WORKING CAPITAL MANAGEMENT

2017

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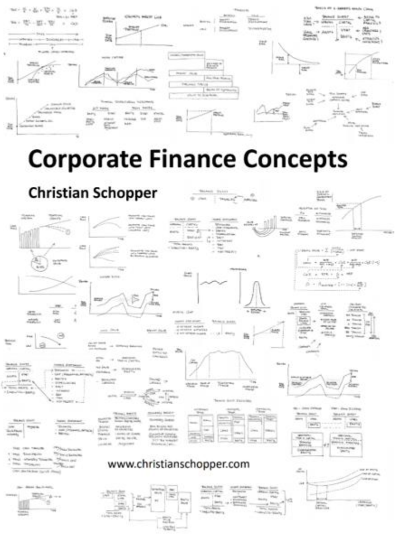

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Introduction

- Working capital is the only investment a company makes on which it **doesn't expect a defined return**
  - The investment is needed in order to 'oil the wheels' of business rather than to produce something itself

- For many businesses, the components of working capital represent the largest items on the balance sheet
  - Despite this, many firms tend not to see working capital as a strategic consideration or top management attention

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Sustainable Growth

- The **level of working capital** in a business has a **direct effect on the amount of growth** the company can sustain organically from its own internal resources
  - Growth in sales requires that the business takes on **additional inventories** and has **more debtors**
  - Even if no further capital expenditure is required to achieve the growth, the underlying capital invested in a business will still need to increase

- The amount of **growth** that a business can sustain **out of its own resources**, before issuing new capital, is constrained both by its anticipated rate of profitability and by the underlying asset requirement

$$\boxed{g = \text{return on investment} \times \text{retention ratio}}$$

- Thus, if a company is to grow without borrowing or issuing further capital it needs either to increase its profitability or to make better use of its assets

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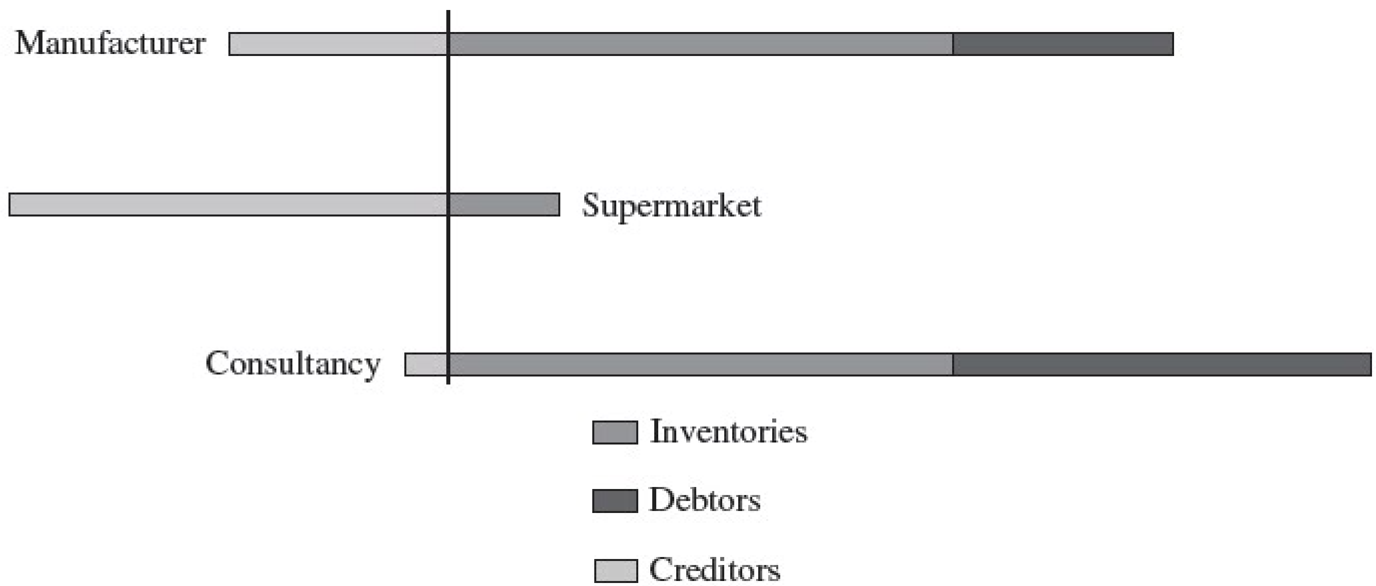
Working Capital in Different Industries



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Risk and Return in Working Capital

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	Risk avoided by holding working capital	Cost of the working capital investment
Inventories (stocks)	• Stock outs delaying the manufacturing process. • Loss of customers who cannot wait for delivery.	• Cash tied up in stock. • Costs of holding stock.
Debtors	• Loss of customers due to more attractive opportunities elsewhere.	• Credit control costs and bad debts. • Cash tied up in debtors.
Creditors	• Too heavy reliance on bank finance.	• Poor name in the industry. • Charged higher prices.

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The Order-to-Receipt Cycle

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Receive order

↓

Pricing

↓

Order fulfilment

↓

Invoicing

↓

Collection procedures

↓

Cash processing

↓

Banking

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Cash and Overdrafts

- The advantage of **holding cash balances** (as part of working capital investment) is that the business can (always) meet demands …
  - The disadvantage of holding cash is a very poor return

- … **but**: Companies need to be focused in their use of funds, and having **excessive cash** deposits is a **poor** strategic decision

- Still: It is always useful to have **negotiated a borrowing facility** even if it is not immediately required, as this **gives financial flexibility**

- Often, **overdraft facilities** are **repayable** to the bank **on demand**
  - No breach of covenants is needed for the bank to change its mind about the funding, and require repayment
  - Thus overdraft finance is not nearly as low risk for companies as would be a negotiated loan

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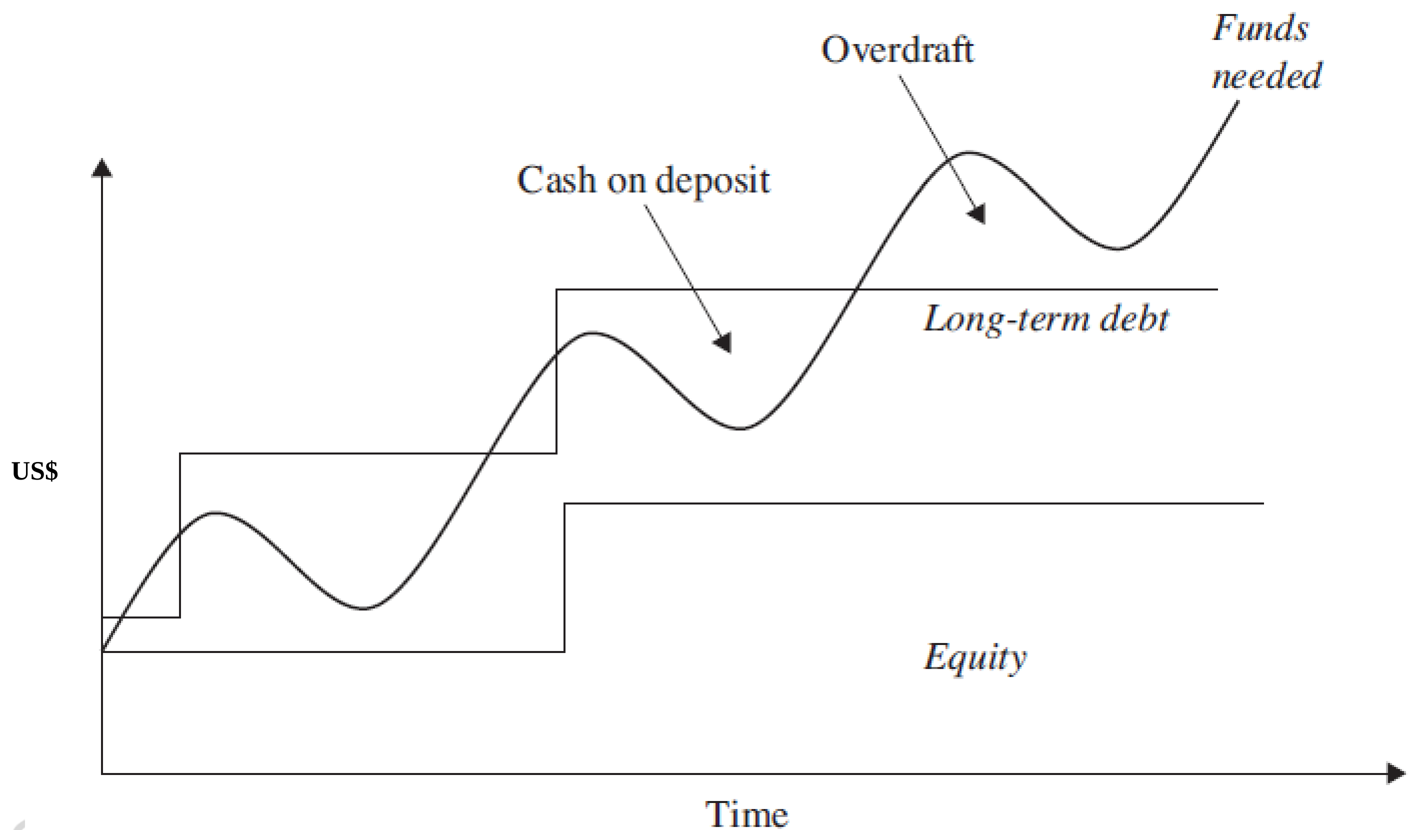
Funding Requirements over Time



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Working Capital Requirements

Working Capital Cycle

- Timing differences between **converting current assets to cash** and making cash payments on obligations

Cash-to-Cash Cycle

- Difference in days, required to **convert current assets and current liabilities into cash**
  - **Working capital needs**: Difference in the cash-to-cash cycle times the average daily cost of goods sold

- Net Working Capital
  = Current Assets - Current Liabilities

- Typically, net working capital is positive
  - … but exceptions exist

- Assets **must be financed** by liabilities or equity
  - Typically, trade credit current liabilities will finance a part of a companies current assets without the need for short term bank credit

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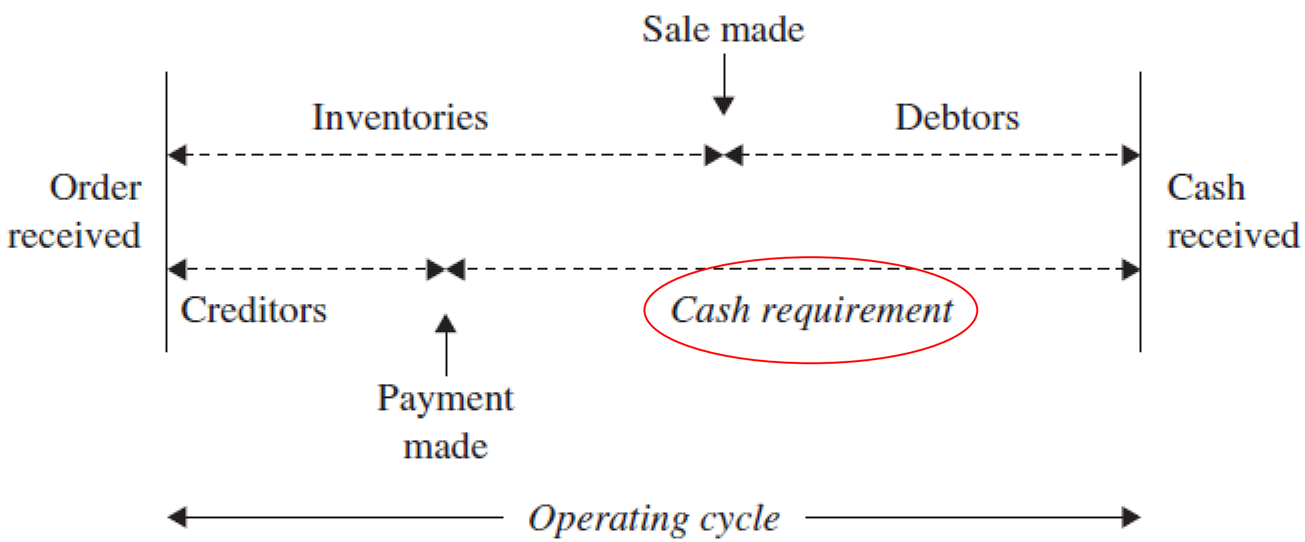
Working Capital Cycle



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Example: Working Capital Cycle and Funding Requirements

	2002	2003		
Current Assets				
Cash Turnover	8,7	5,5	Rev´s	364
Days Receivables	40,1	42,8	Rev´s	
Inventory Turnover	82,6	78,0	COGS	
Cash-to-Cash Asset Cycle	**131,4**	**126,4**		
Current Liabilities				
Days Payables	45,9	45,6	Purchases	
Days Accruals	21,2	21,6	Opex	
Liability Cycle	**67,1**	**67,2**		
Cash Conversion Cycle (days)	**64,3**	**59,2**		
Liquidity Requirements	**92.454**	**115.420**	COGS	
	125.588	**154.367**	COGS+Opex	

	2002	2003
Net sales	**2.013**	**2.694**
Cost of goods sold		
Beginning inventory	239	326
Purchases	1.524	2.042
	1.763	2.368
Ending inventory	326	418
Total cost of goods sold	1.437	1.950
Gross profit	576	744
Operating expense	515	658
EBIT	**61**	**86**
Interest expense	20	33
Net income before taxes	41	53
Provision for income taxes	7	9
Net income	**34**	**44**
Cash	48	41
Accounts receivable, net	222	317
Inventory	326	418
Current assets	596	776
Property, net	140	157
Total assets	**736**	**933**
Notes payable, bank	146	233
Accounts payable	192	256
Accrued expenses	30	39
Long-term debt, current portion	7	7
Current liabilities	375	535
Long-term debt	57	50
Total liabilities	432	585
Net worth	304	348
Total liabilities and net worth	**736**	**933**

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Working Capital Turnover as per Industries

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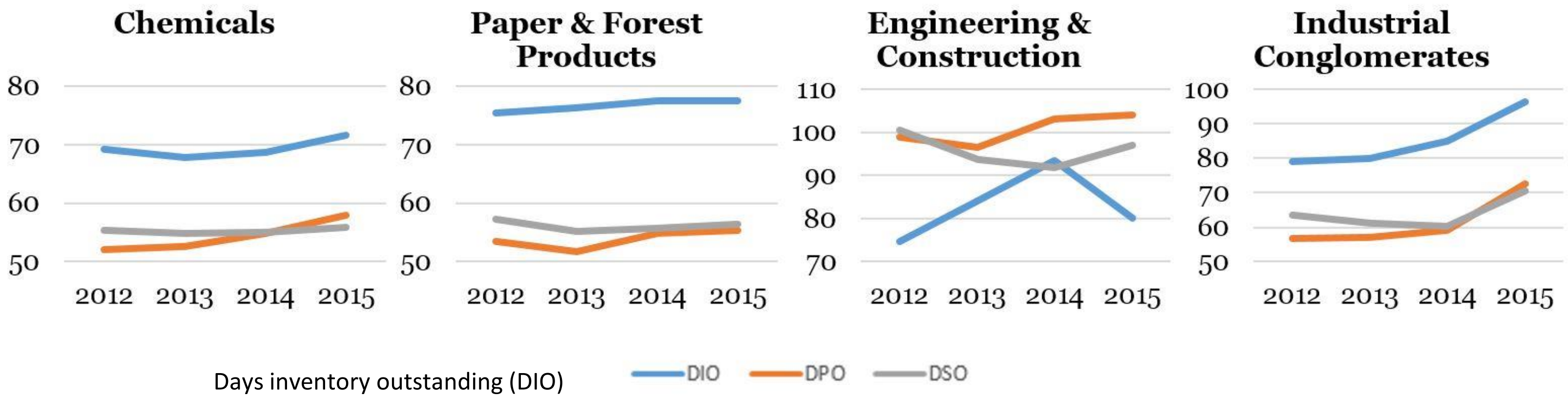

Days inventory outstanding (DIO)
Days payable outstanding (DPO)
Days sales outstanding (DSO)

http://pwc.blogs.com/finance_and_treasury/2016/11/improving-working-capital-management-a-11-trillion-opportunity.html

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Seasonal vs Permanent Working Capital Needs

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Base Amount of Working Capital

=	**Minimum** Level of Current Assets
less	**Minimum** Level of Current Liabilities
less	Short Term Bank Credit and Current Maturities of Long Term Debt

- The difference in minimum levels represents the **amount of permanent financing**

- Therefore: **Base Amount of Working Capital should be financed with Long Term Debt or Equity**

Seasonal Working Capital needs

=	**Total** Current Assets
less	**Adjusted Total** Current Liabilities

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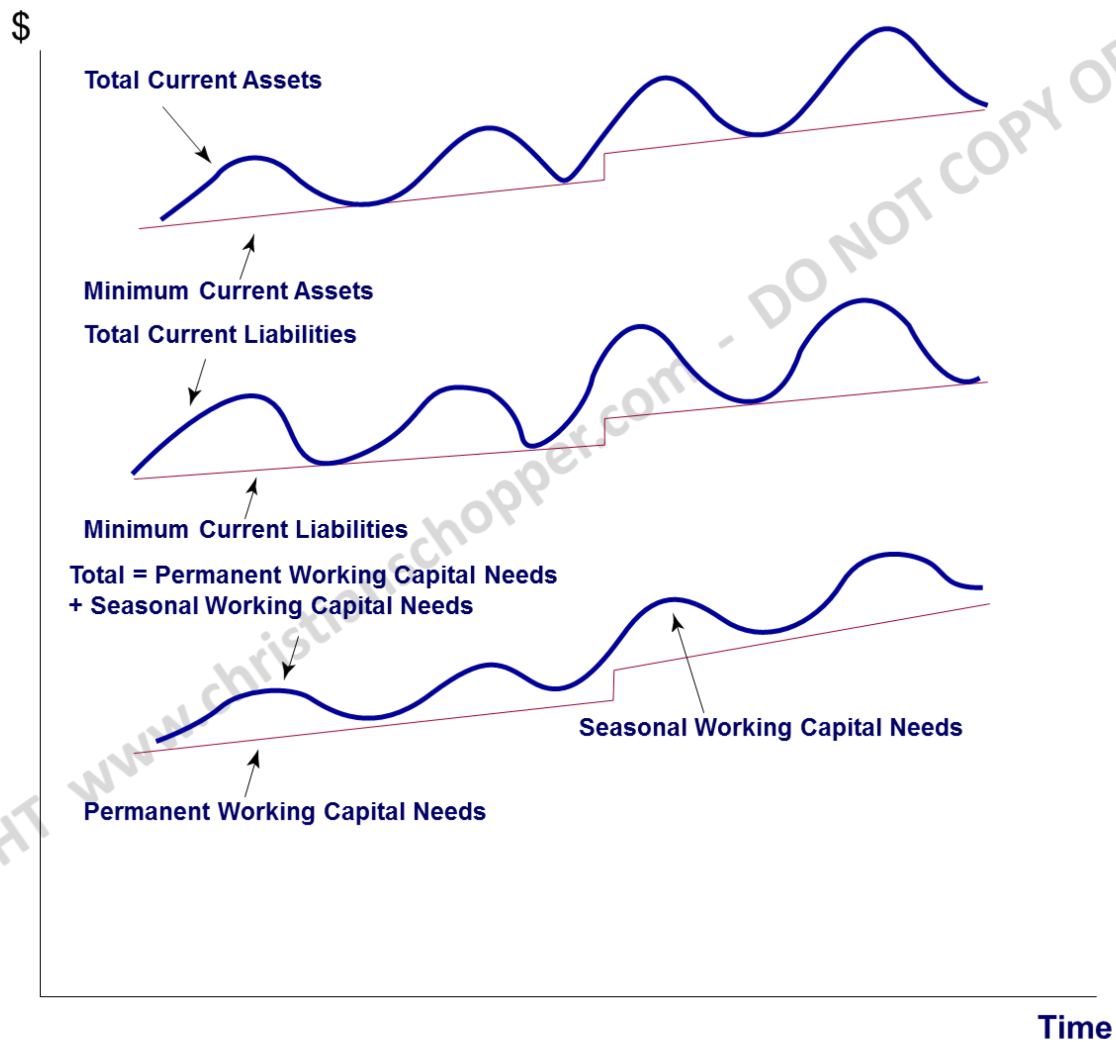
Seasonal vs Permanent Working Capital Needs (cont´d)



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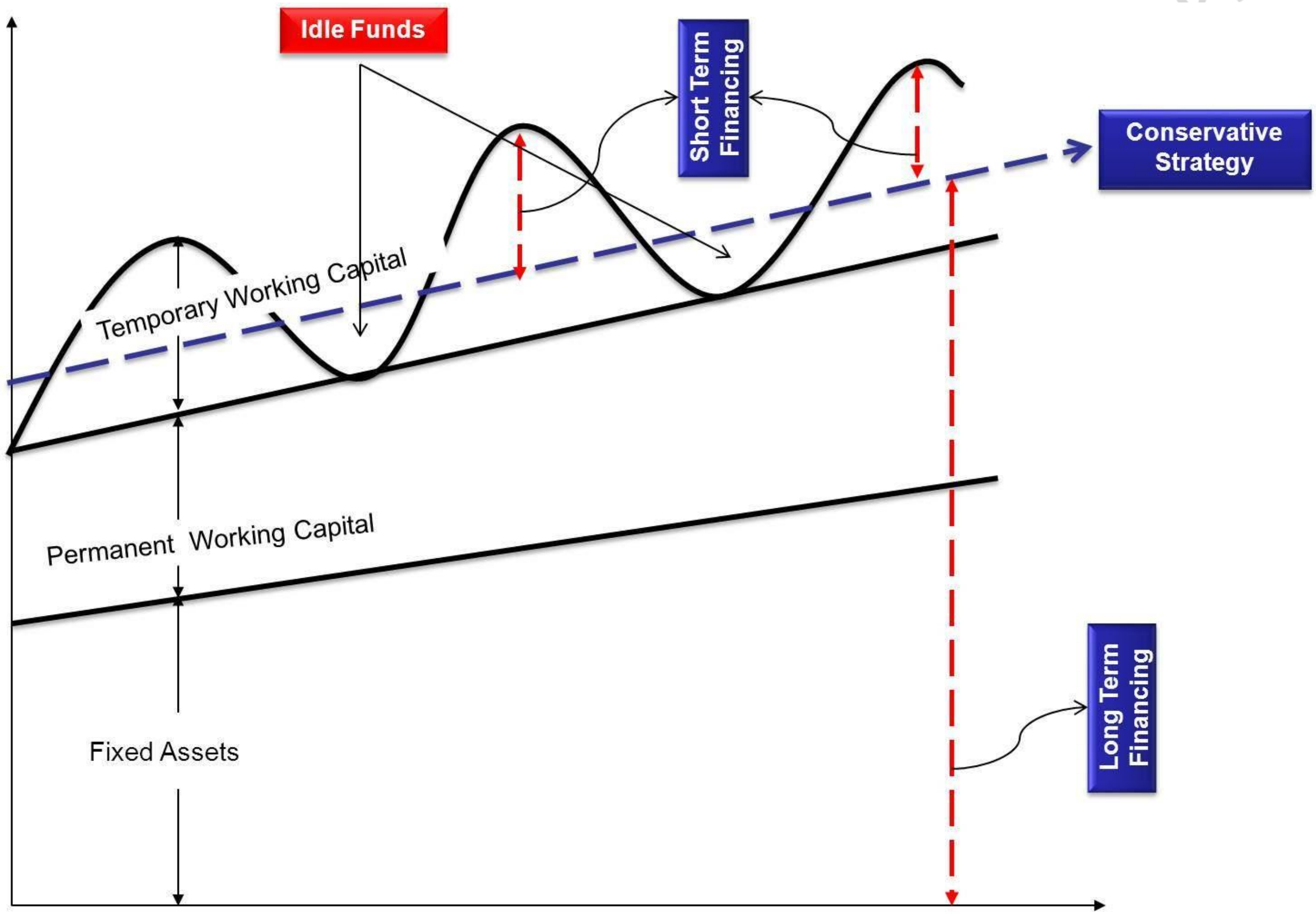

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Excursion: Factoring

- Company effectively **sells** its debtors to the factor
  - Often to a bank subsidiary that specializes in this type of transaction

- When the company issues an invoice, it sends one copy to the customer and, at the same time, a copy to the factoring company

- The factoring company will then **advance** to the company **a proportion** (generally about 70–80%) **of the invoice value**
  - Thus the business has access to funds immediately

- Debtor instructed to pay the factor rather than its supplier

- Once the factor has received the funds, the balance of the invoice amount is credited to the business's bank account
  - Commission and interest are of course deducted

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Excursion: Factoring - Advantages

- **Funds are available immediately**, rather than waiting until the customer pays

- Factoring companies will **advance a higher percentage** of the debtor book than would banks which secured overdraft finance on debtors
  - Because factors seem to understand the risks better, and have more control

- Factoring companies **often collect debtors earlier** than would the trading businesses, as their systems are more efficient

- **Factors can advise on the credit-worthiness of potential customers**
  - Indeed, they may refuse to take on the debts of some customers
  - **For an additional fee**, the **factor could** also take on the risk of **bad debts**

- Company can **choose to factor only part of its debtors**
  - E.g. export sales, in which the company has little experience of debtor management

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Excursion: Factoring - Disadvantages

- Factoring is **more expensive**, with commission on top of higher interest charges

- Inserting the factor into the **customer–supplier relationship may damage** that relationship
  - Particularly if the factor is aggressive in chasing debts

- The **company loses control over its debtors ledger**, which some see as a key management and marketing tool

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Summary

- Working capital comprises the net of stocks (inventories) and trade debtors less trade creditors

- Working capital represents a substantial investment for most companies, and needs to be managed strategically, to be maintained at the lowest level consistent with value creation

- Long-term financial needs, including the core element of working capital, should be funded with long-term finance. Short-term needs should be funded with short-term funding

- Factoring and invoice discounting are types of asset finance which can be used to fund working capital (debtors).

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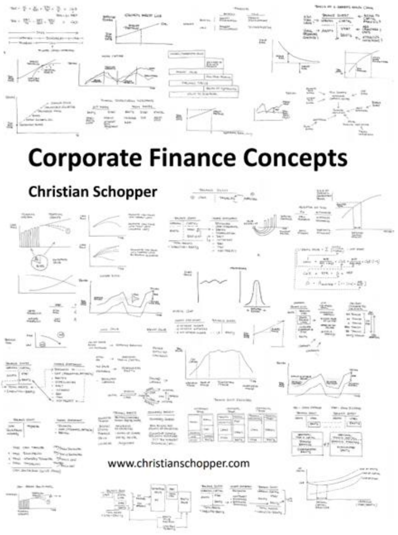

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