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RISK MANAGEMENT IN TRADE FINANCE: TOOLS TO CREATE VALUE

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Summary

Overview

Cross-border trade is vital for companies that want to be global in supply chain management. This has always been valid for multinational companies, but now it's becoming valid also for SME.

All trade transactions **require financing** to be provided either by the buyer or by the seller. If a buyer is to pay cash on delivery then they must cover the period between obtaining goods and selling them on to recoup the expenditure. If a seller allows a buyer some time to pay then the seller must finance that period.

Trade finance products - 1

We generally distinguish <u>short-term</u> from <u>medium to long-term</u> trade finance products.

We define short-term trade finance products as all instruments facilitating trade transactions with:

- maturity of normally less than a year

- clear link to a specific trade transaction.

Short-term trade finance instruments are traditionally considered <u>highly liquid</u> products given the relationship to a specific transaction and clearly identified trade good.

Trade finance products - 2

They are also collateralised by:
 a) a set of documents
b) the underlying goods themselves.

Furthermore, at least one bank, but in many cases two or more banks, are involved,

transforming what was a corporate counterparty risk for an exporter into (at least to some extent) a financial institution (FI) counterparty risk. of the instruments and their product and transaction profile.

Trade finance market

There is no comprehensive source for measuring the <u>size</u> and <u>composition</u> of the trade finance market. Aspects of bank-intermediated trade finance are captured by statistics in many CGFS (Committee on the Global Financial System) member countries, but coverage differs significantly across countries, and in many cases is quite limited. Combining these data with information from other sources, such as trade associations and SWIFT, can support a general characterisation of the size, structure and trends of the global market, but the approach requires significant interpolation and inference.

Visibility into trends in pricing is very limited.

Trade finance market

Trade finance directly supports about <u>one-third of global trade</u>,

with letters of credit (L/Cs) covering about <u>one-sixth of total tra</u>de.

However, the proportion varies widely at the country level:

bank-intermediated products are primarily used to finance trade <u>involving emerging market economies (EMEs)</u>, particularly in Asia.

Global banks appear to provide about <u>one-quarter to a third</u> of global trade finance, and almost <u>half of their exposure</u> is to firms in emerging Asia.

Trade finance seems to be even more <u>dollar denominated</u> than global trade, with 80% of L/Cs, and a high proportion of the activities of global and local banks denominated in dollars.

The ability of global and local banks to provide trade finance can be disrupted if banks' dollar funding lines are curtailed, as appears to have been the case in some instances in 2008/09, and again in 2011/12.

Trade finance assets by selected bank

	Total assets (US$ bn)	Trade finance assets (US$ bn)	Trade finance as % of total assets	ICC Trade Register 2013	Notes
HSBC (United Kingdom)	2,556	166	6.5	Yes	Loans for international trade and services; documentary credit (2011)
Standard Chartered (United Kingdom)	599	110	18.4	Yes	Trade assets and contingents (2011)
Bank of China (China)	1,878	107	5.7	Yes	Domestic and foreign currency trade finance balance (2011)[1]
Industrial and Commercial Bank of China (China)	2,456	86	3.5		Outstanding on-balance sheet trade financing (2010)[1]
Deutsche Bank (Germany)	2,800	74	2.6	Yes	International trade finance (2012)
JPMorgan Chase (United States)	2,266	35	1.5	Yes	Trade finance loans (2011)
UniCredit (Italy)	1,199	18	1.5	Yes	Advances to customers for import/export (2011)
Banco do Brasil S.A. (Brazil)	523	16	3.1		Advances before and after exports and imports financing (2012)
Intesa Sanpaolo (Italy)	827	8	0.9		Assets in global banking & transaction business (2011)
Average			4.3		

[1] Trade finance of the two Chinese banks includes both credit related to international trade and domestic trade.

Sources: Banks' annual reports and other investor information.

Short term trade finance activity

Type of product	Share of activity (%)[1]	Average maturity (days)
Letters of credit and guarantees	52	90
Import L/Cs	26	80
Export confirmed L/Cs	7	70
Performance guarantees and standby L/Cs	19	110
Loans	48	105
Loans for import	19	110
Loans for export: bank risk	13	140
Loans for export: corporate risk	16	70

[1] Weighted by the dollar value of transactions. Averages for 2008 to 2011.

Source: ICC (2013a)

Trade finance products maturity

In the ICC trade register, the <u>average maturity of funded loans</u> was about <u>3.5 months</u>, while L/Cs and guarantees had slightly shorter maturities. There are some indications that maturities are somewhat <u>longer in emerging markets</u> as trade finance loans are sometimes used as a substitute for working capital loans. This is, for example, the case in Brazil, where the trade finance product with the highest market share (the ACC) partly fulfils this role and has an average maturity of around six months. Similar maturities are also observed in India

Trade finance impact on financial stability

The developments in recent years suggest that global and local trade finance markets are likely to be resilient unless there are severe, adverse shocks that affect the creditworthiness and access to foreign currency funding of the majority of banks active in these markets.

However, in the face of severe global shocks such as in 2008–09, or severe country-specific shocks, as occurred in some EMEs in the 1990s, it seems that trade finance can act as an amplifier of financial shocks with potential repercussions for the real economy, providing the rationale for policy responses aimed at limiting any externalities for global trade from individual banks' withdrawal from trade finance markets.

Yet even in crisis conditions it seems that trade finance claims have been relatively safe and liquid assets, themselves posing only limited risks to banks and overall financial stability.

Trade finance impact on financial stability

Concerns about a perceived shortage of trade finance (starting 2008) elicited joint efforts by the public sector and industry to improve the available data on trade finance markets, and led the G20 leaders to <u>call for joint public sector efforts to boost the availability of trade finance</u>. As part of this effort, the World Bank Group and the regional development banks substantially expanded their support for the sector, largely through <u>guarantee programmes</u>. The Brazilian and Korean central banks also introduced innovative schemes targeting trade finance markets directly

Financial Statement

ASSETS	LIABILITIES
S-T Assets	S-T Liabilities
L-T Assets	L-T Liabilities & Equity
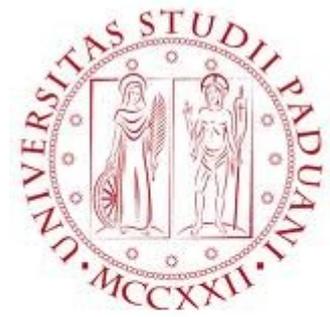
Financial Statement

ASSETS   LIABILITIES

SHORT TERM

S-T Liabilities

S-T Assets

NET WORKING CAPITAL

NET CAPITAL EMPLOYED

LONG TERM

L-T Assets

L-T Liabilities & Equity
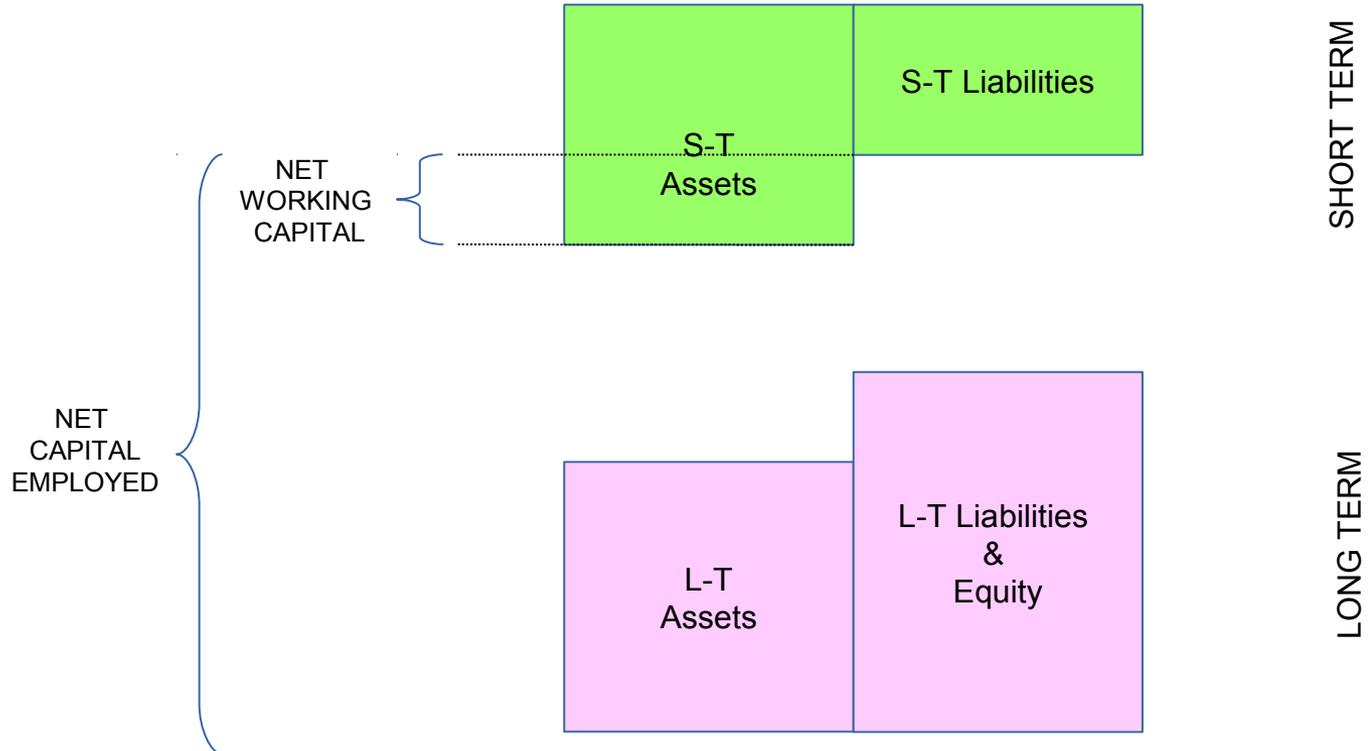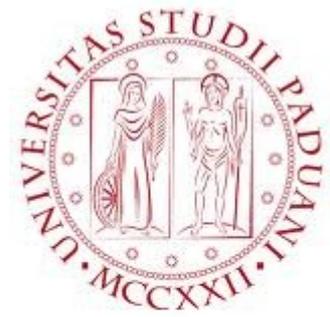
Working Capital Management
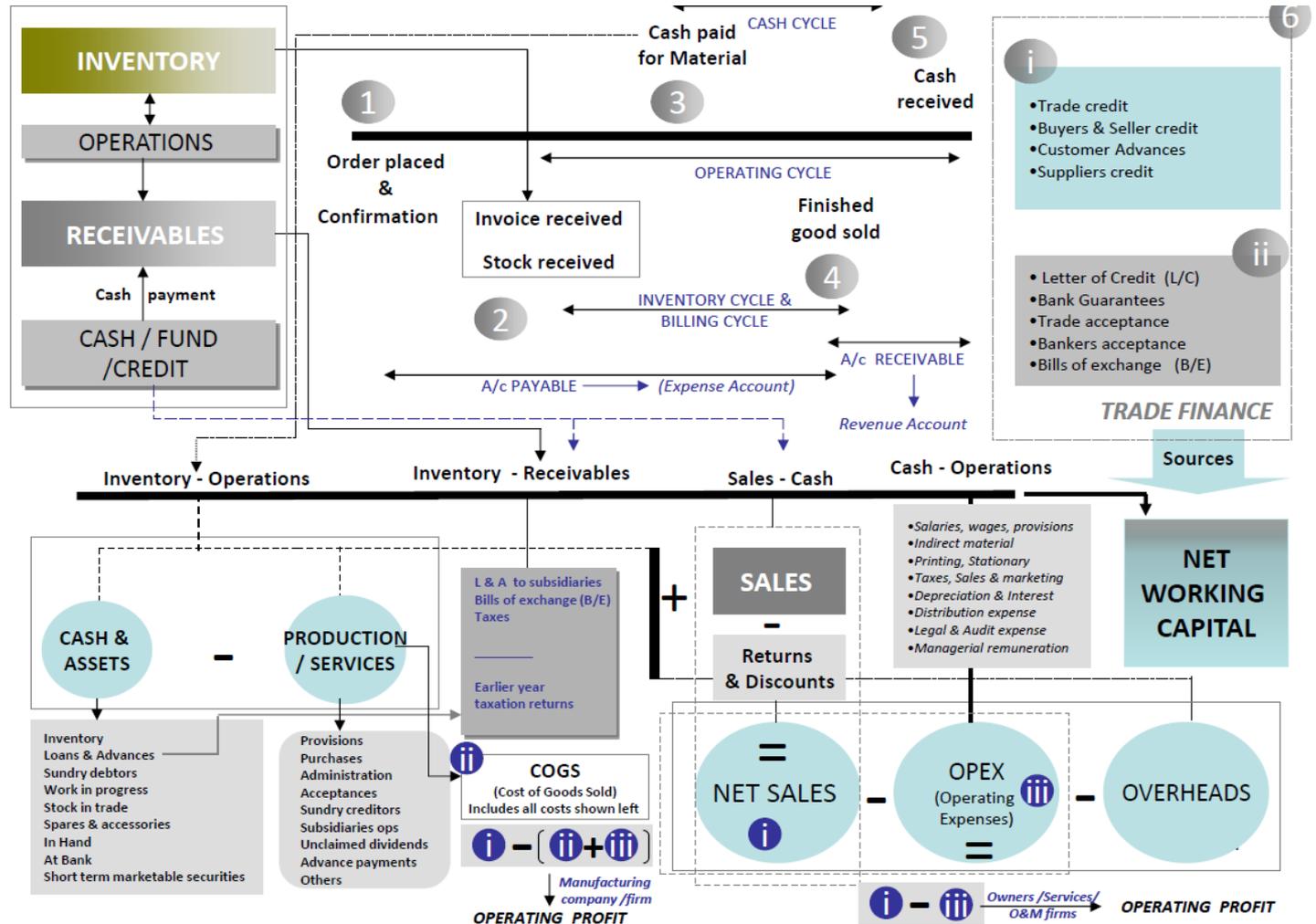
Risks linked to Working Capital

Buyer's Insolvency/Credit Risk.

Buyer's Acceptance Risk .

Seller's Performance Risk.

Documentation Risk.

Economic Risk.

Legal Risk

Foreign Exchange Risk.
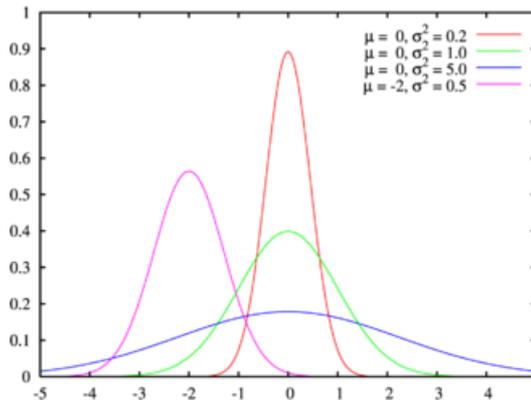
Interest Rate Risk.

Political/Sovereign Risk.

Risk - definition

Risk is the "effect of uncertainty on objectives"

...and an effect is a positive or negative deviation from what is expected.

For this reason the measures of risk are variance and standard deviation

Risks and ERM

Every enterpire is a sum of risks to mange so it's necessary to implement a model of Enterprise Risk Management (better if formalized)

The subject is so important that since 2004 ISO published ISO 31000 – Priciples and guidelines to manage Enterprise risks (updated in 2009)

ISO 31000 (rel.2009)
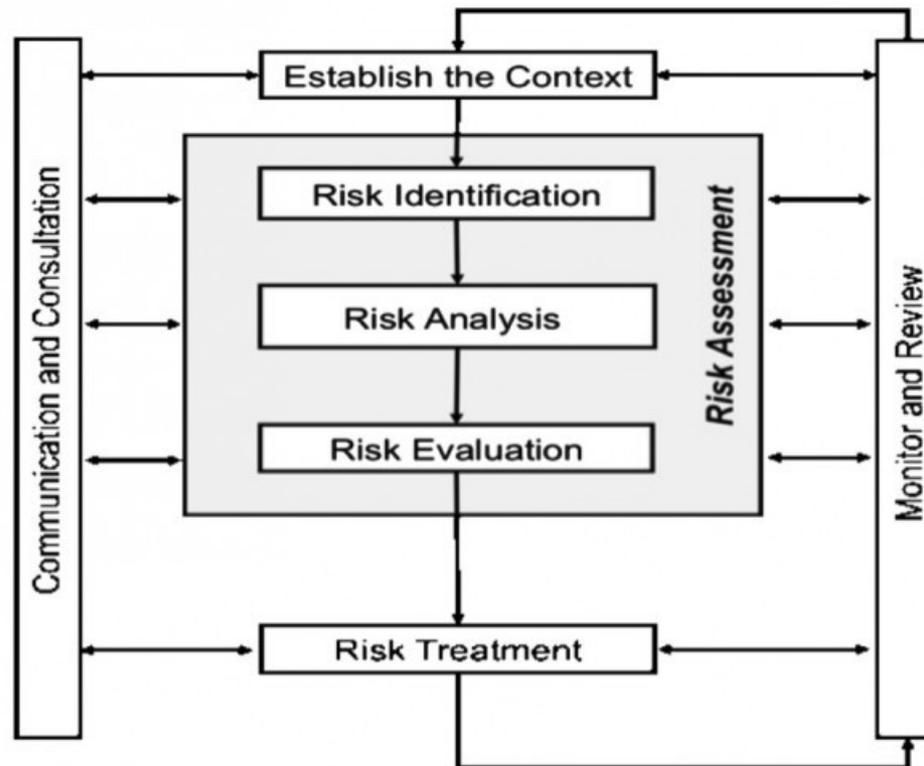
Risk treatment in operations and woking capital

TRADE FINANCE

PRODUCTS

Import L/Cs

Export confirmed

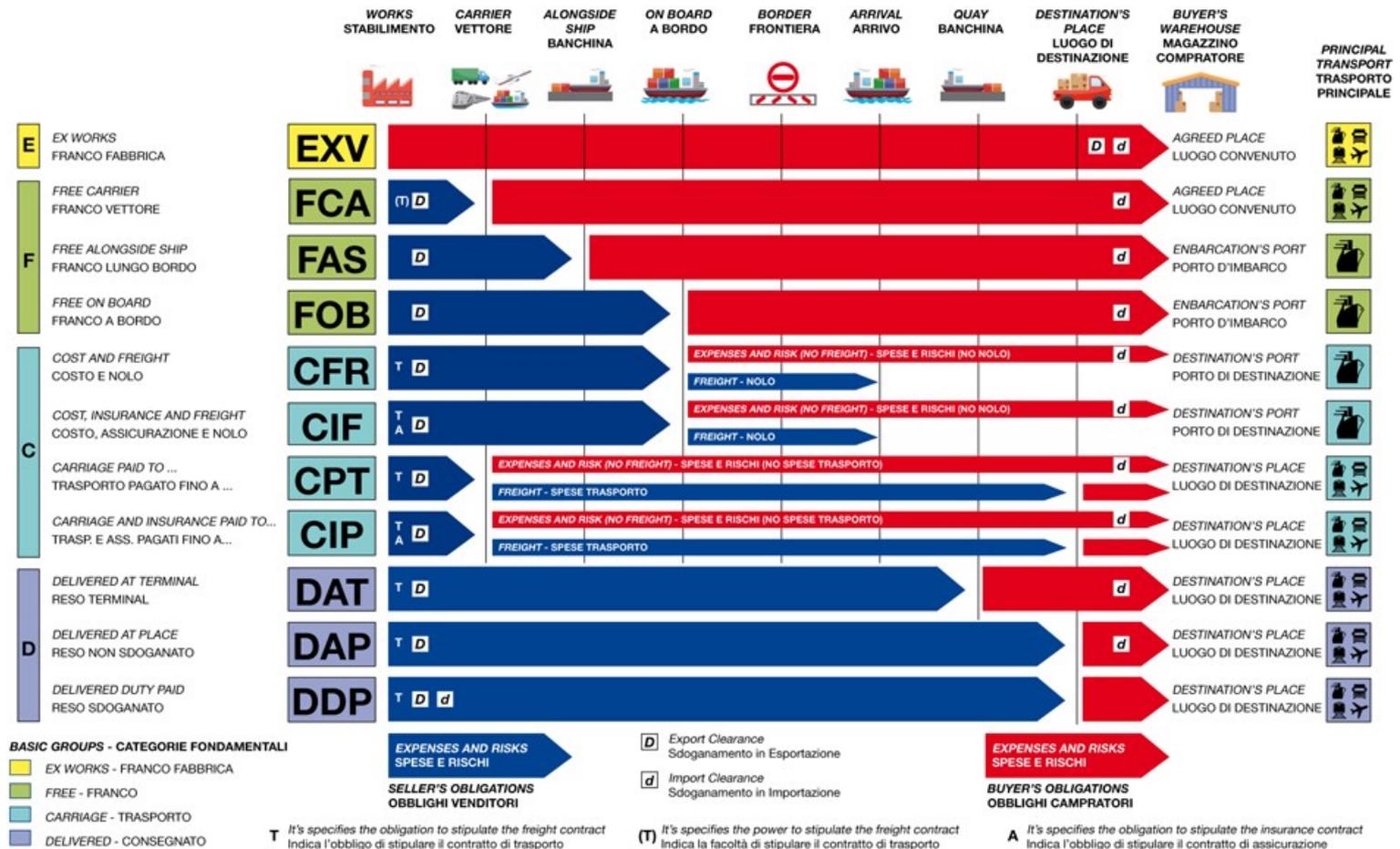**Performance guarantees and standby L/Cs**

Loans for import

Loans for export   (bank risk)

Loans for export (corporate risk)

Risk treatment in operations and woking capital

Capital Asset Pricing Model

The capital asset pricing model (CAPM) is a model that describes the <u>relationship between risk and expected return</u> and that is used in the pricing of risky securities (enterprises).

$$r_e = r_f + \beta \times (r_m - r_f)$$

RISK FREE

RISK PREMIUM

Risk premium: compensation the investor needs for taking on additional risk.

Calculated by taking a risk measure (beta) that compares the returns of the enterprise to the market over a period of time and to the market premium $(r_m - r_f)$.

Business (Enterprise) Valuation

There are different methods to evaluate a business/enterprise

One of the most commonly used is DCF (Discounted Cash Flow)

With this method, a business is worth the present value of its future cash flows. DCF attempts to project future cash flows and then multiplies them by a factor (the discount factor) to reduce them to today's worth.

$$CF_1/(1+ r)^1 + CF_2/(1+ r)^2 + CF_3/(1+ r)^3 + \ldots + Cf_n/(1+ r)^n$$
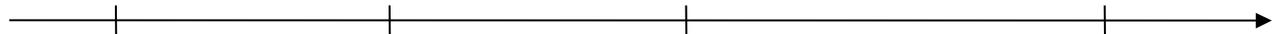
Interest rates

The interest rate we use to discount cash flows is so calculated:

or capital asset pricing model (CAPM) is a model that describes the <u>relationship between risk and expected return</u> and that is used in the pricing of risky securities (enterprises).

% EQUITY   % DEBT

$$r = E/(D+E) \times r_e + D/(D+E) \times r_d$$

EQUITY
COST

DEBT
COST

Results

The lower is the risk in my company the lower is r_e

To lower the risk I have two ways:

  Incoterms

  Financial Trade Finance instruments

Trade finance instruments are cheaper then other financial instruments so i can reduce r_d

In this way I can reduce r

The lower is r, the higher is the Enterprise Value

MANAGING THE RISKS THROUGH TRADE FINANCE INSTRUMENTS WE CAN CREATE HIGHER VALUE