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Investor Mental Models

2026

Introduction to mental models

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- Model models allow complex data to be quickly and accurately turned into actionable insights.

- They provide a thought process for filtering the signal from the noise and for separating out what's important from what's not important.

- Presented here are a range of 1-page mental models for deciphering a range of concepts encountered in the world of investing.

What influences share prices?

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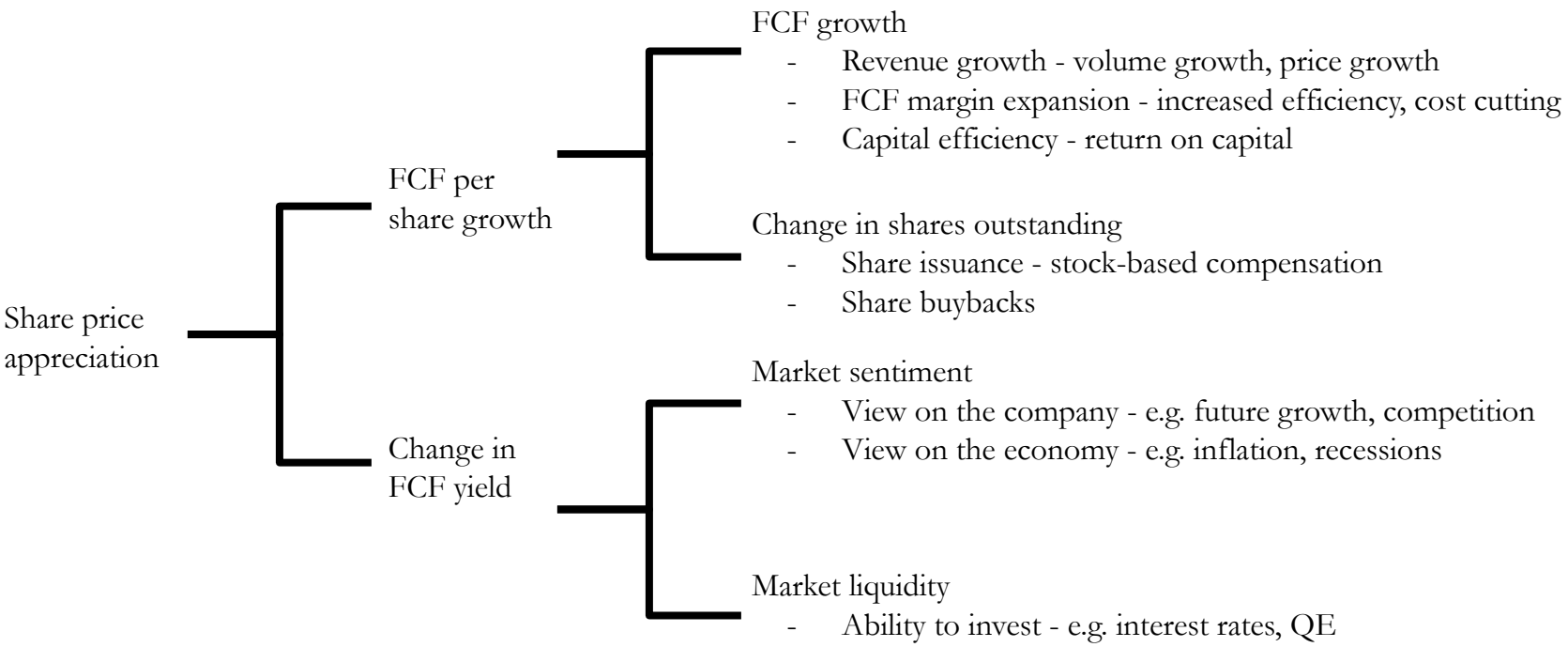

What drives share price growth?

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Operating leverage, cash conversion, share buy- backs and multiple expansion can all work together to boost revenue growth into even higher share price growth.

This example is from the credit score company Fair Isaac. Notice how their growth rates increase as you move from revenue to share price.

Fair Isaac (FICO)	Revenue	Gross Profit	Op. Profit	Net Income	FCF	FCF/Share	Share Price
2013	743	514	165	90	112	3.09	52
2014	789	540	166	95	162	4.66	58
2015	839	568	156	87	122	3.73	82
2016	881	616	170	109	188	5.83	129
2017	935	647	187	133	206	6.38	135
2018	1,000	687	175	126	192	6.15	234
2019	1,160	823	254	192	236	7.8	315
2020	1,295	933	341	236	343	11.46	443
2021	1,317	984	413	392	416	14.23	434
2022	1,377	1,075	542	374	503	19.11	440
CAGR:	7%	9%	14%	17%	18%	22%	27%

Faster net income growth than revenue growth requires **operating leverage**, signalling that the company is becoming increasingly efficient.

Faster FCF growth than net income growth requires good **cash conversion**, suggesting it can efficiently manage working capital.

Faster FCF per share growth than FCF growth requires **share buybacks**.

Faster share price growth than FCF per share growth requires **multiple expansion**, as it was fairly valued by the market.

Four Essential Investing Ratios

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Company A and Company B both make **$1bn** in free cash flow (FCF). Comparing a company's FCF to its invested capital, revenue, historic FCF and market capitalisation reveals four important investing ratios.

	Company A	**Company B**
FCF Return on capital (Quality) *How efficient the company is at investing its capital at high returns*	FCF = $1bn Invested capital = $4bn FCF ROC = $1bn / $4bn = **25%**	FCF = $1bn Invested capital = $20bn FCF ROC = $1bn / $20bn = **5%**
FCF Margin (Quality) *How efficient the company is at adding value to the supply chain*	FCF = $1bn Revenue = $2bn FCF Margin = $1bn / $2bn = **50%**	FCF = $1bn Revenue = $10bn FCF Margin = $1bn / $10bn = **10%**
FCF Growth Rate (Growth) *How efficient the company is at growing its free cash flow over time*	FCF = $1bn FCF 5 years ago = $0.25bn FCF Growth Rate = $1bn / $0.25bn = **4x**	FCF = $1bn FCF 5 years ago = $0.5bn FCF Growth Rate = $1bn / $0.5bn = **2x**
FCF Yield (Valuation) *How attractively the market values the company's free cash flow*	FCF = $1bn Market capitalisation = $20bn FCF Yield = $1bn / $20bn = **5%**	FCF = $1bn Market capitalisation = $50bn FCF Yield = $1bn / $50bn = **2%**

Despite generate the same FCF, Company A is a more efficient capital allocator (ROC), has more negotiating power and pricing power (margins), has a faster growth (growth rate) and is more attractively valued (FCF yield) than Company B.

Understanding pricing power & recurring revenue

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Why do customers keep buying from the same company?

Mission-critical: Product is essential → **No alternatives:** Market served by only a few companies → **Switching cost:** Changing providers would be costly

Why does this lead to recurring revenue?
If the product is essential (rather than discretionary), then not buying the product could significantly harm the buyer's finances, market position, reputation, etc. This leads to repeat sales.

Why is the product essential?
Essential products are typically those that are required by the buyer to generate revenue, cut costs, stay competitive or manage risk.

Why does this lead to recurring revenue?
If there are no alternatives at all (or no alternatives of comparable quality and cost) then buyers are forced to continue buying.

Why are there no alternatives? (see next slide)
Would be competitors either:

- **don't know how** to compete - because it requires knowledge and expertise
- **don't have the capability** to compete - because it requires capital and resource
- **aren't allowed** to compete - because it requires regulatory authorisation or there are IP protections in place.

Why does this lead to recurring revenue?
If buyers don't change who they buy from, then they continue to buy from their existing supplier.

Why is there a switching cost?
Switching costs arise when changing providers would be disruptive, risky or costly. This may be because a company is selling something is entrenched in their customer's operations. Sometimes a company will tailor and bespoke what they sell to their customer's needs, making finding an alternative difficult.

Understanding monopolies and duopolies

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Why aren't there competitors offering similar products and services?

Knowledge barrier: Entrants don't know how to compete

Who has it?

Businesses selling something that is complex and hard to replicate (e.g. proprietary technology). A competitor would require access to trade secrets and significant expertise to compete.

Examples

Competing with the semiconductor equipment companies (**AMAT, ASML, KLA, Lam**) would require knowledge protected by trade secrets to ensure their machines work reliably at scale. This includes thousands of processes not documents in patents.

Capability barrier: Entrants aren't able to compete

Who has it?

Businesses selling something requiring:

- a supply chain that is difficult to access
- infrastructure that is difficult or expensive to acquire

A competitor would require significant capital, time and resource to compete.

Examples

Competing with **TSMC** would require significant capital (at the state subsidy level).

Competing with **Visa** would require significant time and capital to assemble a network of thousands of banks, millions of merchants and billions of cardholders.

Legal barrier: Entrants aren't allowed to compete

Who has it?

Businesses selling something that is protected by intellectual property or requires regulatory authorisation to sell. A competitor would require licensing of the IP or regulatory authorisation to compete.

Examples

Competing with **FICO** and **Moody's** would require securing regulatory recognition, convincing regulators, banks and investors to rewrite regulation, compliance frameworks, underwriting standards and risk policies built around FICO and the incumbent credit rating agencies.

Corporate finance's 3 principles

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In corporate finance there are three rules for maximising value:

1. Buy **high return** assets

2. Finance assets with **low cost** debt

3. Only return capital to investors if there are no suitable investments

These principles should guide both how managers run their businesses and how investors find and manage investments.

Maximise the highest possible return by investing in the highest returning assets.

Understanding share price returns

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The three hypothetical companies below demonstrates what drives share price performance. Each company has seen its share price grow 6x over the last decade from $100 to $600. However each company achieved their share price growth through different routes: Company A through growing its earnings, Company B through growing its valuation, and Company C through a mixture of both. In reality Company C reflects most multibaggers.

Company A		**Company B**		**Company C**	
Earnings growth:	6x	**Earnings growth:**	1x	**Earnings growth:**	2x
Valuation growth:	1x	**Valuation growth:**	6x	**Valuation growth:**	3x
Share price growth:	6x	**Share price growth:**	6x	**Share price growth:**	6x

This example demonstrates the important fact that any share price change can be understood by the change in earnings and the change in valuation:

Share Price Growth = Earnings Growth x Valuation (P/E) Growth

Not all earnings are equal

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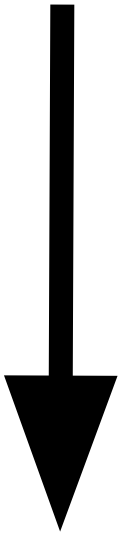
Here is a reverse rank of the different types of earnings



5. **Negative** earnings — *Expenses > Revenue*
4. **Low ROI** earnings — *Use billions to make millions*
3. **Cyclical** earnings — *Airlines, banks, oil, etc.*
2. **Leveraged** earnings — *Capital intensive, e.g. banks*
1. **High ROI, low cyclicality, unleveraged** earnings

Value investments by comparing their FCF yields to the investable universe of companies with high ROCs, competitive advantages, low cyclicality and low debt.

Compounding capital

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Observation: A 20% return on capital should look like this: **$100 → $120 → $144 → $173 → $207**

However, very few companies are able to achieve a high return on capital over a long time period for several reasons.

A consistently high ROC requires:

1. **Durability** - companies need to maintain profitability even during economic downturns. Many companies can't do this due to significant exposure to economic cycles, e.g. commodity prices and interest rates.

2. **Reinvestment opportunities** - companies need opportunities to reinvest their profits at high returns. Many companies lack opportunities to reinvest and instead pay out excess profits as dividends.

3. **Pricing power** - companies need to be able to raise their prices without losing sales. Many companies can't do this due to heavy competition meaning they need to compete on prices.

High returns on capital + Durable earnings + Reinvestment opportunities + Pricing power = High long-term growth

Importance of market share and market growth

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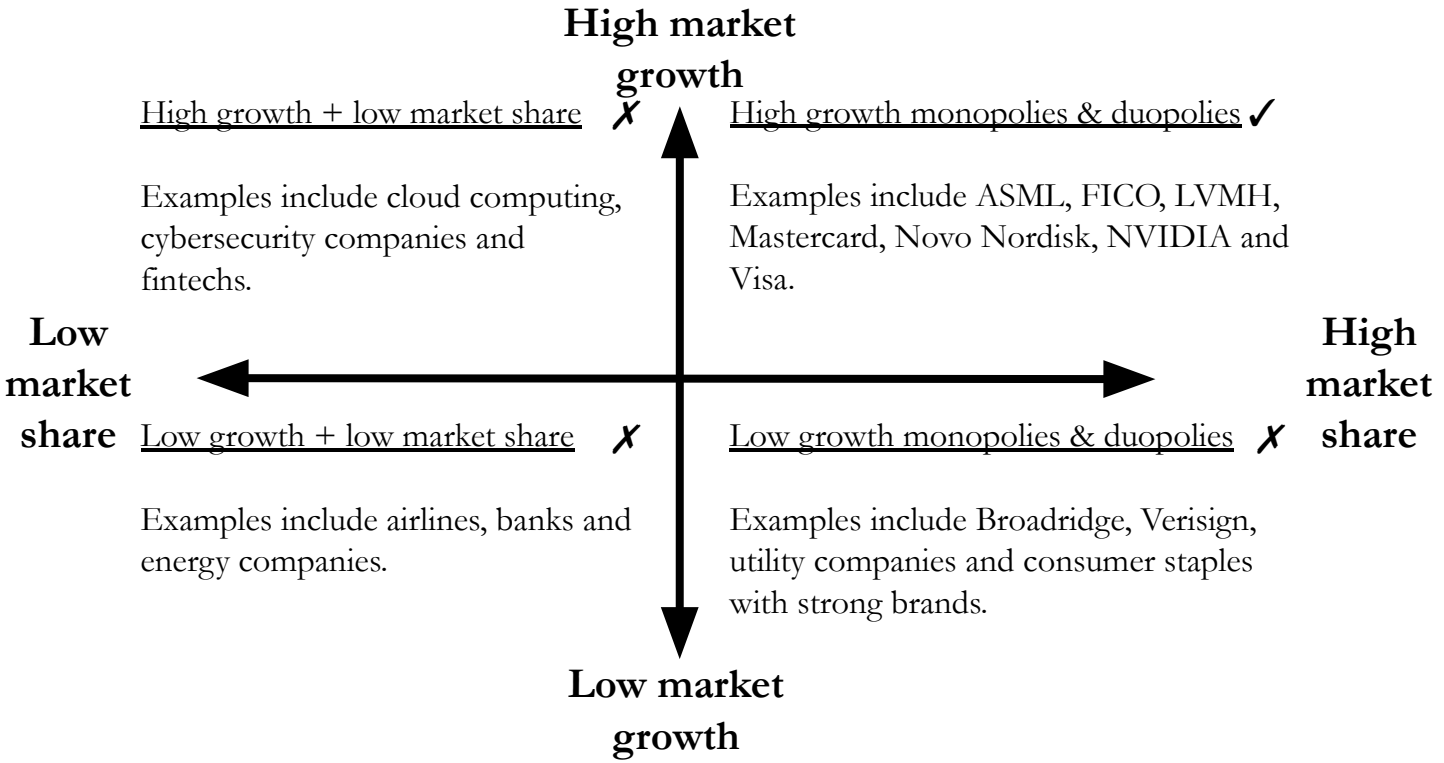

Importance of predictability and growth

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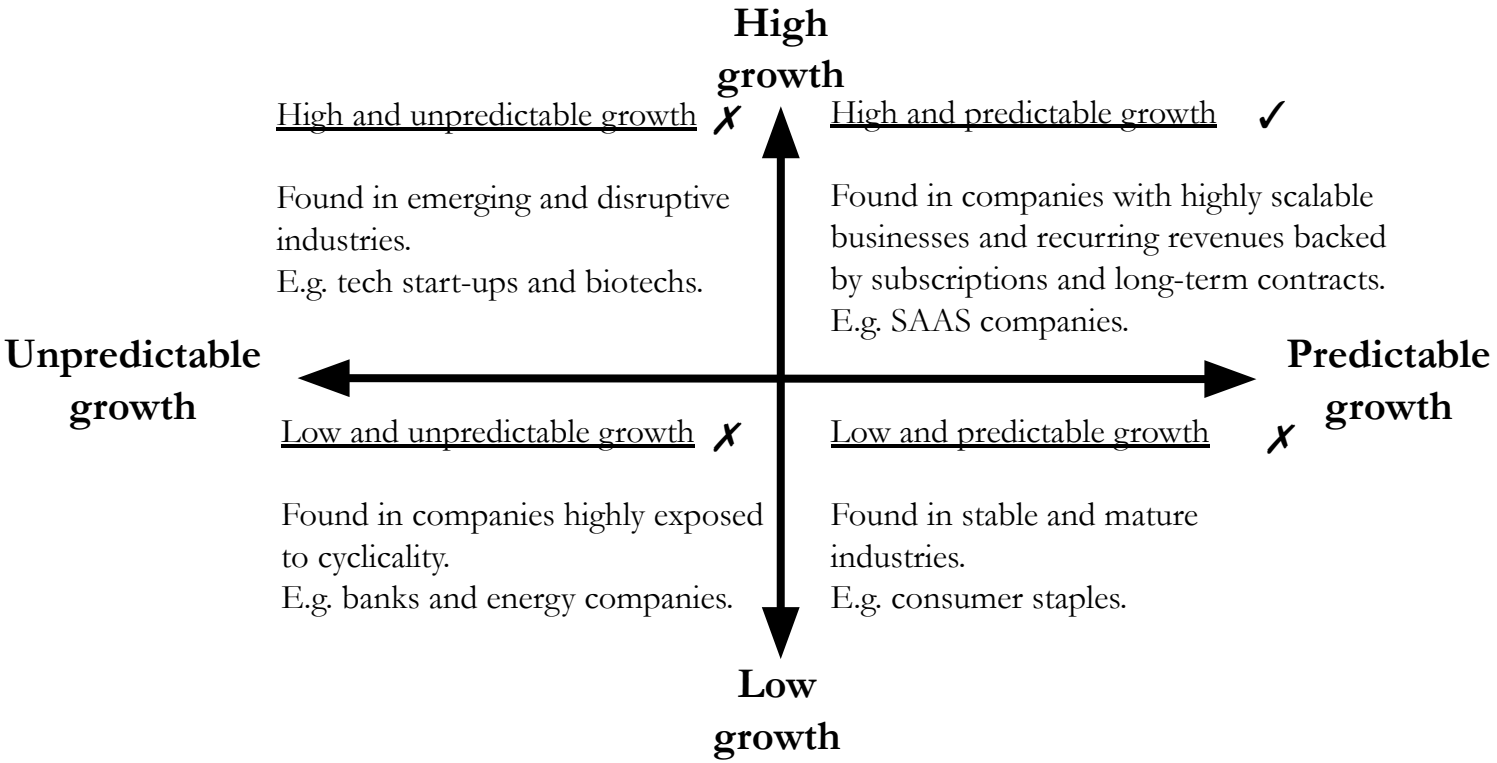

Importance of ROC and growth

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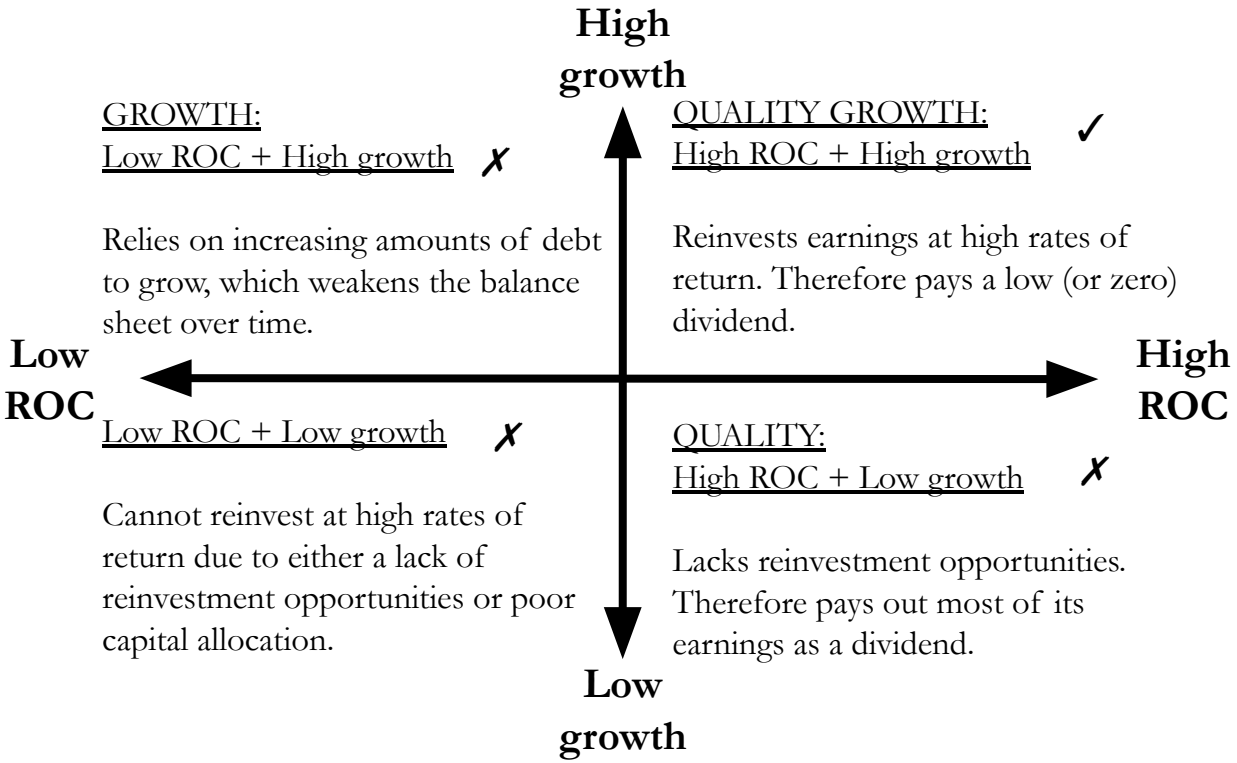

The supply chain and investor relationship

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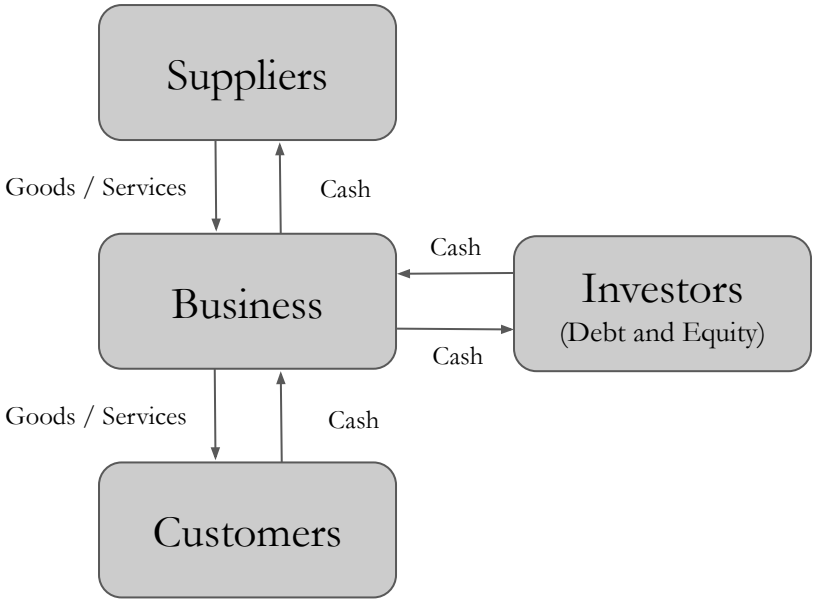

A company is best understood by its relationship with its investors and supply-chain (suppliers and customers).

Businesses borrow money from investors, exchange it with their suppliers for goods and services, provide goods and services to their customers in exchange for money and return money to their investors.

The higher the return on capital (ROC) the more efficient the business's relationship is with its investors. A ROC of 20% means that for every $100 of invested capital the business returns $20.

The higher the gross margin the more efficient the business's relationship with its suppliers and customers. A gross margin of 60% means the business makes something for $40 and sells it for $100.

What works in investing

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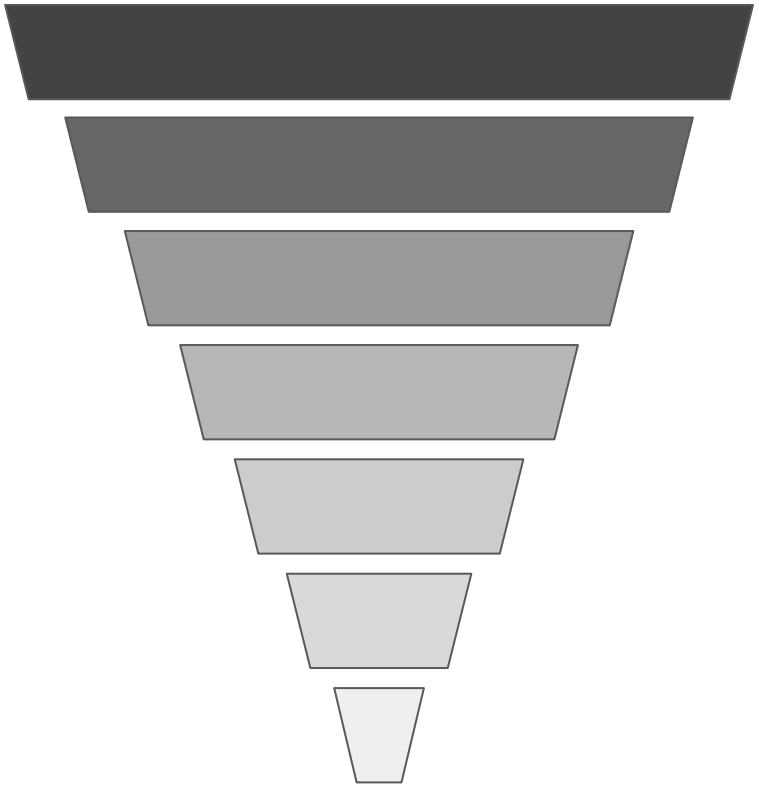

We start with over 1,500 investable companies worldwide

We then examine their financials to look for consistently high**:**

- Free cash flow (FCF) per share growth rate
- FCF return on capital
- FCF margin

We then examine their business and supply chain to look for**:**

- Pricing power
- Barriers to entry
- Operating leverage
- Monopolies / duopolies
- Diversified, recurring and resilient revenues

This reduces our investable universe to around 30-40 companies.

We invest in the best 10-20 investment opportunities (factoring in valuation) and then invest for the long-term.

The Semiconductor Ecosystem

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Semiconductor Design Software

Provides software to designers
Cadence
Synopsys

Semiconductor Manufacturing Equipment

Provides equipment to manufacturers
Applied Materials
ASML
Lam Research
KLA
Tokyo Electron

Semiconductor Designers

Designs only (fabless)
AMD
NVIDIA
Broadcom
Qualcomm

Semiconductor Manufacturers

Manufactures only (pure-play foundries)
TSMC
GlobalFoundries

Designs and manufactures (IDM)
Intel
Samsung
Micron
Texas Instruments

Semiconductor Consumers

Drivers of semiconductor demand:
- computers
- electronic devices
- cloud computing and data centres
- wireless infrastructure
- vehicles
- industrial electronics