Chair of Logistics Management

University of St.Gallen

PostFinance

# Swiss e-commerce conference 2017

## How to finance e-commerce growth through working capital management?


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# Agenda

1. E-commerce and working capital management

2. Application example: Off-balance-logistics

# Definition of working capital from a balance sheet point of view

**Assets** — **Balance Sheet[1]** — **Liabilities**

| Assets | Liabilities |
|---|---|
| A I Liquid Assets | A I Accounts payable |
| A II Accounts receivable | A II Other short-term liabilities |
| A III Other (short-term) receivables | A III Accruals and deferrals |
| A IV Inventory | A IV Long-term liabilities |
| A V Accruals and deferrals | A V Accrued liabilities |
| B I Financial as | B I |

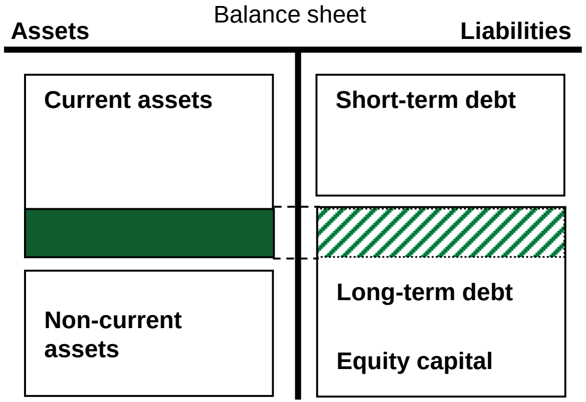
- A — Current assets
- B — Non-current assets
- A — Debt financing
- B — Equity capital
- Short-term liabilities

| | |
|---|---|
| Liquid Assets | Accounts payable |
| Accounts receivable | Other short-term liabilities |
| Other short-term receivables (Securities) | Accruals and deferrals ← Is often neglected |
| Inventories | |
| Accruals and deferrals | **Working Capital** |

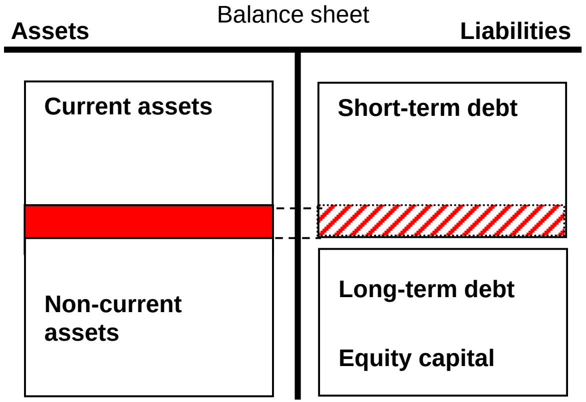
**Working Capital = Current assets – short-term, non-interest-bearing debt**

Working capital is the part of the current assets, that has to be financed by interest-bearing capital.

# Implications of working capital from a balance sheet perspective




**Positive net working capital:**
Part of the current assets are financed with long-term capital.



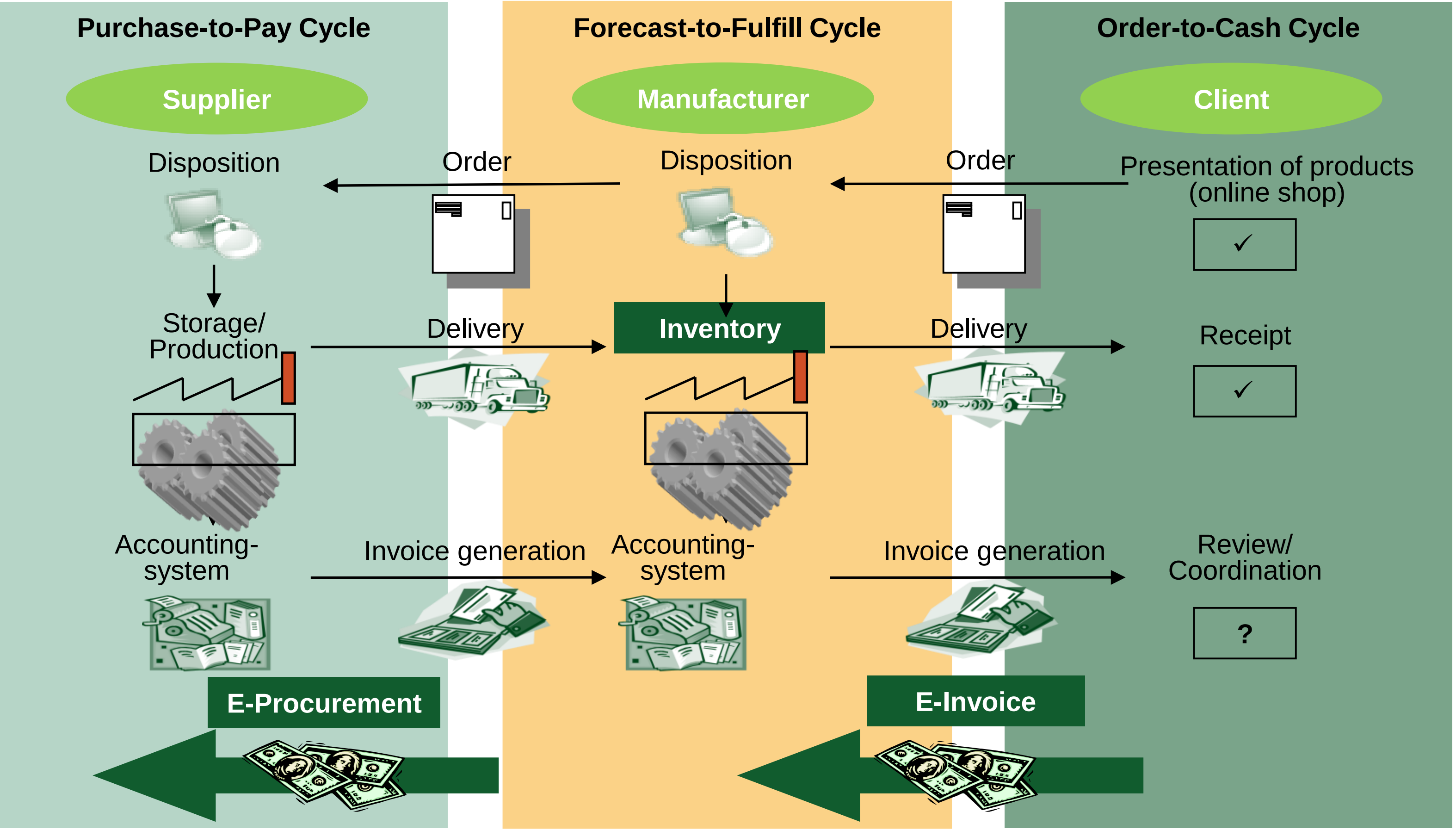

**Negative net working capital:**
Inventories and accounts receivable are not enough to cover the accounts payable. The company may experience problems of liquidity.

The higher the working capital, the more secure the company's liquidity.

*But:*
Excessive working capital creates additional, avoidable storage and commitment costs.

The management of the net working capital fluctuates between a too high and a too low value. Furthermore, specific success impacts have to be considered.

# Working capital management and its e-commerce potential

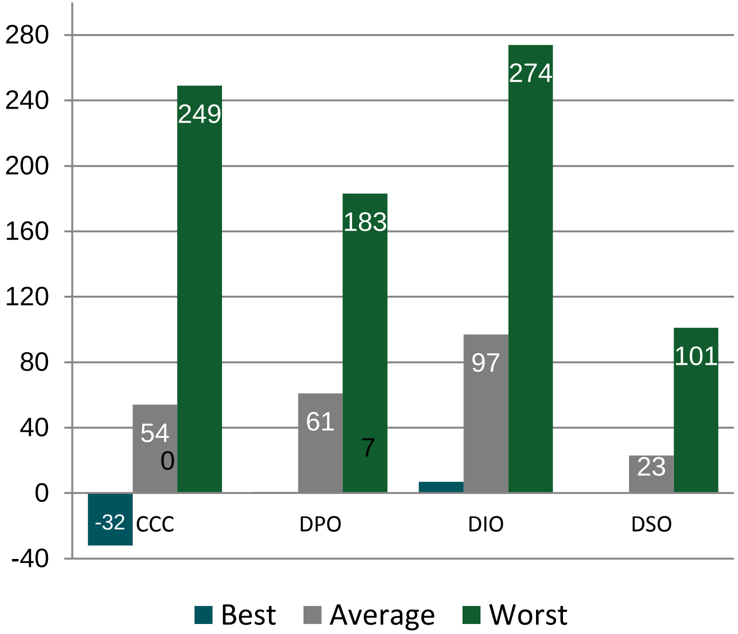


# The cash conversion cycle

| | Purchase-to-Pay Cycle | | Forecast-to-Fulfill Cycle | | Order-to-Cash Cycle |
|---|---|---|---|---|---|
| **C2C =** - | DPO | + | DIH | + | DSO |
| **Cash-to-cash cycle =** - | $\frac{\text{Liabilities}}{\text{Production costs/365}}$ | + | $\frac{\text{Inventories}}{\text{Production costs/365}}$ | + | $\frac{\text{Accounts receivable}}{\text{Turnover/365}}$ |
| | *«When do we pay our suppliers?»* | | *«How long do we store the goods?» (Often also: «How often does a warehouse turn every year?»)* | | *«When do our customers pay their bills?»* |
| **Typical values (CH)=** | **32 Days** | | **30-50 Days (7-12x)** | | **32 Days** |
| **Typical drivers** | ▪ Payment conditions<br>▪ Discount policy<br>▪ Supplier dependency | | ▪ Range of products<br>▪ Level of standardization<br>▪ Supplier management | | ▪ Payment conditions<br>▪ Collection process<br>▪ Means of payment |

# Working capital management performance across the retail sector

## Average Cash conversion cycle by selected retail sub-sectors




## Average Cash conversion cycle by selected retail sub-sectors


Retail is typically characterised by low DSO-values. However, inventory performance (DIO) is the most widespread (almost 180 days) and therefore the most likely key performance differentiator for retail companies.

# Agenda

## E-commerce and Working Capital Management

1. **Application example: Off-balance-logistics**

# An agile inventory management system is the backbone of each e-commerce business

## Challenges

**Capital tied up in warehouses**

High percentage of procurement in turnover

Long storage duration (DIH > 45 d)

**Cost pressure**

Cost of storage (relative to stock value > 20%)

Cost of transport (Share of turnover > 1.2%)

Cost of capital (WACC > 6%)

**Logistics requirements**

Market-driven: faster delivery, E-Commerce, $CO_2$-neutral

Internal: limited storage capacity, fixed-step cost of storage

## OFF-BALANCE LOGISTICS


**End-to-end logistics removed from your balance sheet**

You sell your stocks to Swiss Post, we take them on physically and on our balance sheet

You sell to your customers – we deliver the goods

Swiss Post also assumes all related payments on your behalf.

## Benefits

**Enhanced liquidity**

Reduction of capital tied up in warehouse inventories

**Cost reduction**

Reduced cost of storage / logistics through outsourcing to specialists

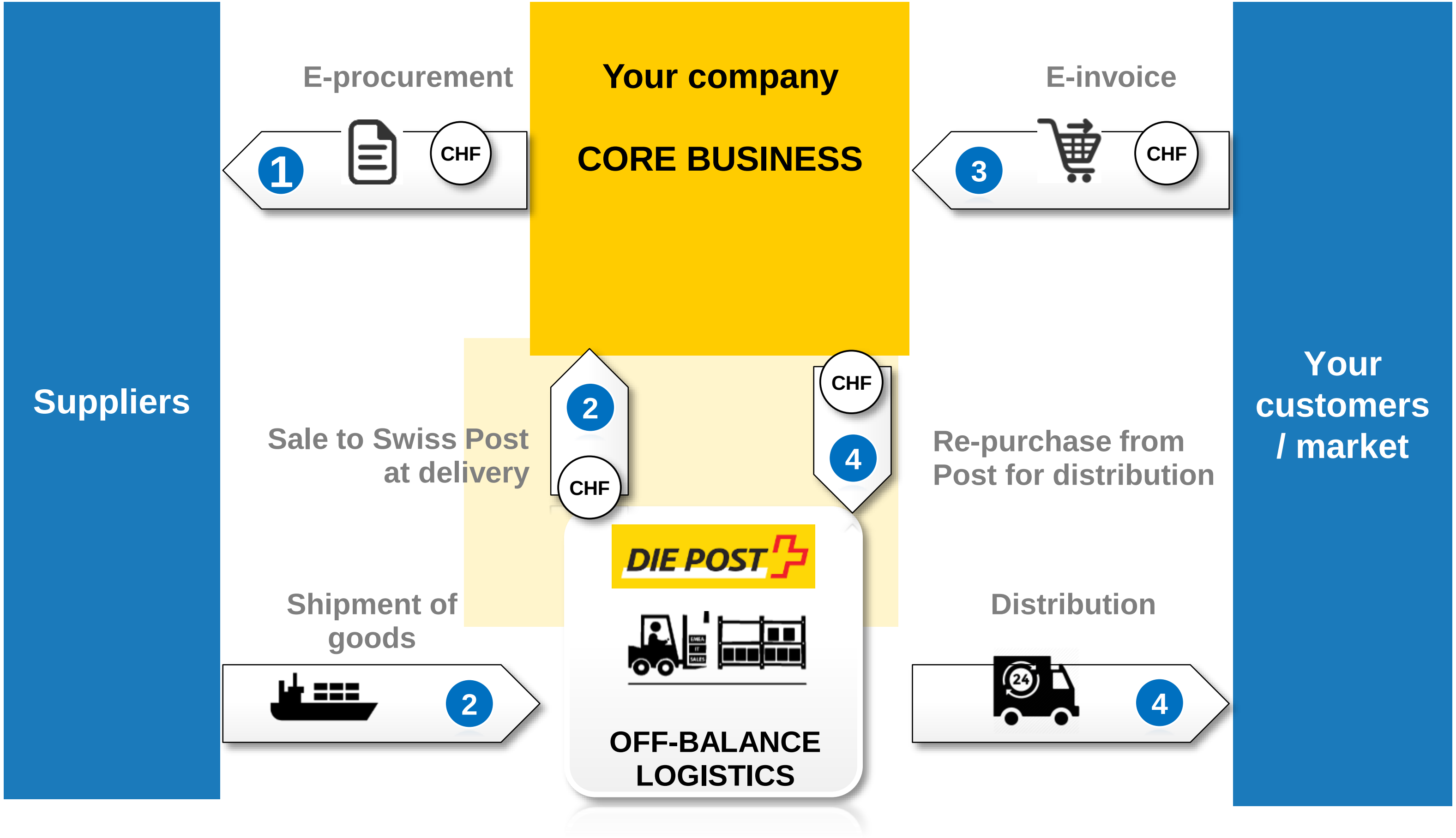
Reduced cost of capital

Rigorous use of cash discounts

**Requirements fulfilled**

Without additional investment in internal logistics

# PostFinance & Swiss Post offer logistics and E-Commerce services in one stop



# Comprehensive effects on liquidity and costs

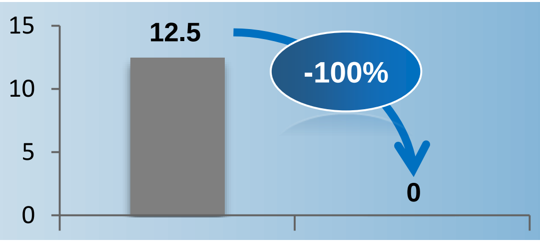
## EXAMPLE: PROCUREMENT VALUE CHF 100 Mio. p.a.

## BENEFITS OFF-BALANCE LOGISTICS

**Tied-up capital:**

DIH: 45 d

Value of stocks MCHF 12.5
(MCHF 100 / 360 d * 45 d)




**Additional liquidity:**

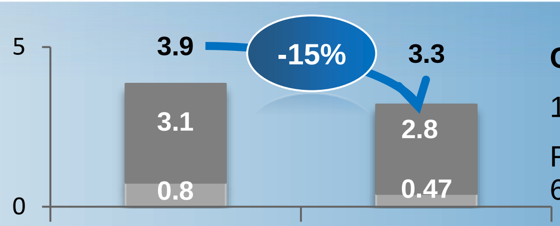
DIH: 0 d

Stocks removed from balance sheet and MCHF 12.5 additional liquidity

**Cost:**

Cost of storage MCHF 3.1
(MCHF 12.5 * 25% storage cost)

Cost of financing MCHF 0.8
(MCHF 12.5 stocks * 6% WACC*)




**Cost reduction:**

10% reduction on logistics

Reduced cost of financing 6% to 3.75%

**New requirements:**

E-Commerce

**E-Commerce from Swiss Post storage**

**E-Commerce possible without additional investment**

**Off-Balance Logistics advantageous if:**

Stock value > MCHF 3 | WACC > 6% | Equity ratio < 20% | Liquidity needed to finance growth

# Our broad range of E-Commerce services and solutions create value from marketing to ordering through to logistics

**PostFinance Digital & mobile payments combined ….** **…with mail and logistics services. SWISS POST**

**Future modular offering PostFinance / Swiss Post**

**Information Management / Liquidity-Planning**

**Liquidity Optimization**

| | | | | |
|---|---|---|---|---|
| E-Procurement Services | Payments | **Off-Balance Logistics** | Sales Services | Cash Collection |
| Reverse Factoring | Online transaction processing | Billing Services | E-Invoice, Factoring | |

**Risk Management**

| | | |
|---|---|---|
| Guarantees, Letter of credit | Guarantee of fulfilment | Guarantees, Letter of credit |

Hedging (interest, currency)

# Contact

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