Long-term Financing

Lecture for Corporate Finance

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

Ing. Tomáš Heryán, Ph.D.
Corporate Finance
FIU/BAFIK

Outline of the lecture

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

- Debt financing
- External vs. Internal financial sources
- Assessing the exchange rate risk of debt financing
- Reducing exchange rate risk

Introduction

Firms typically seek to match the duration of their finance with the duration of the investment so that long-term sources of funds are used to finance long-term projects.

They have access to both domestic and foreign sources of funds and companies do consider long-term financing in foreign currencies.

Financial managers must be aware of their sources of long-term funds so that they can finance international projects in a manner that maximizes the wealth of the company.

Financial managers also need to consider the structure of the investment, whether it is a partnership, subsidiary or project finance.

Cost of debt financing

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

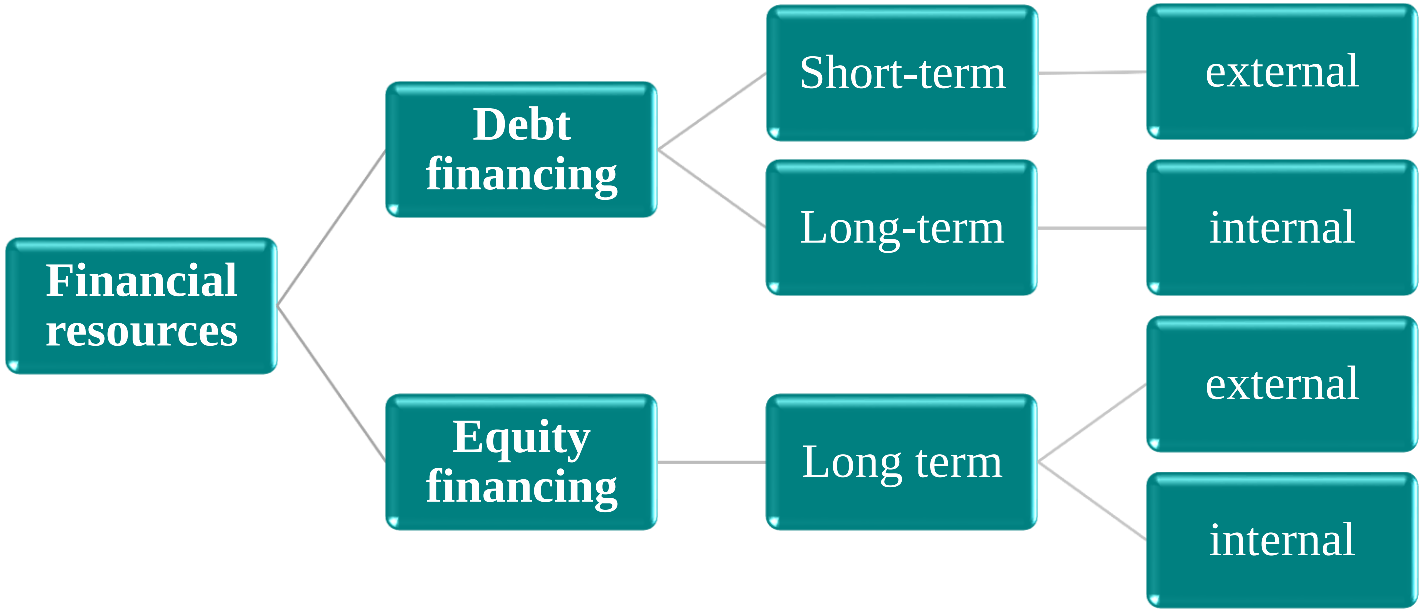
Firm’s long-term financing decision is commonly influenced by the different interest rates that exist among currencies. The actual cost of long-term financing is based on both the quoted interest rate and the short-term percentage change in the exchange rate of the currency borrowed over the loan life.

Because bonds denominated in foreign currencies sometimes have lower yields, corporations often consider issuing bonds denominated in those currencies. Since the total financing cost to a firm issuing a foreign currency/denominated bond is affected by that currency’s value relative to the company’s main currency, there is no guarantee that the bond will be less costly than a home currency/denominated bond.

Long-term financing decision

- The company must determine the amount of funds needed.
- The firm should forecast the price at which it can issue the bond.
- Then it should forecast periodic exchange rate values for the currency denominating the bond.
- These information can be used to determine the bond’s financing costs, which can be compared with the financing costs that firm would incur its home currency.
- The uncertainty of the actual financing costs to be incurred from foreign financing must be accounted for as well.

Financial sources



Financial sources

Long-term means that availability of these sources is longer than one year: INT: retained earnings; EX: bonds, bank loans, financial leasing or forfaiting.

Capital shares can be internal whether the company is not join stock company. Otherwise it is external.

External financial sources

External financial sources are e. g.: bonds, bank loans, financial leasing or forfaiting.

Long term means, that duration is longer than one year. Long-term sources could be external or internal.

A bond is an instrument of indebtedness of the bond issuer (debtor) to the holders (creditors).

There are several kinds of bonds. For example, zero coupon bond, which does not have any coupons and debtor sell it to the creditor for a price which is lower than its nominal value.

After time of expiration (at maturity) the debtor pays to the creditor its nominal value.

Bonds

- By bonds a company can obtain a significant amount of financial sources for anonymous creditor, what could be quite risky for them in case that the company is not successful.
- Quicker amortize the debt is possibly sometimes too.
- Disadvantages of bonds could be in necessity to confirm emission and costs of this emission.
- There must be investors (creditors) who would buy this emission of bonds.
- Market price is then related to the acceptable amount of risk.
- The higher risk means the lower price of bonds.

Bank loans

A bank loan (credit) is a next possible external financial source.

A bank lends a company some amount of money. In comparison to bonds a loan could be for company very expansive in case of low quality of a company.

Interest rate reflects amount of risk of lent money and maturity time.

If payments are regularly paid and they are constant or regularly growing, it could be calculated using growing annuity calculated from present value, because value of lent money is its present value and payments are paid from next period.

Financial leasing

It is a contract between lessee and lessor. Lessee (tenant) is using subject of lessor in the long term (for the duration of subject amortization). Lessee carries main part of risks related to ownership. After the contract expires the lessee buys the subject for a lower price.

By leasing it is possible to finance up to 100 % of subject value from external (foreign) financial source. Payments are usually paid after placing equipment in operation and they are fixed and determinable. In some ways it is very easy to get leasing.

Sometimes the payments could be higher than real asset price and higher in comparison to the bank loan, but it depends on every particular situation. Payments usually include insurance.

Forfaiting

Forfaiting is a possibility how to get money if a company owns some bills (debts). It is selling of single debts to a forfaiting company without possibility for regression.

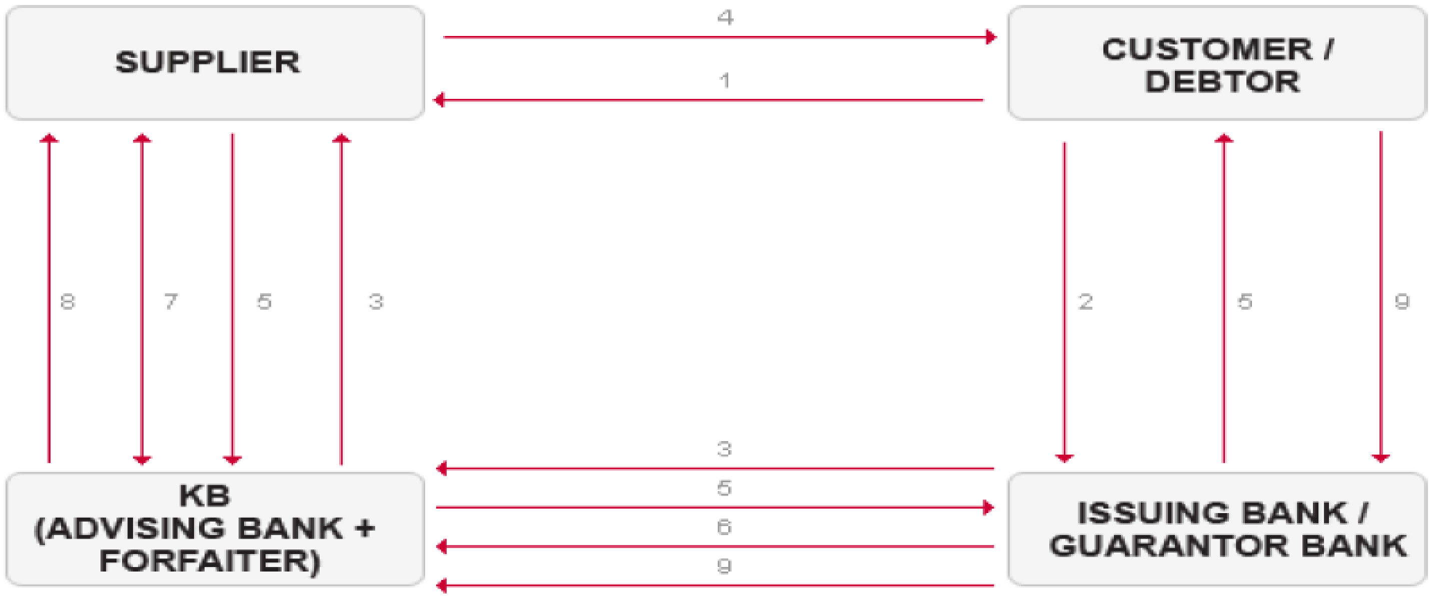
It is sold for lower price than is value of debt. It means some costs for the company, but interest and monetary risk is transferred to **forfaiter**.

Company can offer deliveries on credit without using of bank loan.

Debts for forfaiting have several conditions: longer term of expiration, they should be debts from selling of capital equipment, engineering products, etc., they should be secured and in free convertible currency.

How forfaiting works ???

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA



1 – Contract
2 – Request for issue of a documentary letter of credit
3 – Letter of credit
4 – Delivery of goods or services
5 – Presentation of letter of credit documents
6 – Acceptance of letter of credit documents
7 – Conclusion of a contract on assignment of debts
8 – Payment
9 – Settlement of receivable

Figure title 1

External or internal financial sources

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

- Financial sources created own capital.

- It is financed by shares emitted within a stock exchange.

- It includes basic capital, capital in excess of industry (emission agio), and profit in a given accounting period and retained income from previous years (these sources are internal).

- A company can increase of shareholders’ capital by share issue (emission) or alternatively by GDR (global deposit receipts) or ADR (American deposit receipts).

Initial public offering (IPO)

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

- IPO could be way of getting finance too.
- It is the issuing of shares for the first time in order to obtain a listing.
- It could be related to many disadvantages for companies which were not publicly listed before.
- They must be so attractive, credible and trustworthy for potential investors to they buy the shares and not only buy, but pay for them good price.
- In this way the company can get enough money for their business plans.

Venture capital

- A venture capital is a kind of long-term financial sources of some other company, which becomes part of shareholders' capital of a company. Giving company gets some power in management.
- There are three types of it: speed capital, start-up capital and early stage expansion capital according the phase of a company and purpose.
- It is useful in cases that company's business project is very risky and it cannot get bank loan or sell bonds, or it would cost so much, that the company would be incapable of paying.
- It is an opportunity for a high building up of the company value in the future and it is high risk for investor as well. It usually brings experience (know-how) to the company.

Assessing the exchange rate risk of debt financing

The expected value of the exchange rate can be computed for each period by multiplying each possible exchange rate by its associated probability and totaling the products.

Then, the exchange rate's expected value can be used to forecast the cash outflows necessary to pay the bondholders over each period.

After developing probability distributions and computing the expected values, the company can estimate the expected cost of financing and compare that with the cost of financing with a bond denominated in the home currency.

Reducing exchange rate risk

- The exchange rate risk from financing with bonds in foreign currencies can be reduced by using one of those alternative strategies.

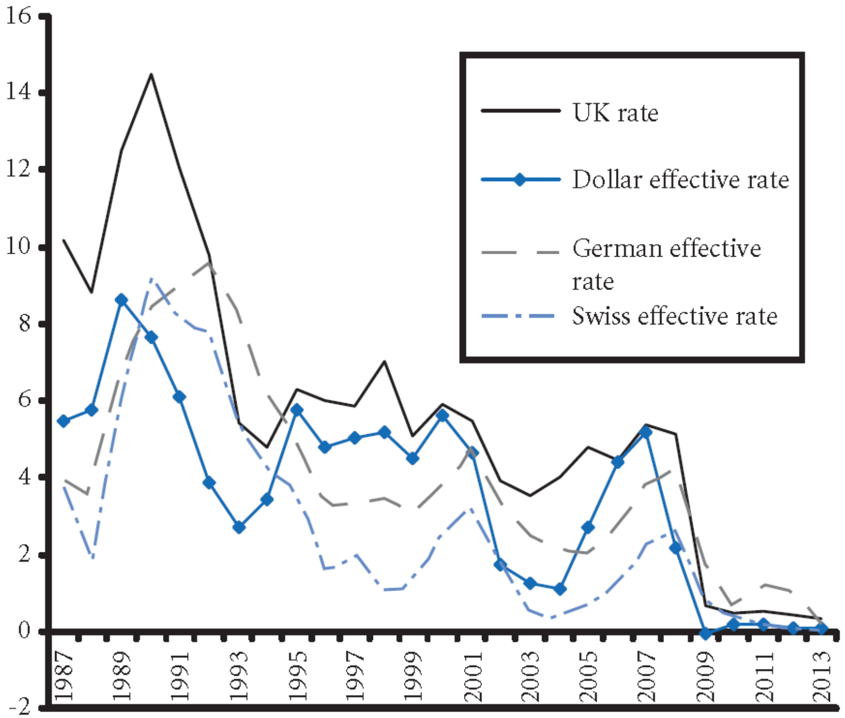
- Offsetting cash inflows – some firms may have inflow payments in particular currencies, which could offset their outflow payments related to bond financing.

- However, it is unlikely that the firm would be able to perfectly match the timing and amount of the outflows an foreign currency denominating the bond to the inflows in that currency.

- Therefore some exposure to exchange rate fluctuations will exist.

UK *i* rates compared with the effective foreign *i* rate

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA



Note: The UK rate appears to be more expensive than borrowing from abroad. However, foreign borrowing is more risky, the foreign rates do not include higher transaction costs and foreign borrowing is likely to include a higher risk premium.

Comparison of the interest rates

Comparison of the interest rates

Since early 90s there was a higher volatility in the U.K.

The bottom of interest rates was caused by the global financial crisis.

During the sovereign debt crisis the short-term interest rates were even negative.

Forward contracts

- When a bond denominated in a foreign currency has a lower coupon rate than the firm’s home currency, the firm may consider issuing bonds denominated in that currency and simultaneously hedging its exchange rate risk through the forward market.

- Because the forward market can sometimes accommodate requests of 5 years or longer, such an approach may be possible. The firm could arrange to purchase the foreign currency forward for each time at which payments are required.

- However, hedging through forward may not be less costly than the outflow payments needed if a dollar-denominated bond were issued.

Currency swaps

A currency swaps enables firms to exchange currencies at periodic intervals. The motive for such swaps is to make payments in a currency where revenues are being earned and thereby reduce exposure to exchange rate movements.

Many firms simultaneously swap interest payments and currencies at agreed rates. Rates can also be fixed with forward and futures.

Swaps have also been used for window dressing balance sheets – an attempt to deceive the investment markets. Both the Greek and Italian governments have been accused of this practice that originated in Japan and was given the name Tobashi, or Make go away. In essence the company arranges a swap with counterparty at very unfavourable rates.

Illustration of interest rate swap

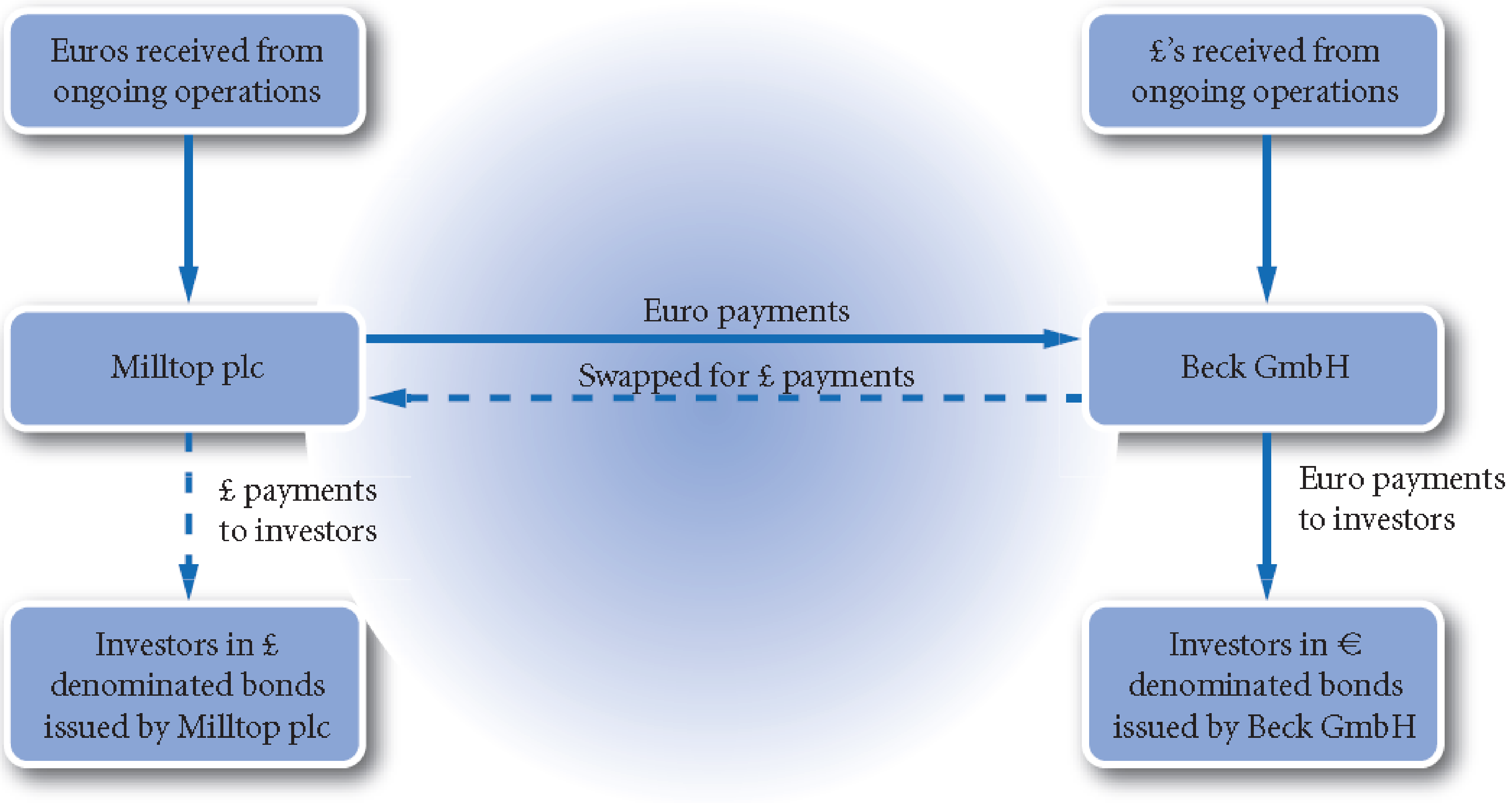


Illustration of interest rate swap

Parallel loans

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

- Firms can also obtain financing in a foreign currency through a parallel [or back-to-back] loan, which occurs when two parties provide simultaneous loans with an agreement to repay at a specific point in the future.

- Sometimes, parallel loans can function as a useful alternative to forward or futures contracts as a way to finance foreign projects abroad, when foreign currency will depreciate substantially.

- If the foreign currency is not heavily traded, forwards as well as futures contracts may not be available.

Illustration of parallel loan

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

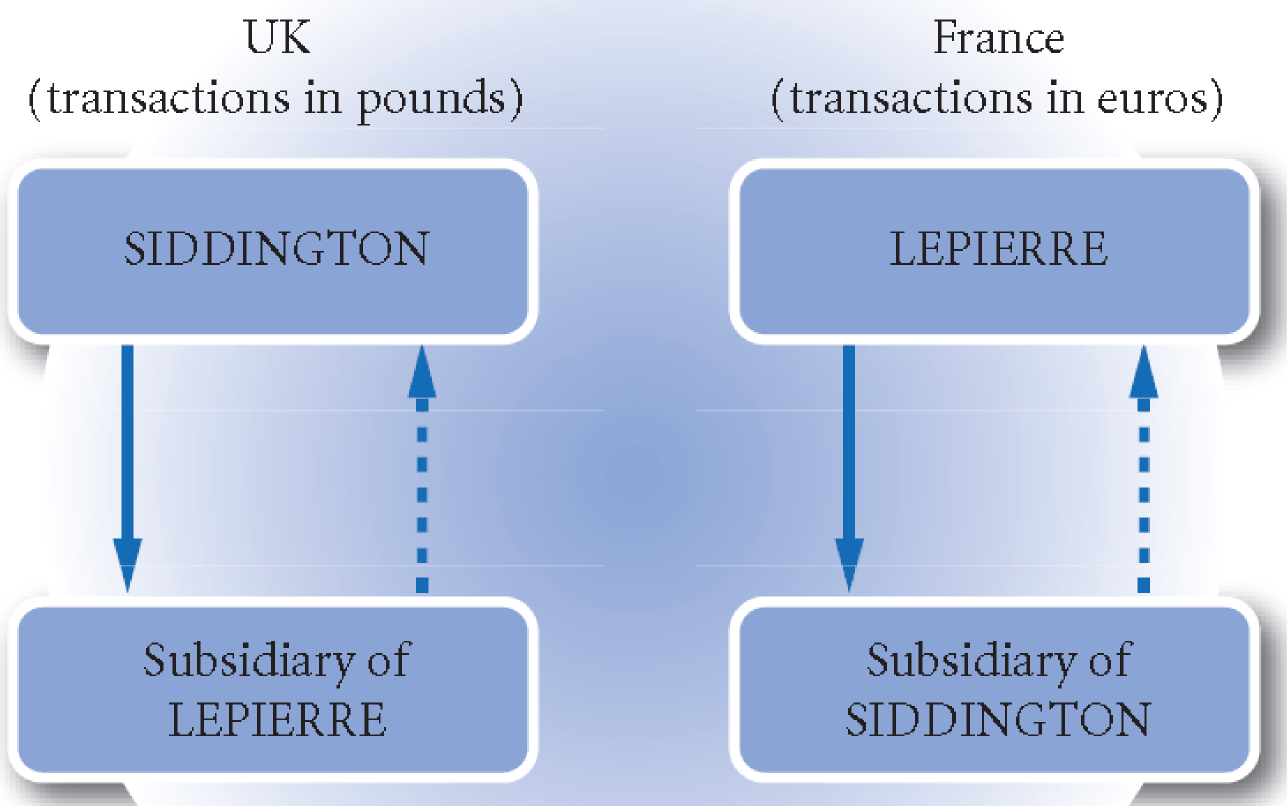


Illustration of parallel loan

Literature

1. MADURA, J., FOX, R., 2014. *International Financial Management*. Mason etc.: South-Western Publishing., pp. 509-534. ISBN 978-1-4080-7981-2.
2. HALTOFOVÁ, P. 2015. *Case Studies in Finance Management*. SU OPF, pp. 36-47. ISBN 978-80-7510-028-3.
3. BERK, J. & P. DeMARZO, 2017. Debt Financing. In: Corporate Finance, Chap. 24, pp. 897-949. ISBN 978-1-292-16016-0.
4. ROSS, S. A., R. W. WESTERFIELD, J. JAFFE & B. D. JORDAN, 2019. Long-term Financing. In: Corporate Finance, Chap. 15, pp. 468-486. ISBN 978-1-260-09187-8.

SILESIAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA

Thank you for your attention!

☺