbergCement signed a new €3 bn syndicated credit facility. Twenty banks were mandated as Bookrunners and Mandated Lead Arrangers in this transaction. Deutsche Bank Luxembourg acted as Lender. Documentation and Facility Agent.

CONNECTING WITH CHINA

Chinese banks in Luxembourg are a good example of international banks that operate predominantly in corporate banking (trade and project financing and syndicated loans). In addition to corporate banking services, the banks have expanded into capital market activities in Europe and asset and wealth management, thereby serving as a bridge connecting Europe and China.

During the last two decades, Chinese investors have consolidated their economic presence in the EU through greenfield investments, mergers and acquisitions. Chinese banks have, as a result, sought a base in Europe through which they can serve such clients, helping

Chinese customers invest into Europe as well as European clients looking to invest in China.

Seven major Chinese banks have chosen Luxembourg as their continental European hub: Bank of China (BoC), Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Agricultural Bank of China (ABC), Bank of Communications (BoComm), China Merchants Bank (CMB) and China Everbright Bank. Setting up their European hubs in the Grand Duchy has enabled these banks to leverage the EU passport to branch out and accompany their corporate clients across the continent.

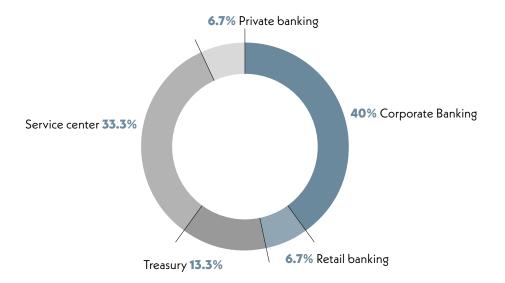
BANK OF CHINA: THE FIRST CHINESE BANK TO ENTER THE EUROPEAN MARKET

BoC opened its Luxembourg branch in 1979, as its first overseas branch after the creation of the People's Republic of China. The Grand Duchy was chosen for several reasons: its openness to China in general and to BoC in particular, its suitable geographical location in the centre of Europe, its stable political and regulatory environment, as well as the country's regulatory regime.

As the first Chinese bank entering the European market, BoC Luxembourg branch started its business by accompanying Chinese corporations doing business with Europe.

BoC Luxembourg serves as the European hub for the group. While in the past, half of BoC Luxembourg's clients were based in China, today approximately 80% of its clients are based outside China.

Business areas of Chinese banks in Luxembourg



Source: Banking in Luxembourg, Trends and Figures 2020, PwC

The main business of many of the Chinese banks remains lending, or corporate banking.

- They employ 851 people in the Grand Duchy.
- > 40% of Chinese banks' business in Luxembourg was corporate banking related (trade and project financing, as well as syndicated loans).
- The subsidiaries also act as a "service centre" for the European branch network, as well as the branch of the parent in Luxembourg, accounting for another 33.3% of business.

STRUCTURED FINANCE

Structured finance is a bespoke lending service, typically employed for companies requiring substantial financing deals that encompass long production and credit extension periods. It can benefit companies by reducing funding costs, and can help to diversify risk by spreading it

across different asset classes, geographies, industries, instruments, and credit risks. Banks in Luxembourg have wide experience in this area, combining technical knowledge and cross-border expertise to meet the specific needs of treasury and finance centres.

Over the years, Luxembourg has become a leading centre for securitisation and structured finance vehicles. One of the main reasons for this is the existence of a dedicated securitisation law that permits innovation while providing legal certainty. By mid of May 2020, 1,288 vehicles representing around 7,000 compartments existed in Luxembourg. The number of supervised securitisation vehicles increased by two to 33 with a volume increase of 7% to € 47.7 bn by the end of 2019.

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, cuts the cost of financing and transfers risk 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 bank, securitisation activity in Luxembourg is much broader.

Under Luxembourg law, an extremely wide range of assets can be securitised: traditional exposures (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 stream.

The securitisation vehicle can be constituted either as a company or a fund. The law also distinguishes between regulated and unregulated securitisation undertakings. A securitisation vehicle which issues securities to the public on a continuous basis must be authorised by the CSSF to exercise its activities.

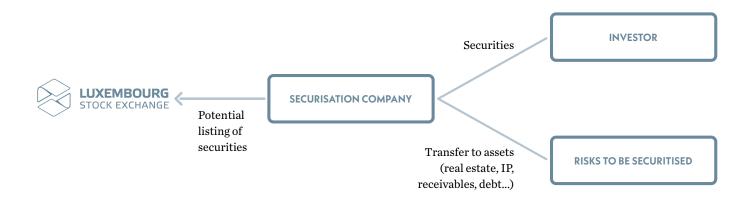
Flexibility and Investor Protection

FLEXIBILITY

- > 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.

INVESTOR PROTECTION

- > 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).

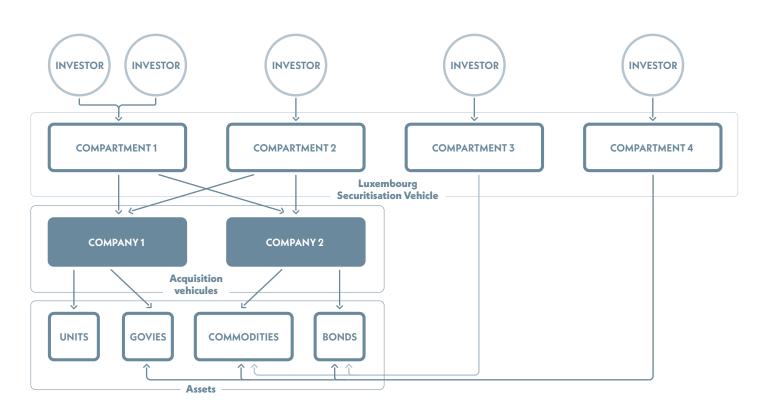


Financing by way of (listed and/or unlisted) securities to all kinds of investors:

- equity securities: ordinary equity, preferred shares, non-voting shares or tracker shares;
- > units (for securisation funds only);

> warrants;

- > beneficiary shares (parts bénéficiaires);
- on an ancillary basis, by way of loans.
- debt securities: notes, bonds and certificates;



Source: Allen & Overy

STRUCTURING COLLATERALISED DEBT OBLIGATIONS

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

Through debt subordination, structured finance allows the issue of securities with a lower repayment priority than other more senior debt: in the case of a liquidation following bankruptcy, subordinated debt is repayable only after other debts have been settled.

The law recognises "segregation and ring fencing", "limited recourse", "non-petition", "non seizure of assets" and "subordination" provisions, which are key to structuring 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.

FIDUCIARY ISSUES AND NOTES

A fiduciary contract is an agreement, the legal framework for which is established in Luxembourg statute, between a fiduciant and a fiduciary, pursuant to which the fiduciant grants ownership rights over certain assets specified in the contract (the Fiduciary Assets) to the fiduciary, subject to the obligations set out in the contract. The fiduciary contract arrangement differs from a trust as the fiduciary takes legal title over the Fiduciary Assets. At the end of the contract the Fiduciary Assets will be returned to the fiduciant or another specified beneficiary according to the terms of the contract.

Although legal title of the Fiduciary Assets passes to the fiduciary, the Fiduciary Assets are held in segregated fiduciary estates and are not recorded on the balance sheet of the fiduciary. Fiduciary Assets are ring-fenced and may only be seized by creditors holding rights deriving from the Fiduciary Assets themselves or the fiduciary contract. Therefore the Fiduciary Assets are not affected by insolvency proceedings or other claims brought against the fiduciary.

The 2003 Law provides restrictions on the parties that can act as fiduciary in fiduciary contracts. These include credit institutions (such as banks), investment firms, insurance or reinsurance undertakings and securitisation companies (among others).

There is no restriction, however, on parties who may act as fiduciants or indeed the kind of assets that may constitute Fiduciary Assets – e.g. real estate, rights and claims, or swaps, established or located in any country could validly constitute Fiduciary Assets.

Fiduciary contracts can be use for the purpose of fundraising.

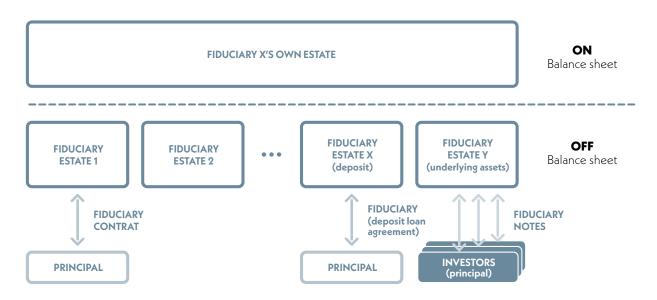
In such cases, the fiduciary contract takes the form of a transferable security (being a note or certificate, the Fiduciary Note), which is issued by the fiduciary and backed by the Fiduciary Assets provided by the fiduciant.

Under a fiduciary note programme, the fiduciary will act as the issuer of the notes on a fiduciary basis, from time to time, to one or more principals (nominees on behalf of investors or else to the investors themselves) subject to the terms and obligations established in the issuance documents.

The terms and conditions of issuance of each series of notes are set out in a

base prospectus, which, depending on whether or not the fiduciary notes will be listed, may need to be approved by the appropriate listing authority or local regulator. The fiduciary will provide support in this regard. Any further terms attaching to further issuances or series will be set out in a series-specific prospectus and/or the relevant final terms document.

Fiduciary X (e.g a luxembourg credit institution)



Source: Allen & Overy

TRADE FINANCE

Banks in Luxembourg can assist companies in international trade transactions, including lending and issuing letters of credit, as well as factoring, export credit and insurance.

The Luxembourg Export Credit Agency (Office du Ducroire) is a public institution designed to support Luxembourg exporters while trading internationally, mainly by providing credit insurance schemes for exports, imports and investments abroad.

The Office du Ducroire offers tailor-made solutions to SMEs and multinationals. The insurance products principally apply to trade markets outside the OECD area. The credits insured by the Office du Ducroire are generally backed by the Luxembourg State. Only the risks linked to short-term credits for debtors in OECD countries are covered without any State guarantee. If the intensity and duration of the risks exceed its insurance capacities, the Office du Ducroire may intervene for the account of the State.

"In Luxembourg, we have a dedicated team of trade experts and trained operators, as well as a robust and global digital Transaction Banking platform (FX, Trade & Cash Management). Our close collaboration with the European Credit Agencies, especially with the Office du Ducroire Luxembourg, allow us to offer not only traditional trade finance products, but also structured finance and customised supply chain solutions for our clients (supplier financing programmes, receivable programmes, and IT financing)."

Anne-Sophie Weyland,

Director Corporate Banking, BGL BNP Paribas Luxembourg

RMB-DENOMINATED TRADE FINANCE

RMB is increasingly being used in international trade and payments. This represents an important signal that the internationalisation of the currency is well on its way. As a European financial hub, Luxembourg is well placed to facilitate these developments.

Trade has been one of the major factors in the internationalisation of the RMB. Using RMB as a trade finance currency has many advantages for both Chinese and European business partners.

CNH accounts enable both sides to avoid foreign exchange (FX) transactions and therefore currency risk. Currently, RMB is the third most used currency for trade finance after the Euro, with a global share of 4.61%. RMB-denominated trade finance is an on-going activity in Luxembourg. Its activities include import and export financing, as well as letters of credit and other loan guarantees.

A CROSS-BORDER LOAN FOR A LIQUEFIED NATURAL GAS PLANT

Intesa Sanpaolo Bank Luxembourg is a corporate bank dedicated to serving high-profile corporate customers in the Benelux area as part of the Intesa Sanpaolo Group.

A few years ago, the bank established a Structured Export Finance Desk, which handles structuring, arranging and lending activities in commodity and trade finance.

The following example of a cross-border loan occurred in December 2016, when Intesa Sanpaolo Bank Luxembourg arranged a 14.5-year credit line facility with Yamal LNG, a liquefied natural gas plant in Russia, for the total amount of EUR 750 million.

The project is a key element of Yamal's liquid natural gas (LNG) production development; the strategic location enables Yamal to supply LNG to both European and Asia Pacific markets.

Insurance coverage was provided by the Italian Export credit agency SACE and the French export credit agency BPI France. In 2017, Intesa Sanpaolo Bank Luxembourg increased its participation by signing two further facilities with insurance coverage by the Swedish Export Credit Agency EKN and the German Export Credit Agency Euler Hermes.

CAPITAL MARKETS

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

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 customerfocused 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 (Islamic bonds), it has actively contributed to innovation in the financial marketplace.

for international bond listings in Europe

2,500+ issuers



117 sovereigns

37,000+ securities listed

5,700+ share classes of UCIs listed

100+ jurisdictions

10,400+ new listings in 2019



LUXEMBOURG AND CHINA'S GREEN REVOLUTION

In 2016, the Luxembourg Stock Exchange launched the Luxembourg Green Exchange (LGX), the world's first platform dedicated to green, social and sustainable securities. The LGX remains the only platform of its kind, currently listing more than half of the world's green bonds.

As a result of its unique position, the Luxembourg exchange has deepened its solid relation with China, the largest green bond issuer globally.

China needs to access the international investor community for around 50% of its funding of green bonds and requires innovative global partnerships to do so. Therefore, in 2017, Luxembourg and China decided to build bridges through the launch of the Green Bond Index Series. The green bond indexes are displayed simultaneously on the Shanghai, Shenzhen and Luxembourg stock exchanges and are important for raising awareness about the performance of Chinese green bonds. The relationship has been deepened with the development of an

BELT AND ROAD INITIATIVE (BRI)

The Belt and Road initiative was launched in 2013, involving China underwriting billions of dollars of infrastructure investment in countries along the old Silk Road, linking it with Europe. These projects typically need long term funding of 10 years and above. China is spending roughly US\$150 bn a year in the 68 countries that have signed up to the scheme.

In September 2017, in order to raise proceeds to support both domestic provinces as well as foreign countries key to the Belt and Road initiative, ICBC Luxembourg displayed its green bonds on the LGX. These are dedicated to financing renewable energy projects, low carbon and low-emission transportation, energy efficiency and management of sustainable water resources.

CASE STUDY: HSBC LUXEMBOURG CHINA DESK

HSBC's global network and universal banking model is optimised for clients engaged in BRI projects. HSBC is currently involved in more than 100 BRI projects globally.

HSBC has five China Desks located in Europe. The Luxembourg China Desk was established in early 2017 in order to work closely with local Chinese Banks and corporate subsidiaries. Chinese firms investing overseas, especially in Europe, are quite often required to set up a holding structure in Luxembourg. The aim of the HSBC China Desks is to assist Chinese corporates to establish their holding company, navigate through local regulations and coordinate with various teams across jurisdictions to make sure the process is smooth and successful.

Luxembourg acts as a key gateway to Europe and investment from China will usually penetrate further into other European countries. In 2017, the HSBC China Desk in Luxembourg assisted many Chinese corporate clients investing into Germany, France and UK as well as South America through Luxembourg, by providing cash and liquidity management solutions including international payments & collections, FX transactions, deposits and cash pooling structures.

RESPONSIBLE FINANCE

Luxembourg is today globally recognised as an ideal platform to assist companies, governments and investors around the world meet their sustainable development targets.

In recent years, financial markets have developed instruments that are specifically designed to raise money for sustainable development aims. Luxembourg has been at the forefront of this development, thanks to close cooperation between the public, private and civil society sectors. The Luxembourg financial centre has developed an ecosystem that is uniquely suited to raising international capital for sustainable investment.

Luxembourg has a long-established track record as the location of choice for sustainable and impact investment funds, environment strategies accounting for 38% of funds and 57% of assets under management; social strategies, accounting for 34% of funds and 36% of assets under management. Luxembourg has also been a pioneer in the area of sustainable finance labels for more than a decade. Moreover, over half the world's listed green bonds are listed in Luxembourg, where the stock exchange offers a dedicated platform for green securities as well as social and sustainable bonds.

STRUCTURED FINANCE AND THE CIRCULAR ECONOMY

Luxembourg corporate banks are specialised at structuring securitisation deals for circular economy companies.

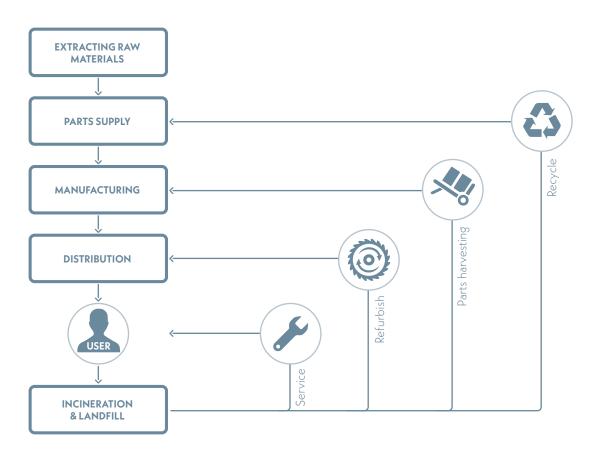
The principal difference between a traditional company and circulareconomy company is its financial cycle.

The economic model of a traditional manufacturing company is linear, whereas the economic model of a circular economy company is based on the principle of extending the life of a good.

This is achieved in two ways:

- either, by developing products that are designed around the recuperation and re-extraction of primary materials and their re-use;
- or, where product life-cycles are very long, exchange of individual parts on a modular basis using reconditioned parts.

The circular economy



In its business model, a circular economy company has to address two needs:

- a need for increased long-term financing
 a need for working capital to replace the to cover the additional Research & Development (R & D) costs traditionally capitalised on their balance sheet as well as the residual value of leased assets; and
- structural income gap caused by moving away from the up-front sale of products to a rental model.

To satisfy the first need, the financial institution can mobilise teams in the equity and bond markets as well as provide advice and support to the circular economy company both at the structuring stage and in placing the deal with investors, whom it is their responsibility to identify. Alternatively, if a capital market solution is not desired, the financial institution can bundle the debt into a structured vehicle with a view to onward distribution as per its own risk appetite. Such a distribution might take the form of a syndication, a third party sub-participation or any other form of repackaging.

To finance its working capital requirements, the circular economy company may use securitisation, factoring or any other asset-backed financing strategy. All these techniques have been successfully tried and tested in the past. Moreover, in the context of the EU's STS (Simple, Transparent, Standardised) regulation, these structures are likely to become popular with investors who will appreciate the underlying risk diversification and clarity of the product. If its business model is viable, the circular economy company should be able to raise cash with confidence and at a moderate cost profile in relation to the diversification of the risk taken by the investor.

CASE STUDY: SOCIÉTÉ GÉNÉRALE - CAPITAL RAISING FOR CIRCULAR ECONOMY COMPANIES

Société Générale in Luxembourg has fully adopted the principles and objectives of the circular economy and provides a complete service to circular economy companies. Using multi-skilled teams, Société Générale Bank & Trust (SGBT) collaborates with Société Générale Investment Bank and with Société Générale Securities Services to provide an end-to-end capital raising service.

The bank makes full use of the toolbox of structures available in Luxembourg including securitisation issues, debt issues or infrastructure funds such as the ELTIF (European Long-Term Investment Fund). The new ESMA standards for securitisations to be Simple, Transparent and Standardised (STS) are central to this activity.

The viability of the circular business model and the opportunity for sectoral diversification that it offers to investors potentially make circular economy companies ideal targets for long term investors.

MARITIME FINANCE

As a leading international financial centre with close ties to harbours such as Antwerp, Zeebrugge and Rotterdam, Luxembourg has developed strong expertise in maritime finance. Since the early nineties Luxembourg has provided an attractive legal framework for the maritime industry and its seafarers. Many important shipowners, classification companies and maritime suppliers are located in Luxembourg.

In July 2020, out of a total of 213 ships registered in Luxembourg, 208 are flying the Luxembourg flag ¹. Luxembourg-registered vessels operate all over the world and are known for their high quality; the average age is just 11.5 years.

Shipowners specialise in areas as diverse as the transportation of bulk liquids, offshore oil and gas marine services, dredging and land reclamation, and are encouraged to renew their fleets on a regular basis and invest in new vessels. In 2019, 223 authorised maritime companies and 58 accredited maritime managers were recognised in Luxembourg ².

Shipping companies choose Luxembourg for many reasons. With access to a single window for maritime affairs, they know where to turn to get things done quickly and efficiently – especially when it comes to registering new ships.

While the process is convenient, shipowners understand that owning and operating a fleet requires complex multidisciplinary expertise in accounting, audit, insurance, finance, law, ICT and satellite services.

In the field of maritime insurance, Luxembourg has already a long track record of being the European home to two of the 13 major global P&I clubs, with the British ship Insurer Tindall Riley (Britannia) being the latest to choose the Grand-Duchy in order to serve the EU market. Since the predominant source of finance for the maritime industry remains bank lending, customers can choose among all the leading international banks active in this industry and present in Luxembourg, ranging from the major French, Japanese, American, German up to the seven largest Chinese banks.

Luxembourg thus offers various national and cross-border ship financing solutions, such as bank lending, bond issuance, securitisations, joint venture structures and regulated or unregulated investment funds structures. Luxembourg also offers various types of maritime mortgages, which are internationally well-known by banks and financial institutions.

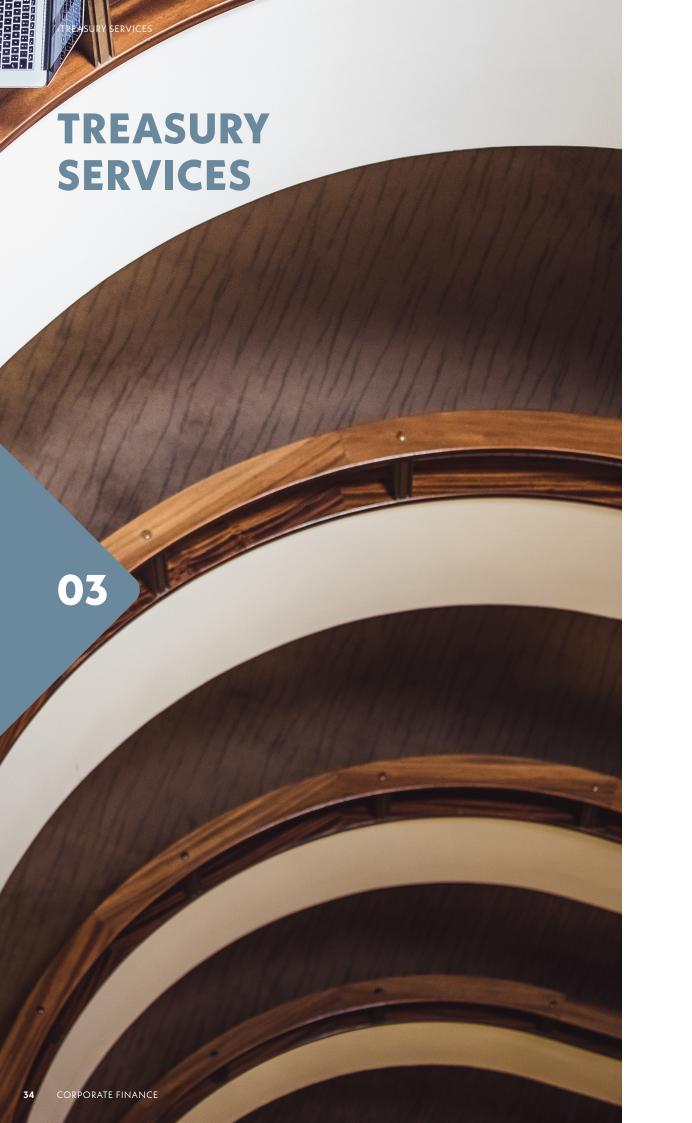
PUBLIC FUNDING

Access to funding is a critical issue for entrepreneurs, researchers, start-ups and established companies looking to accelerate their business.

In Luxembourg, companies can draw on a range of attractive public funding programmes that help companies expand their activities, develop innovative concepts and products and strengthen their competitiveness overall. For more information on various national and international funding programmes, Luxinnovation (luxinnovation.lu) can help point you in the right direction.

¹ http://maritime.lu/luxembourg-merchant-fleet#fleet

 $^{^2}$ Commissariat aux affaires maritimes



TREASURY SERVICES

Cash management solutions need to be specifically developed to meet the challenges treasury owners face today. While the fundamental role of the treasurer remains the same, treasury models are being re-evaluated. With so many factors impacting business quicker than ever, there is an increasing understanding that agility and speed are crucial if a firm is to effectively manage its liquidity. Flexibility is also needed within

centralised treasury structures in order to be able to react appropriately to local circumstance and needs.

Banks in Luxembourg play a critical role in supporting corporate treasurers in meeting these objectives. Luxembourg is a prime location for core cash services, often combined with treasury, finance and accounting as a shared service hub.

PHYSICAL AND NOTIONAL CASH CONCENTRATION

Depending on company needs and requirements, concentration of cash can either be physical or notional.

Physical cash concentration enables companies to automatically centralise and consolidate the balances of all their accounts in either the same or a different currency, into a single account. Whether zero-balance or target-balance, cash movements into and out of the master account are structured so that all subsidiary accounts are brought to a zero or target balance and the consolidated position is held at the master account.

On the other hand, there is no physical consolidation of cash in notional pooling which enables the company to pool the debit and credit balances of the accounts notionally. The creation of a notional position of credit and debit account balances across multiple currencies aims to improve the group's liquidity management. This is particularly suitable to groups with a decentralised treasury, aiming to preserve a certain level of the subsidiaries' cash management autonomy, or where the physical consolidation of balances does not meet the treasurer's need.

Notional pooling may not be suitable for all companies as restrictions related to the inclusion of country of incorporation may apply.

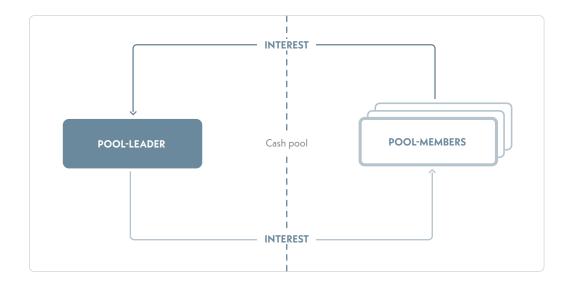
For many internationally active companies or groups, multinational cash concentration has become a core component of their global cash management strategy.

Reasons include the potential for:

Improved, real-time visibility of the company's consolidated global cash position, facilitating the enhancement of group wide cash management and forecasting;

- Opportunities to reduce external debt through a more efficient (re) allocation of cash available for the multi-national corporate;
- Access to better dealing conditions when investing excess cash balances through the ability to consolidate smaller or non-core balances.

Example of a multinational cash-pool



WHY GUARDIAN INDUSTRIES CHOSE LUXEMBOURG

Luxembourg is home to a vibrant manufacturing sector that specialises in added value products that are exported all over the world. One of the market leaders is Guardian, a leading manufacturer of high-quality commercial, residential, interior and automotive glass products. The company produced in Luxembourg the glass for one of the world's tallest buildings, the Buri Khalifa in the United Arab Emirates.

Currently Guardian employs approximately 700 people in Luxembourg: close to 150 people ir regional functions and 550 in plant and operational functions.

Initially, the Guardian Industries group only had operations in the United States. In the early eighties, Guardian set up its first two international float glass plants in Luxembourg. This was followed by rapid international expansion through the construction and acquisition of several plants inside and outside Europe.

This expansion, which was managed from Luxembourg, grew in scope and complexity over time. Luxembourg was selected as the headquarter and international holding company of the Guardian group due to a combination of factors including the country's strong economic performance, the banking and legal infrastructure and the availability of a high quality work force.

Treasury services conducted out of Luxembourg

The headquarter functions include regional marketing, sales, demand creation, supply chain, sales and operations planning, procurement, business development, operations excellence, engineering excellence, R&D and finance. The finance activities focus on regional financial planning and analysis, accounting, credit management, tax and treasury.

The regional treasury desk handles cash management, liquidity and funding, as well as foreign exchange transactions. Guardian Glass sources its materials such as silica sand and soda ash from regional and global markets and sells its finished products (including commercial coated products installed on skyscrapers) around the world. The treasury desk therefore needs to manage bank accounts in multiple convertible and local market currencies.

Guardian typically works with partner banks in Luxembourg providing full scope of services Its liquidity is managed in-house.

"The talented workforce combined with the advanced banking infrastructure and landscape, makes Luxembourg the perfect location for the Group Treasury function."

Gabor Harakaly,

Director of Business Development, Guardian Europe

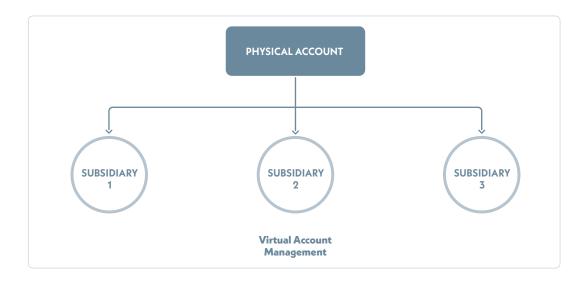
VIRTUAL ACCOUNT MANAGEMENT

Corporate treasurers are at different junctures on the path to centralisation, and each organisation defines its end state differently. Despite this, companies often speak of a shared but elusive ideal: a single bank account within the treasury hub to manage payments and cash concentration.

As treasury management evolves so do banking solutions. Physical and notional cash concentration capabilities already support centralisation. But further innovation of account services has been necessary for banks to satisfy the changing needs of treasuries.

Virtual account solutions enable this vision by combining one physical bank account with an accounting sub-ledger that is uniquely configured to separately identify different cash flows and balances. This one- to-many model can be as simple as segregation of payables and receivables, or more granular to reflect the account setup of the company's general ledger.

The result is further flexibility to support the path towards centralisation and virtual account solutions may represent a potential pivot point for transforming treasury management and enabling corporate treasury's shift to a strategic role.



CASE STUDY: J.P. MORGAN BANK S.A.

J.P. Morgan was incorporated in Luxembourg in 1973, initially specialising in private banking. Today the firm offers clients securities services, asset management services and a full suite of cash management solutions.

Payments, receipts, liquidity management and account services in J.P. Morgan Bank Luxembourg S.A. allow multinational corporates looking to consolidate their treasury operations to develop a treasury hub in Luxembourg or leverage this central location to serve their business across the FII.

J.P. Morgan Bank Luxembourg S.A. continues to invest in new and innovative solutions ranging from Application Programme Interface ("API's"), machine learning, robotics and advanced data structures to transform the hindsight, insight and foresight that intelligent data brings to the market.

"Banks can help corporate treasurers on their centralisation journey by offering value-added services and technology solutions based on the corporation's operating footprint, business activities and cash flows. At J.P. Morgan, we believe the best results are when companies and banks work together to develop solutions."

Frédéric Mouchel,

CEO, J.P. Morgan Bank Luxembourg S.A.

PAYMENT FACTORY: CONTROL OF PAYMENTS OUT OF LUXEMBOURG

On a daily basis, globally-active companies make transactions through accounts in different banks, in different countries, using different currencies and adopting different procedures. Not only is this complex and time consuming to manage, it is also costly for the companies as each bank, not to mention each correspondent bank in the transaction chain, applies separate transaction fees.

At the least a multitude of banking partnerships makes it difficult to consolidate the cash position, exaggerates complex approval processes, and generates higher operational risks and transaction costs; at worst, it may imply a lack of visibility with regard to group cash flows.

These challenges in mind, many existing treasury centres in Luxembourg are looking to gain even more efficiencies out of their bank account structure whilst establishing tighter controls around their transactional flows, and in response are setting up Payment Factories, which may leverage 'payment' and / or 'receive on-behalf-of' models, often referred to as POBO and ROBO.

The level of automation implemented can vary from firm to firm. Luxembourg IT and banking service providers offer all the necessary tools to achieve this, including acceptance of all the main standards for interfaces (e.g. SWIFTNet, ISO20022 XML).

The establishment of the Single Euro Payments Area was the catalyst of centralisation as it mandated the message format standard ISO 20022 XML making it the optimal instrument, where full data is passed on both parties end-to-end on payments.

OPERATIONAL EFFICIENCIES

Setting up a payment factory in Luxembourg offers a wide range of potential benefits:

- ➤ Increased standardisation leveraging standardised connectivity and formats; generally SWIFT and ISO XML.
- Enhanced automation of payments, resulting in a higher straightthrough rate hence reducing manual interventions and underlying costs.
- Reduction in the number of banking relationships, resulting in less bank connectivity arrangements and increased pricing consistency.
- Improved visibility into funding requirements allowing better liquidity management and control over funding arrangements.
- Consolidated supplier visibility, better supply chain management.

RISK MANAGEMENT EFFICIENCIES

- Possible reduction in the number of Banking Partner(s) allows for a more thorough counterparty risk analysis and mitigation of the same.
- ➤ Improved control of payables by reduction of the entry points, leading to better fraud prevention.
- ➤ Easier reporting process, both internally and externally, based on the centralisation of the payable activity.

COST EFFICIENCIES

- Cost reduction (reduction of external bank charges, decreased IT, headcount and overhead costs).
- Harmonised transactional banking costs based on a consolidation of payable flows.
- ➤ Enhanced FX processing and costs through better natural hedges and volume consolidation.
- Reduced account maintenance and reporting charges based on a leaner payable account structure.
- ➤ Enhanced visibility into suppliers globally, hence creating potential bargaining opportunities.

WHY APERAM CHOSE LUXEMBOURG

Aperam is a global player in stainless, electrical and specialty steel, with customers in over 40 countries. In 2017, Aperam had sales of €4.5 bn and shipments of 1.94 million tonnes.

Aperam's industrial network is concentrated in six production facilities located in Brazil, Belgium and France. The distribution network is comprised of 14 steel service centers, 6 transformation facilities and 16 sales offices.

Aperam's shares are listed on the Luxembourg Stock Exchange, on Euronext Amsterdam, Paris and Brussels. Aperam is member of key indexes, including BEL20, SBF120, NEXT 150, CAC MID60 and AMX. Aperam is also rated Investment Grade by both Moody's and Standard & Poor's.

The company has its corporate headquarters in Luxembourg of which corporate finance functions. It includes the treasury hub of the Group with an in-house bank focusing on cash and financial risk management, and managing centrally financing activities.

The company regularly uses banks in Luxembourg for its various financing activities.

"Following the spin-off of the stainless steel division from ArcelorMittal, it was decided that Aperam Group finance should be based in Luxembourg, at the Company's headquarter in close contact with other key corporate functions. We have always been very satisfied of our Luxembourg location which was an obvious choice when considering Luxembourg's historical links with the steel industry, the expertise of its financial sector and the overall stability of the country."

Benoît Scholtissen,

Group Treasurer, Aperam

LIQUIDITY MANAGEMENT SOLUTIONS

In today's world, where treasurers generally operate on a global scale in an ever-expanding number of currencies, the need for control, visibility and optimisation are crucial. Liquidity solutions help deliver end-to-end automated solutions that provide transparency and control, tools integral to managing cash, liquidity and risk.

New technology makes it possible to manage treasurers' entire operation through centralized account structures – potentially from a single account which is used to fund local currency payments with the precise amount of cash at the exact time needed. Additionally, designing a hierarchy of virtual or sub-ledger accounts could transform approaches to payments, collections, liquidity and currency risk.

CAPITAL CALL SERVICES

Another treasury service particularly relevant in the private equity sphere is the capital call bridging loan facility. The key driver for using a bridge facility is liquidity management since managers are able to request and draw capital faster than the standard ten-days timeline. It gives immediate access to capital while allowing private equity managers to achieve flexibility with their deployment of capital.

Institutional investment funds such as unlisted real estate funds, private equity funds, infrastructure funds and other limited partnerships and corporate entities can find themselves in need of a short-term cash bridge:

- the fund needs to move quickly on a new investment or make a capital injection into an existing investment without having to wait ten or more days to receive the proceeds from a capital call;
- the fund needs temporary liquidity for payment of expenses, interest or other outgoing commitments without making a capital call from investors.

CASE STUDY: ING CAPITAL CALL BRIDGING LOAN FACILITY

ING Luxembourg offers a bridging loan facility to institutional investment funds. Following analysis of the credit quality of the underlying investor, the facility may be linked to a pledge over uncalled commitment or made on an unsecured basis with full recourse to the underlying assets. The company also offers standby letters of credit, for instance to support long-dated equity commitments, to project finance investments made by the fund or as guarantees to vendors to match deferred payment terms.

The facility can enhance a fund's internal rate of return (IRR). The time component of a fund's IRR calculation typically runs from the date a capital call is made. A capital call facility can be used to make initial investments before the date, thereby delaying a capital call and potentially enhancing the IRR.

MONEY MARKET FUNDS

One of the central activities of the corporate treasurer is surplus cash management. In order to ensure that money is available when and where it is needed, sums of cash must be held on short-term deposit at the best terms possible. Treasury funds evolved to help reduce the opportunity cost of holding cash on a bank account by investing in a diversified portfolio of very short-term debt instruments that credit interest on a daily basis. Money market portfolio managers strive to keep the value of each fund share constant.

In the last decade, however, low interest rates drove the yield on these funds into negative territory. Luxembourg fund promoters responded by offering shortterm bond funds. With typical average durations of six months to a year, these funds provide treasury managers with a positive yield at little additional risk in terms of adverse NAV fluctuation.

Managing money market portfolios is a volume business, which is why a number of major international groups have chosen to run their treasury and short-term bond funds out of Luxembourg. A rising trend is the offer of bespoke cash management portfolios to institutional clients. An example is the Luxembourg Fonds de Compensation which holds the reserves of the Luxembourg State Pension Fund. Money market portfolio managers strive to preserve prinicpal or to limit variable net asset value downside given negative interest rates.

LIQUIDITY FUNDS

The Luxembourg domiciled JP Morgan Liquidity Funds offer pooled treasury management in five currencies: USD, GBP, EUR, AUD and SGD. Invested overnight in the money markets, the Liquidity Funds have a fixed NAV and a AAA credit rating. Different share classes with minimum investment ranging from thousands to millions is a witness to the wide appeal of pooled treasury management. Alongside the Liquidity Funds the company offers a range of short-term bond funds, with a duration of less than twelve months and a variable NAV. JP Morgan offers a bespoke treasury portfolio service to large clients. The target of such a mandate is to combine very short duration with some yield.

TRIPARTY REPURCHASE AGREEMENTS

Another useful tool for corporate treasurers and asset managers is the triparty repurchase agreements (repos), a cash loan service that allows enhanced income with lowered counterparty risk and operational outsourcing. In such a transaction, the corporate client receives securities as collateral for the duration of the loan. The collateral received against the cash loan can be reused within the triparty environment to cover initial and variation margin calls with all counterparties, reducing cost and operational burden. In the case of a

default of the cash borrower, the corporate has direct access to the collateral and can liquidate it. The entire operation is outsourced to the triparty agent, so corporate treasurers need not worry about collateral segregation, margin calls, corporate actions, reporting etc.

This is an area of the market that is subject to technology driven evolution more than almost any other.

CLEARSTREAM

Founded and based in Luxembourg since 1970, Clearstream is a post-trade services provider owned by Deutsche Börse Group. As an International Central Securities Depository (ICSD), Clearstream traditionally offered settlement and custody services for banks. Today, the company engages in a range of activities including settlement, strategic securities lending, collateral management, registration, contract administration and portfolio reconciliation. One important field of activity is triparty repo, where Clearstream acts as an agent between its corporate customers and the banks.

Buy side clients have become increasingly important to Clearstream, acting as counterparties in secured financing transactions, such as repo and securities lending. One hurdle in the repo sector used to be handling all the legal documentation required with each correspondent bank. In 2013, the company launched a standard multilateral repo contract, the so called "Clearstream Repurchase Conditions" (CRC), which allows corporate clients access to the repo market by signing just one contract. Clearstream likewise helps customers to manage their cleared and uncleared OTC derivatives trades in line with EMIR requirements.

Clearstream holds over €14 trillion of assets under custody and processes 170 million settlement transactions annually. Asset safety and a strongly regulated, stable environment are therefore key priorities to the company. Regulation by the CSSF and Bafin, as well as the firm's AA rating testify to its reliability and the robustness of its operations.

CUSTODY SERVICES

With an investment fund sector worth over €5 trillion, fund custody and depositary services are key competences of the Luxembourg banking sector.

Luxembourg retail and alternative investment fund managers are required by law (both on an European and a Luxembourg level) to entrust the custody of their fund assets to a "depositary" or "custodian" bank.

The depositary bank has the dual mission of safeguarding the assets of the collective investment scheme and monitoring certain activities by the fund or its management company, including, for example, conformity with the investment criteria set out in the fund prospectus. This ambivalence in the depositary's roles (as an independent watchdog over the management company or the manager of an alternative investment fund's activity on the one hand, and its service provider for certain delegated tasks, on the other hand) is met in Luxembourg

with expertise, skill and pragmatism. As such, Luxembourg custodian banks are well versed in handling every sort of fund portfolio from simple UCITS, through alternative investment funds and high-volume OTC strategies to statistical arbitrage.

The Luxembourg custodian bank sector is highly diverse, with entities that are part of a global custody group as well as entities operating through third-party sub-custodians. This enables Luxembourg depositary banks to be comfortable with managing and safeguarding assets across a vast global network. Regulated investment funds are sold to investors in 70 jurisdictions and the underlying assets are invested worldwide. Hence the staff present in Luxembourg custodian banks operate on a daily basis in a multicurrency, multi-time zone and multicultural environment.

FOREIGN EXCHANGE AND HEDGING

Currency hedging is offered by just about every bank in Luxembourg. In a market where most clients are active internationally, hedging out foreign exchange risk in multiple currencies is a bread and butter activity. Banks use the full range of forward contracts, swaps, options and futures, to meet the needs of their institutional and private clients.

- Corporate customers need to minimise the risks associated with foreign currency trade, business loans and revenue streams;
- > retail mutual funds may use hedging as a limited tactical manoeuvre, where an insurance company might hedge out 100% of its foreign exchange exposure;
- family offices and private banks commonly offer both hedged and unhedged portfolio options to their sophisticated clients.
- A number of Luxembourg banks also centralise foreign exchange dealing and currency hedging on behalf of their own group, pooling the cash balance of different offices in order to achieve economies of scale.

Corporates are required to report all financial instruments to a trade repository. Luxembourg is home of REGIS-TR, one of the major European trade repositories for reporting trades and transactions across multiple product classes and jurisdictions. REGIS-TR is open to financial and non-financial institutions, and services all of the major regulatory reporting obligations in Europe. Entities such as REGIS-TR are moving to centre stage 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).

WHY FERRERO CHOSE LUXEMBOURG

For more than 20 years Ferrero's headquarters have been situated in Luxembourg, an office that today employs some 1,300 employees. The decision to move to Luxembourg was taken when Ferrero widened its domestic commercial focus to include Western Europe: Luxembourg lay at the geographical centrepoint, in relation to Germany, France, Belgium and Italy, four countries that are home to large Ferrero plants and commercial units.

The Luxembourg office is the nerve centre of the company, housing General Management, the CFO, Control, Finance and Consolidation, Treasury, HR including benefits and pensions, Organisation, Legal, PR & Corporate Communications, Area responsibilities for Commercial and Marketing & Brand activities, R&D, Industrial Management, Procurement and Supply Chain Legal protection of trademarks, IT and Strategy.

The Group Treasury function in Luxembourg, for instance, controls and coordinates the activities of the group's treasury offices worldwide.

Ferrero deals globally, requiring the Group Treasury and Risk Management Units to handle trading accounts in more than 30 currencies. The list covers most currencies of Europe, Asia and Latin America. Ferrero maintains current accounts in some 15 currencies.

Commodity and foreign exchange hedging are handled separately. Commodities are normally hedged in the futures markets. A typical transaction (cocoa for example) involves the purchase of futures based on the budget amounts, which are then closed when physical orders are placed with suppliers. FX hedging is done on net currency budget flows, after taking into account some relevant currency correlations, and is predominantly done through over the counter options.

"Luxembourg is an open, multicultural and friendly country at the heart of the EU and of the Eurozone, with a highly developed financial sector, good connections, easy access to the authorities, a wide set of international tax treaties and very high living standards and social benefits. When we look at corporate treasuries in particular, the very stable legal and regulatory environment, the strong technical infrastructure, the banking and financial environment and the network of tax treaties give Luxembourg, overall, a competitive advantage versus other countries in the euro area; probably none of these elements is crucial if taken per se, but Luxembourg's high score in all of them clearly makes the difference."

Marco Pescarolo,

Head of Group Treasury, Ferrero

PENSION FUNDS

One of the most complex issues facing internationally active firms is the corporate pension scheme, or schemes: for some companies the number of plans runs into hundreds, occasionally thousands. From a treasury management perspective, this represents a major challenge.

While cross-border financing of pension funds has been facilitated through the European Directive on Pension Funds (IORP), only few of these schemes have been able to cross more than one border during the last decade. Luxembourg offers the unique expertise to cross multiple borders. Luxembourg was a pioneer in the cross-border pension fund sector, introducing domestic legislation in 1999 and 2000. This resulted in the first international European pension scheme, launched by Unilever in 2000.

AMUNDI AND L'OREAL: A MULTI-EMPLOYER IORP SCHEME IN PRACTICE

Amundi is the first company to have set up a multi-employer IORP scheme. The company offer its clients a single, established point of entry into each host market. The scheme currently has twelve clients and Amundi reports a strong pipeline of interested firms.

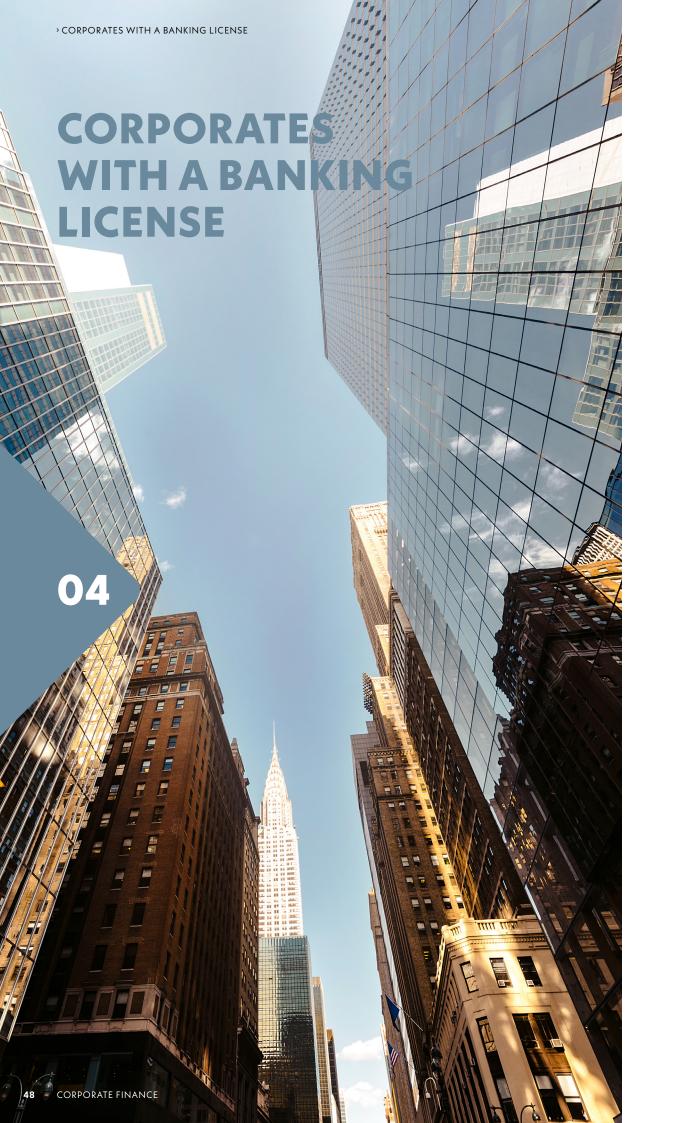
The plan currently operates in eight markets and other country compartments are being added at the request of plan sponsors. For a large, complex company, economies of scale can amount to 30%

L'Oréal is a client of the Amundi IORP. The scheme is up and running in Portugal and will be extended to cover other employees following the conclusion of feasibility studies and with the agreement of local management.

"The advantages of having an IORP include consistency in literature, administration and performance reporting. We have achieved considerable economies of scale including better control of our investment performance. At a corporate level, our pan-European pension plan sends a positive message regarding the company environment at l'Oréal."

Marc Raymond,

Head of Compensation & Benefits at l'Oréal



CORPORATES WITH A BANKING LICENSE

Some corporate groups acquire a banking licence to operate financing activities out of Luxembourg.

JOHN DEERE

John Deere is an American company that manufactures agricultural, construction, and forestry machinery, diesel engines, drivetrains used in heavy equipment and lawn care equipment. In 2000, John Deere Bank established its headquarters in Luxembourg.

The bank is regulated by the CSSF (Commission de Surveillance du Secteur Financier). It is an associated company of John Deere Financial, a wholly-owned subsidiary of Deere & Company.

The cost of and access to credit is a source of concern to many a modern agribusiness. John Deere Financial helps producers to overcome this obstacle, supporting its clients with quick and easy credit processes for the financing of new equipment. Key benefits to the farmer include: convenient and flexible repayment structures, customised solutions for farmers, access to a dedicated relationship banker, flexible lending periods, competitive interest rates on all new equipment as well as product support.

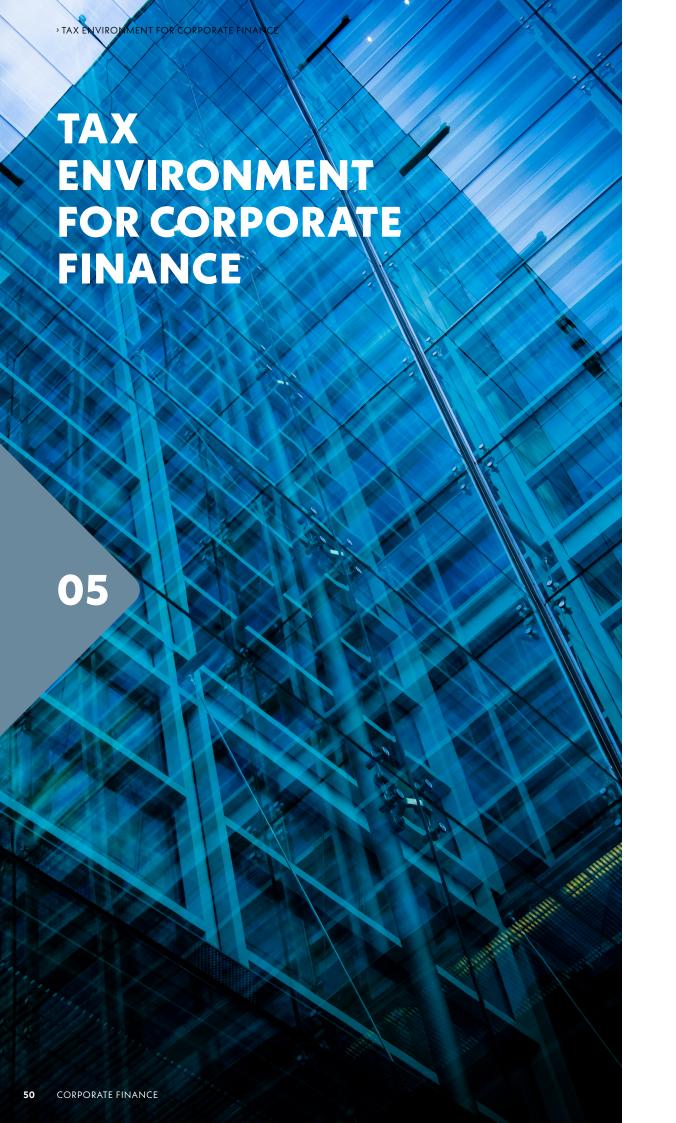
DANIELI

In 2014, the Italian Danieli Group, one of the major suppliers worldwide of plants and equipment for the steel industry, opened a bank, Danieli Banking Corporation (DBC), in the Grand Duchy. Similar to John Deere, the bank is supervised by the CSSF and benefits from membership of the Luxembourg deposit-guarantee scheme.

The bank covers the main banking transactions for in-house corporate clients. Danieli group subsidiaries that open current accounts at DBC can negotiate their term deposits or current account conditions according to their needs and with more efficiency, to the overall benefit of the Group.

DBC's services include multi-currency, call and fixed-term deposit accounts, foreign exchange services, financing solutions (tailored facilities, overdraft) and guarantees, performance bonds and letters of credit

It also offers direct access to a dealing room for traditional money market and forex activity up-to-date information on fixed income markets and direct contact for orders and pricing.



TAX ENVIRONMENT FOR CORPORATE FINANCE

In the past, tax decisions were generally left to specialists. Today, for corporate treasury practitioners, especially those working in multinational organisations, ensuring tax compliance while achieving tax efficiency has become a major responsibility.

Over the past ten years, there has been a progressive move towards the automatic exchange of information. Regulations have increased rapidly with the foreign account tax compliance act ("FATCA"), the common reporting standards ("CRS") and country by-country reporting, for instance. In March 2020, Luxembourg implemented the MDR Directive. Also known as DAC6, the MDR Directive is the latest European initiative regarding automatic exchange of information and is aimed at further increasing tax transparency.

Treasurers who manage financial data must have a thorough understanding of tax rules in order to manage the tax risks linked to their reporting and decisions.

This is particularly visible at the level of financing companies. Luxembourg is an attractive jurisdiction to locate group financing entities as it offers an efficient legal framework. With the development of transfer pricing documentation requirements at both European and international level, close collaboration between finance and tax departments is key when making funding decisions. A risk management requirement was included in the last transfer pricing Circular n°56/1–56bis/1 dated 27 December 2016.

The link between tax and corporate finance functions has been reinforced by the development of reporting software for financial and tax purposes. As new tax rules proliferate and governments call on companies to demonstrate greater

levels of tax transparency, corporate tax functions need to reinforce their tax liability determination process, tax data management and tax reporting capabilities. This trend has led to increasing investment by companies into tax technology solutions. These solutions are becoming more and more sophisticated and are often directly linked to financial source data. Clearly, in the current context, tax functions can no longer be managed separately as interactions with treasury functions become increasingly predominant.

Extensive double tax treaty network

Over the years, Luxembourg has developed a significant network of double tax treaties. As of today, Luxembourg has entered into more than 80 such treaties for the avoidance of double taxation.

Advanced position on BEPS

Luxembourg has been an active participant in the OECD base erosion and profit shifting ("BEPS") project since its beginning. The government has continuously stressed the need to promote coordinated implementation of the 15 different BEPS actions at an international level to ensure a level playing field worldwide.

As a result of BEPS, the European Union adopted the EU Anti-Tax Avoidance Directive (ATAD). Luxembourg has promptly implemented both ATAD I and ATAD II in its domestic legislation. Both directives provide for a series of key anti-tax avoidance measures to counteract some of the most common types of aggressive tax planning, as identified in the BEPS project. Luxembourg, together with over 90 other jurisdictions, has also signed the Multilateral Instrument ("MLI") aimed at implementing tax treaty-related BEPS measures.

Rulings

Tax rulings have been well established in many countries, allowing tax authorities to confirm how they intend to apply existing national and international tax rules to a specific situation. Luxembourg is by tradition open to foreign investment. In 2014, the government formalised and modernised the practice of tax rulings with the set-up of a supervisory commission ("commission des décisions anticipées").

Luxembourg is a major location for financing operations and acquisition structures. With significant amounts at stake, the ruling process offers investors the possibility of securing in advance the tax treatment that will be applicable to a future transaction. For corporate finance actors, this represents a real added value when taking management decisions.

Tax on human capital

Alongside Luxembourg's excellent quality of life and infrastructures, some factors play a major role in attracting a highly skilled and international workforce, essential for the establishment and expansion of corporate finance activities in Luxembourg.

Luxembourg is also attractive due to the tax environment for employees, including:

- Competitive social contribution tax rates;
- > The employee's mandatory social security contributions are in principle considered as tax deductible from the
- Luxembourg individual income tax standpoint;
- > The impatriate tax regime, the scope of which was extended in 2014.

Indirect tax considerations

In corporate finance, various transactions can take place. A business can be bought or sold through a transfer of securities and additional capital can be raised through a share issue. The finance to carry out the transaction can also come from a number of different sources, including loans and the sale of securities. These all have different VAT treatment and can have an impact on the VAT deduction rights of the business involved.

The Luxembourg tax environment in terms of VAT features:

- > currently the lowest VAT rates in the EU > the activities of a treasury centre are leading to VAT savings for companies with no or limited VAT deduction right;
 - mainly VAT exempt;
 - > no stamp duty on loans, transfers of shares or bonds.

Source: ATOZ



USEFUL CONTACTS

Luxembourg Government

www.gouvernement.lu

Ministry of Finance

www.mf.public.lu

Ministry of Economy (Invest in Luxembourg)

www.investinluxembourg.lu

Luxembourg for Finance

www.luxembourg for finance.com

Luxinnovation

www.luxinnovation.lu

Luxembourg Financial Regulator

www.cssf.lu

Luxembourg Stock Exchange

www.bourse.lu

Luxembourg Private Equity and Venture Capital Association

www.lpea.lu

Luxembourg House of Financial Technology

www.lhoft.com

Association of the Luxembourg Fund Industry

www.alfi.lu

The Luxembourg Bankers' Association

www.abbl.lu

Commissariat aux Assurances

www.commassu.lu

Insurance Companies Association

www.aca.lu

Luxembourg Business Federation

www.fedil.lu

The Intellectual Property Institute Luxembourg

www.ipil.lu

Luxembourg Chamber of Commerce

www.cc.lu

Luxembourg Portal for Innovation and Research

www.innovation.public.lu

Luxembourg Business Portal

www.guichet.public.lu/en/entreprises

The University of Luxembourg

www.uni.lu

Interdisciplinary Centre for Security, Reliability

and Trust

wwwen.uni.lu/snt

Luxembourg Institute of Science and Technology

www.list.lu

National Research Fund

www.fnr.lu

Luxembourg School of Finance

 $https://wwwen.uni.lu/fdef/department_of_finance$

National Statistical Office

www.statec.lu

Business Tourism Portal

meetings.visitluxembourg.com

Central Bank of Luxembourg

www.bcl.lu

Luxembourg Association of Corporate Service Providers

www.l3a.lu

Luxembourg Bar Association

www.barreau.lu

Luxembourg House of Training

www.houseoftraining.lu

Luxembourg Financial Markets Association

www.acilux.com

Luxembourg Association of Corporate Treasurers

www.atel.lu

The International Group of Treasury Associations

www.igta.org

Luxembourg Business Angels Network

www.lban.lu

Clearstream

www.clearstream.com

LuxCSD

www.luxcsd.com

REGIS-TR

www.regis-tr.com

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 develop Luxembourg's financial services industry and identify new business opportunities.

LFF connects international investors to the range of financial services provided in Luxembourg, such as investment funds, wealth management, capital market operations or advisory services. In addition to being the first port of call for foreign journalists, LFF cooperates with the various professional associations and monitors global trends in finance, providing the necessary material on products and services available in Luxembourg. Furthermore, LFF manages multiple communication channels, organises seminars in international business locations, and takes part in selected world-class trade fairs and congresses.

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