FINANCE MBA MIDDLESEX 2021

Peter Nordgaard

September 2021

Velkommen!

LEARNING OUTCOMES

1. Critical Financial Accounting B/S, P/L, Cashflow, **Analysis**

2. Understand Accounting, (5)Corporate Finance, Investment, Costs Control and Working Capital

3. Understand/Apply **Economic Principles** Supply/Demand, marginal analysis, Opportunity Costs

Knowledge

4. International Economics, banking, trade, foreign investments

6. Performance Measurements, Corporate Governance, Control, Ethics/Moral

7. Communication and presentation of financial/economic ideas to different audiences across a diverse range of settings

Skills

8. application of numeracy and quantitative skills, including the use of simple models, to business and economic situations

ASSESSMENTS

30%
Managing during challenging times

70%
Case Study
Qualitative and Quantitative Analysis

I er nu testpersoner

Kan vi lære økonomi på en anden måde?

Mindre grafstudier, mindre matematik og mere forståelse
Mere Relevans!

Hvor langt kan jeg gå?

Det meste økonomi er gambling…

Vores første tilgang til Finance i dag vil være;

Hvorfor?

”Finance er studiet om hvordan livet bliver muligt”,
Peter Nordgaard, April 2021

Lad os tage en hurtig øvelse – hvad ville være umuligt uden økonomiske pincipper

Du skal forberede dig og være tålmodig. Du skal være tilstrækkelig åben til at vi kan have relevante dialoger.

*På videolektioner vil vi ikke optage hele dialogen.

Dealen…

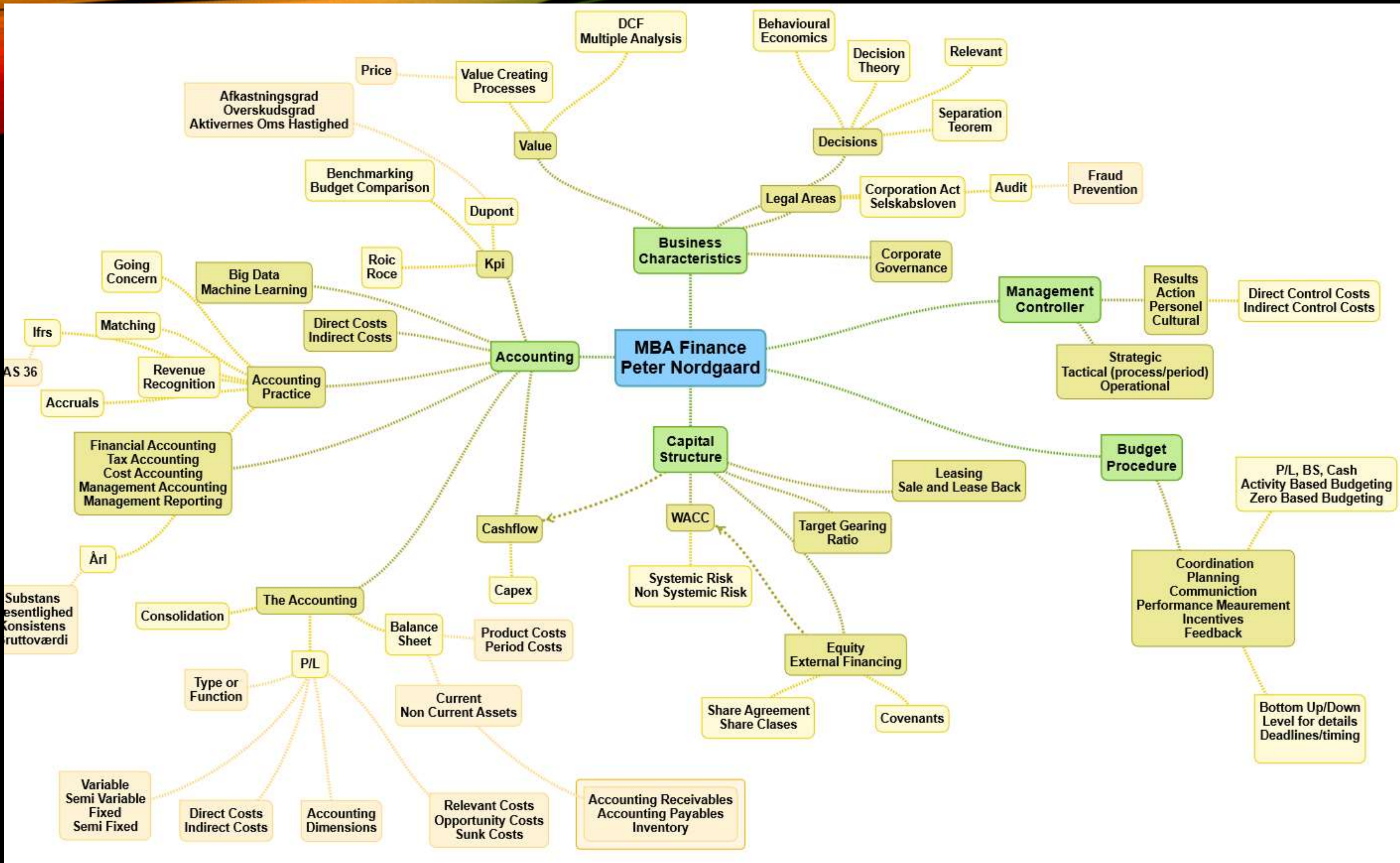
”Finance er studiet om hvordan livet bliver muligt”,
Peter Nordgaard, April 2021

ALT HAR EN MENING

- *3. **Informed consent** should be freely given by participants, and by a trained person when collecting or analysing human tissue (details on accessing and completing online training for gaining informed consent for HTA purposes can be found below in Section 8).*

Mindmap Finance Macro

Mindmap Finance Micro




AL DET ØKONOMI DU
NOGENSINDE BEHØVER LÆRE!
Peter Nordgaard
September 2021

Macro/Micro

Macro Economy
Is the study of aggregated demand, production etc.

Makroøkonomi handler om alt omkring os. Renteniveau, valutakurser, beskæftigelse og støtteordninger

Næsten alle elementer påvirker hinanden

Historisk er makroøkonomi ikke mere end ca. 150 år gammelt

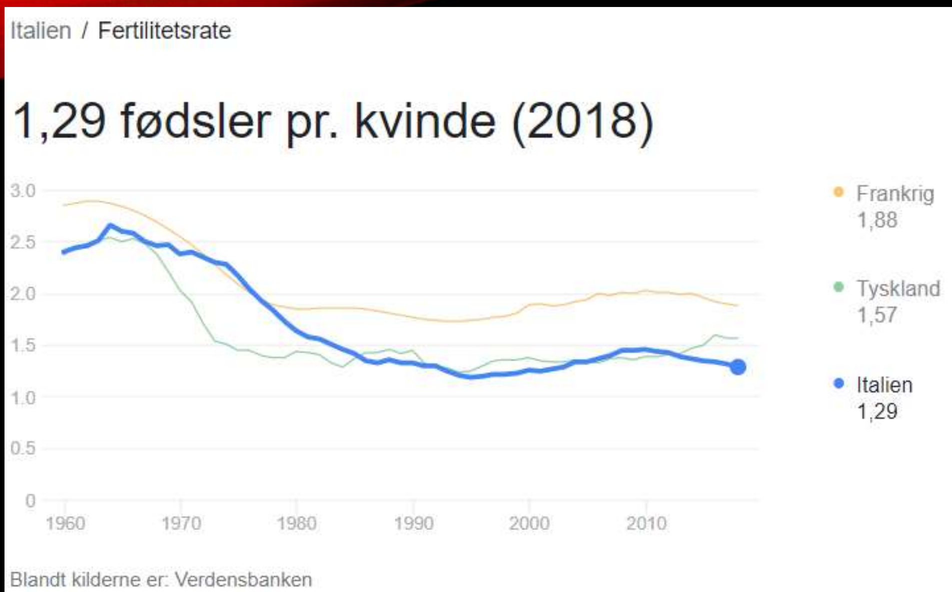
Mikroøkonomi handler om det enkelte individ og dets beslutninger

Historisk er denne tradition langt ældre

Micro Economy
Is the study of individual companies and individuals

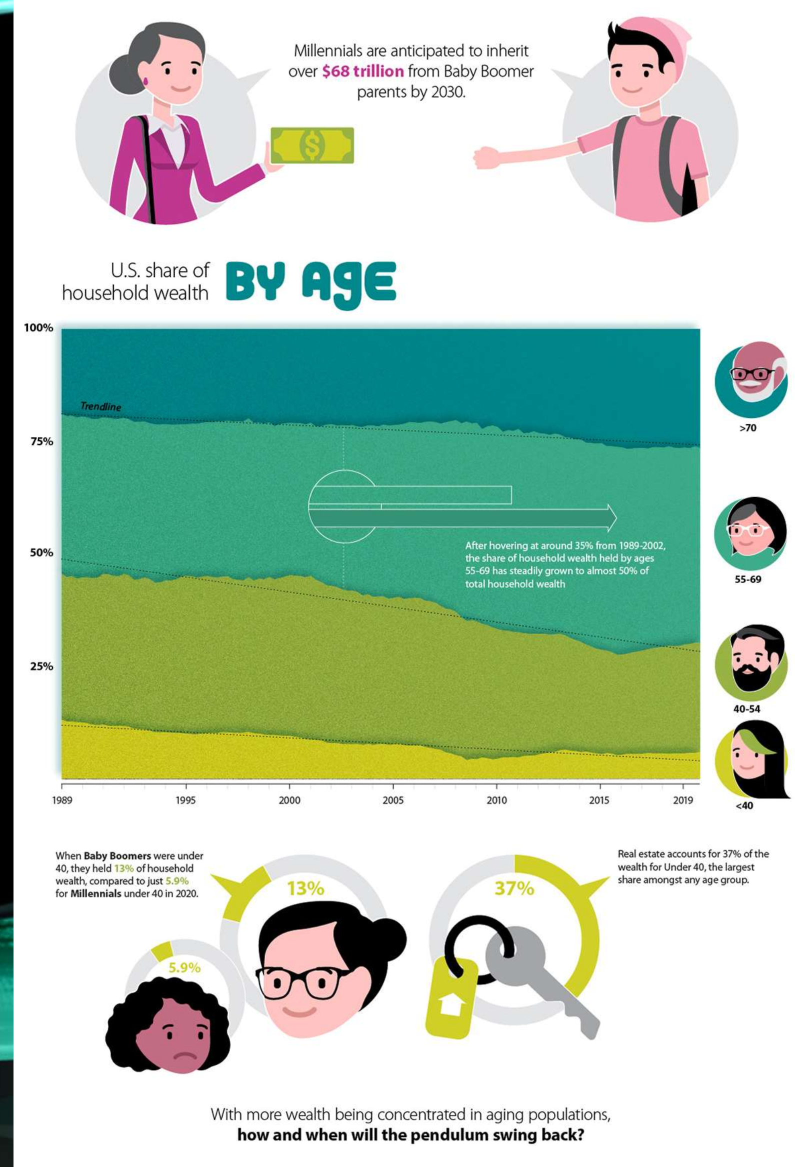
Macro examples

Wealth distribution across generations



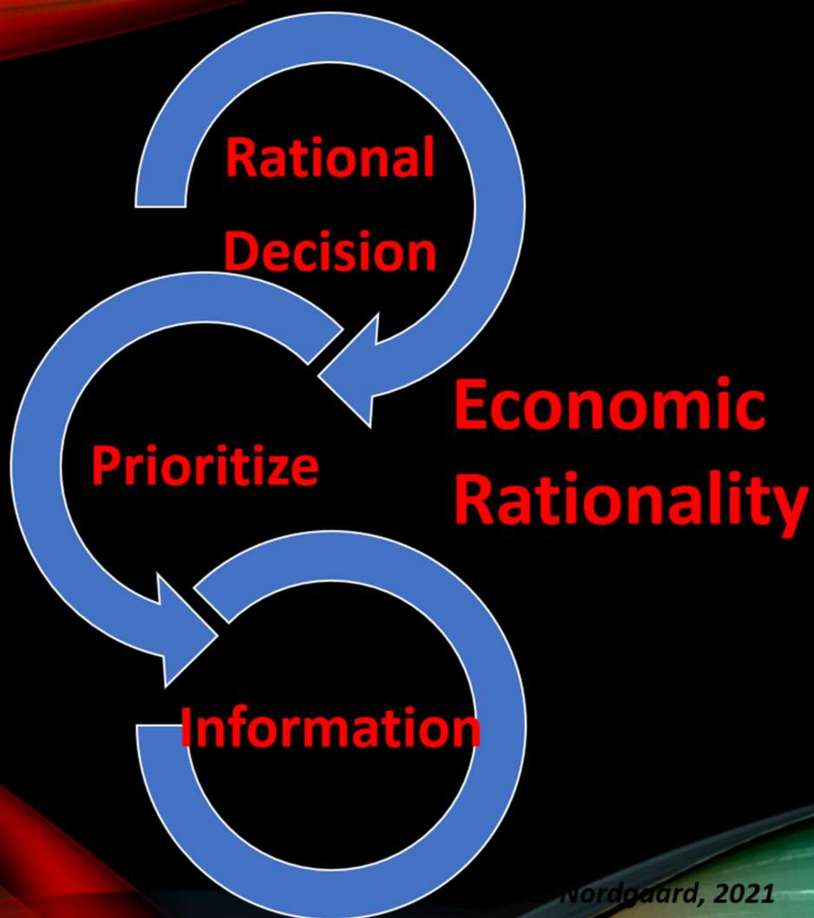
Investeringer i tidlig indsats diskuteres ofte med udgangspunkt i den såkaldte Heckman-kurve, der beskriver det samfundsøkonomiske afkast ved investeringer i forskellige aldersgrupper. Kurven er udtryk for det potentielle afkast ved investeringer i en tænkt situation, hvor der bruges lige mange ressourcer på alle alderstrin. I dette tilfælde vil afkastet være størst ved investeringer i de yngre aldersgrupper. Hvis Heckman-kurven empirisk kan findes for offentlige indsatser, tyder det på, at der vil være effektivitetsgevinster ved at forskyde offentlige indsatser i retning af indsatser tidligere i livet. (Vismænd april 2021)

https://dors.dk/files/media/rapporter/2021/f21/endelig_rapport/f21_hovedkonklusioner.pdf



Macro Economy
Is the study of aggregated demand, production etc.

Economic Theory



The foundation of most economic theory are these three principles.

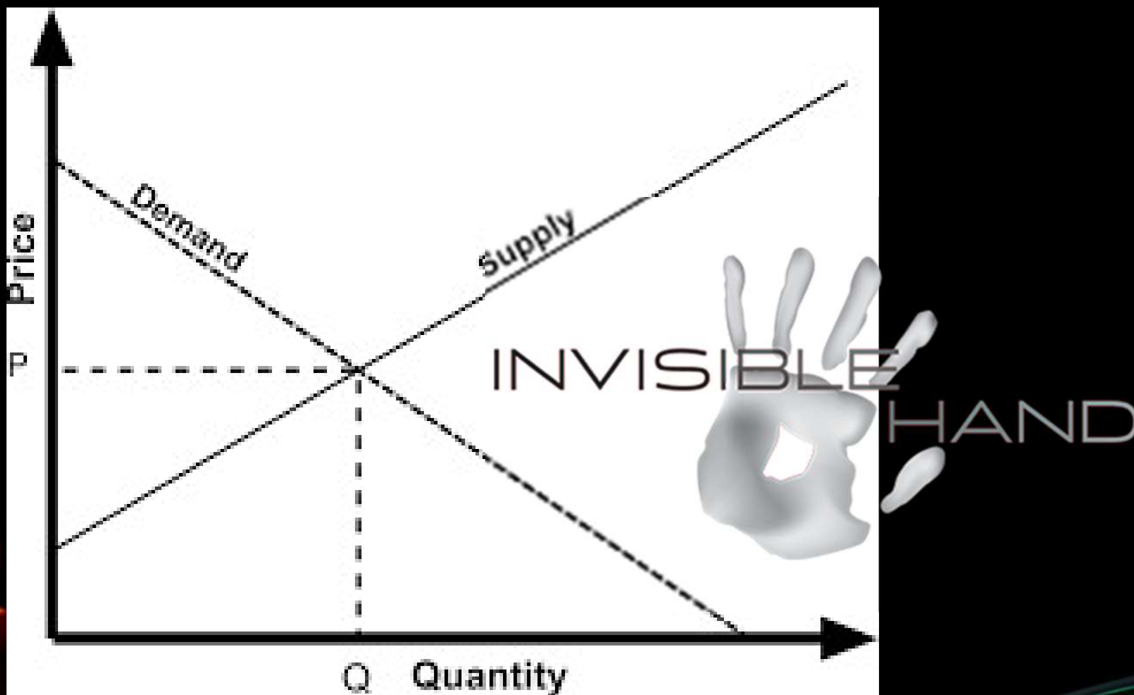
Without them economic reality is impeeded

Agency theory is an example of an impediment. A director of a company, employed by the shareholders, may take decisions that favour himself

You just landed in Thailand and went to local market. What rationality parameters may be missing, when you buy your first product?

Behavioural economy is concentrated on behaviour, not rationality

Equilibrium Price



The main principle in Economic theory is the idea of "Markets clearing"

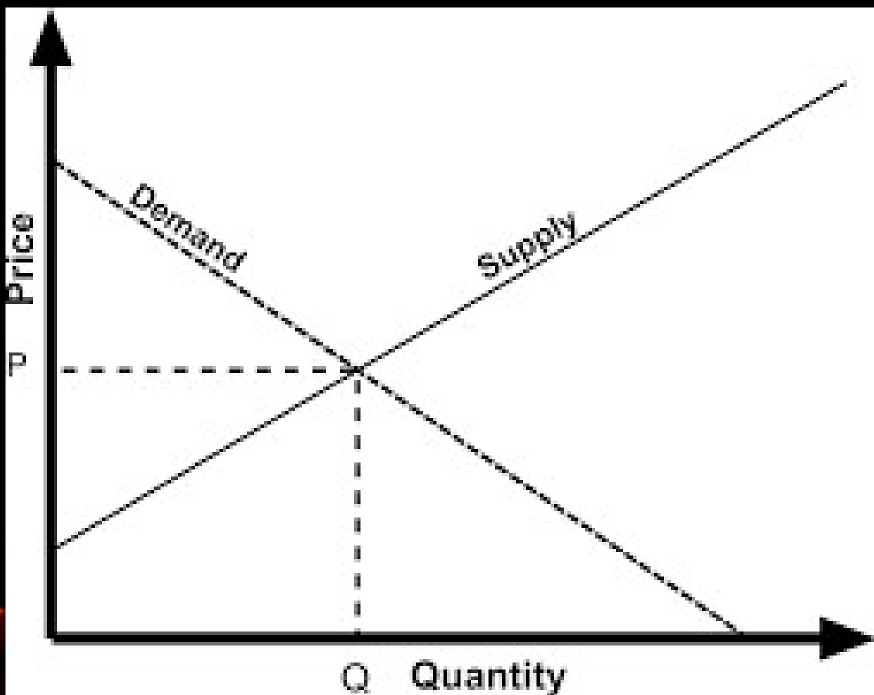
The idea is that the market economy, by itself, creates balance.

If more people wants electric cars, the demand curve will move upwards and price increases. Then it becomes attractive to produce electric cars, more producers surface. Supply increases and price decreases.

The market takes care of everything.

Equilibrium price: Quantity demanded equals quantity produced

Velocity



Equilibrium price: Quantity demanded equals quantity produced

Equilibrium requires changes in supply and demand.

If you like Cola and the price is increased 100 times tomorrow, how fast would your consumption react?

Velocity is an important element of the clearing of markets.

Some supplies and demands react with high velocity. Others, with low velocity

Competition

- Perfect Competition
- Monopolistic Competition
- Oligopoly
- Monopoly

Competition in a Free Market Economy is considered positive for the economy

It pushes prices downwards and increases innovation as companies are forced to constantly improve

Monopolies are considered negative for the economy as the price is not challenged.

Most countries legislation restricts monopolies

Island Economy – Free Market Economy

The market incentives actors to specialize in what they are good at.

Jens can produce a shoe in two hours and good meal in 4 hours.
Eric can produce a good meal in 2 hours and a shoe in 4 hours.
They have 6 hours available.
Both can produce pair of shoes and a good meal.
If Jens only produces shoes and Eric only produces meals, the total production will be 3 meals and 3 pair of shoes! That is an increase of 1 meal and 1 pair of shoes.

Free market economy lets everyone produce what they are good at and trade it in the open market

Command Economy

Socialism versus Capitalism

In Capitalism, the market clears itself.

In Socialism, all decisions, that are now NOT taken by the market, needs to be taken by someone else

That is typically the central institutions.

A command economy thus shares some commonalities with a dictatorship.

Quick Decisions

Difficult demand and supply allocation

Easy Capital Allocation

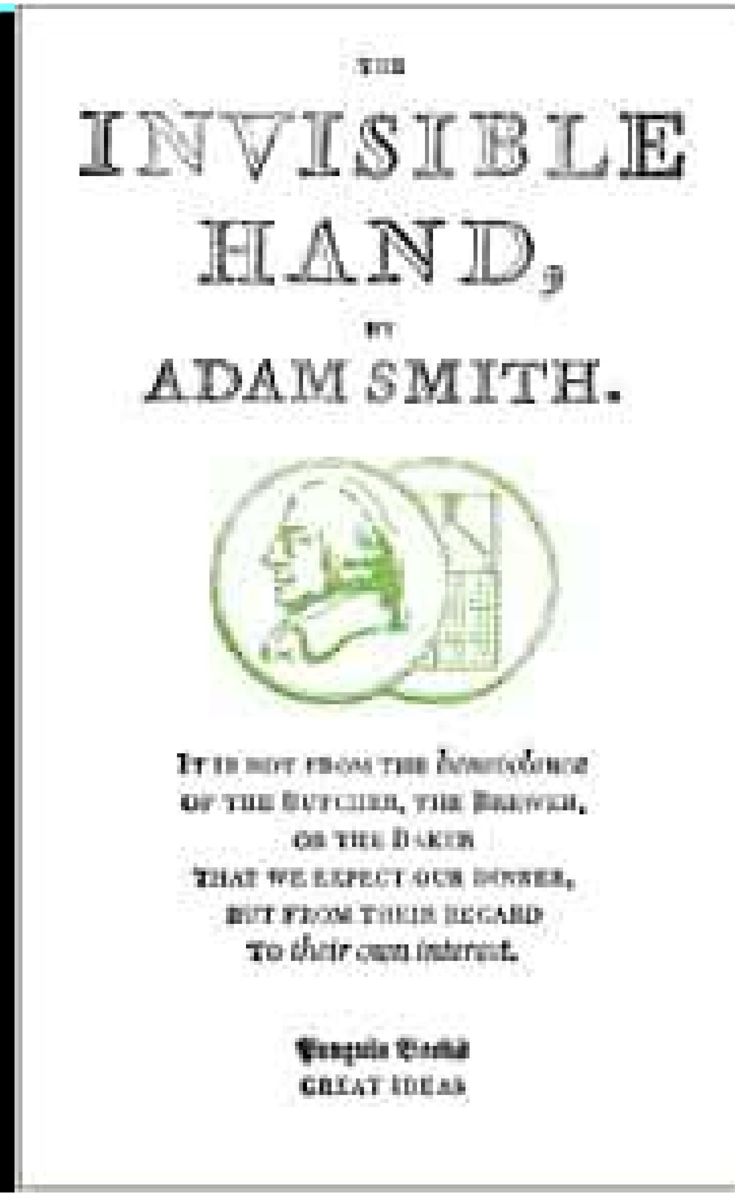
The challenge of the command has been that so many small allocation decisions, not taken by the market, needs to be taken by a central institute.

Could computers and data gathering be better than the market?

Welfare State

When something is for free, demand is endless. There is thus no natural market mechanism to stop the welfare state. The demand for the Welfare state is endless. It is never fullfilled….

Adam Smith’s landmark treatise on the free market paved the way for modern capitalism, arguing that competition is the engine of a productive society, and that self-interest will eventually come to enrich the whole community, as if by an ‘invisible hand’.



Opportunity Costs

Real profitability on an action is:

The profit you made – the profit you could have made on another choice

Every choice has an alternative costs

”I bought a share and I earned 25%!!

”Yes…, but by investing in crypto assets, you could have made 80%… So… ,you lost – 55%”

An organization working on a project, should deduct profit from other possible projects that were now not worked on

Price Elasticity & Diminishing marginal utility

Price Elasticity explains whether the consumer reacts on a price change. If the consumers reaction is high, there is high price elasticity.

Diminishing Marginal Utility indicates that the more you purchase of a product, the less marginal satisfaction you will get from the last product

Elasticity and Products

There are several Elasticity Measures;

Price Elasticity: Demand for a specific product/Service
Cross Price Elasticity: if there is an increase in the price of tea by 10%. and the quantity demanded for coffee increases by 2%, then the **cross elasticity** of demand = 2/10 = +0.2

Income Elasticity: The relationsship betwen changes in income and consumption

Diminishing Marginal Utility indicates that the more you purchase of a product, the less marginal satisfaction you will get from the last product

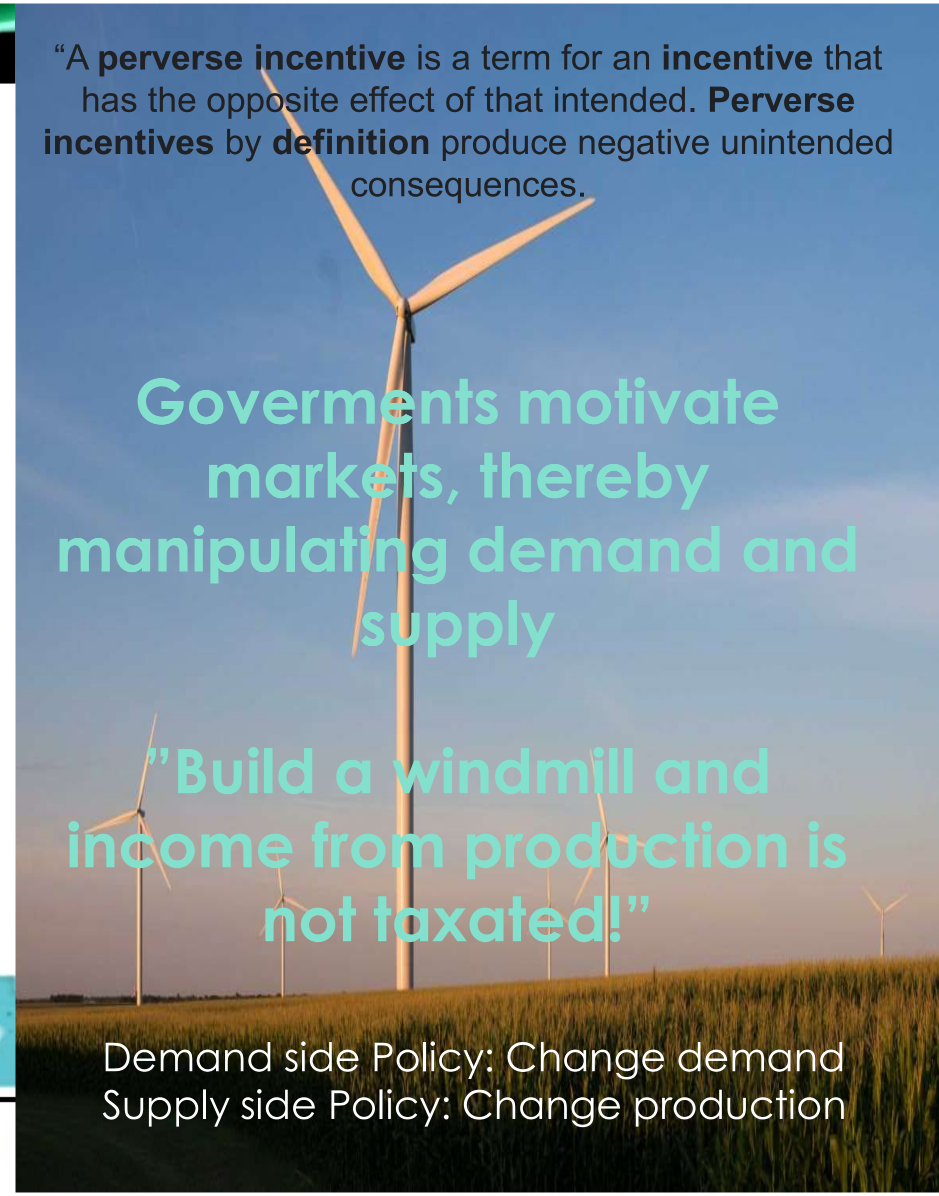
Externality/Free Rider

If something has the price of Zero, it will not display any value in calculations. The usage will not be naturally diminished, as consumption is free

Free Rider

If investing in a good means that everyone else can enjoy without paying, would you really do it?

Market Interference – Fiscal Policy



"A **perverse incentive** is a term for an **incentive** that has the opposite effect of that intended. **Perverse incentives** by **definition** produce negative unintended consequences.

Goverments motivate markets, thereby manipulating demand and supply

"Build a windmill and income from production is not taxated!"

Demand side Policy: Change demand
Supply side Policy: Change production

Monetary Policy

What happened to the purchasing power of Sterling, during Brexit?
Was it robbery?

1. If your countrys currency is devaluated, goods produced in the country becomes cheaper
2. Worries about devaluations may lead to… devaluations…
3. Why does bitcoin increase in value? (Among many factors…)

Macroeconomic Policy

Fiscal Policy

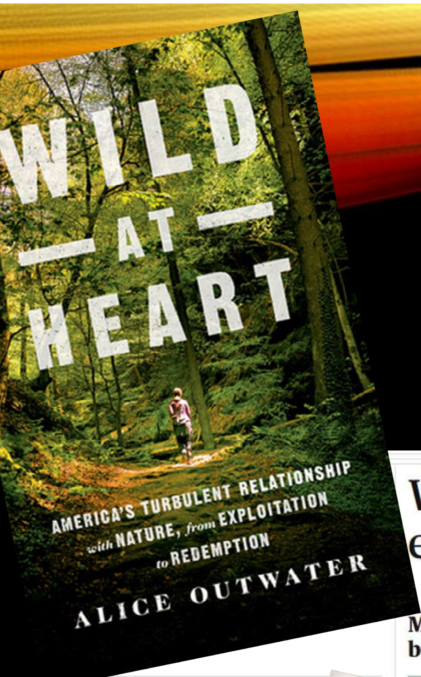
Government Expenditure
Taxation

Monetary Policy

Money Supply
Interest Rates

Supply Side Policy

Freeing markets
Interviening



FILM

The Minimalists

Financial Concepts in real life! ***Less Is Now***

Why single people are hurting the economy

Marriage means financial security and more spending, which boosts the economy. Are singletons selfish, or pragmatic?

Jana Kasperkevic
@kasperka
Wed 30 Oct 2013 20.16 GMT

...n't contribute to the economy by buying candy hearts, even broken ones. Photograph: Phil Degginger... Photograph: Phil Deggineer / Alamy/Alamy

Think about everything you learned so far

1. What economical concepts do you recognize in the podcast about dating?

2, Pick another lifestyle trend and explain its impact on economy!

Inflation

DANMARKS STATISTIK

SØG

Statistikbanken | Priser og forbrug | Vælg fra tabellen PRIS111

Åbn / gem som...

Excel (*.xlsx)

Inkl. koder i sep. kolonner

Inkl. fodnoter mv.

Rediger tabel

Pivot: Drej med uret

Beregn

Grafisk præsentation

Kurvediagram

Sorter data

Udskriv

Forbrugerprisindeks (2015=100) efter enhed, varegruppe og tid

	2005M03	2007M03	2021M03
Indeks			
01.1 Fødevarer	80,1	83,4	105,1
08.3 Teletjenester	120,7	120,2	79,7

Nominal prices shows the nominal price increase. Inflation is measured by calculating a ”basket” of products, which the average consumer buys.

What is the conclusion on the inflation on the two products shown above?

Financial Policy

1. Consumption leads to costs
1. Investments are not for immediate consumption. An investment is not a cost. Only consumption is a cost
2. The profit & Loss statement shows consumption

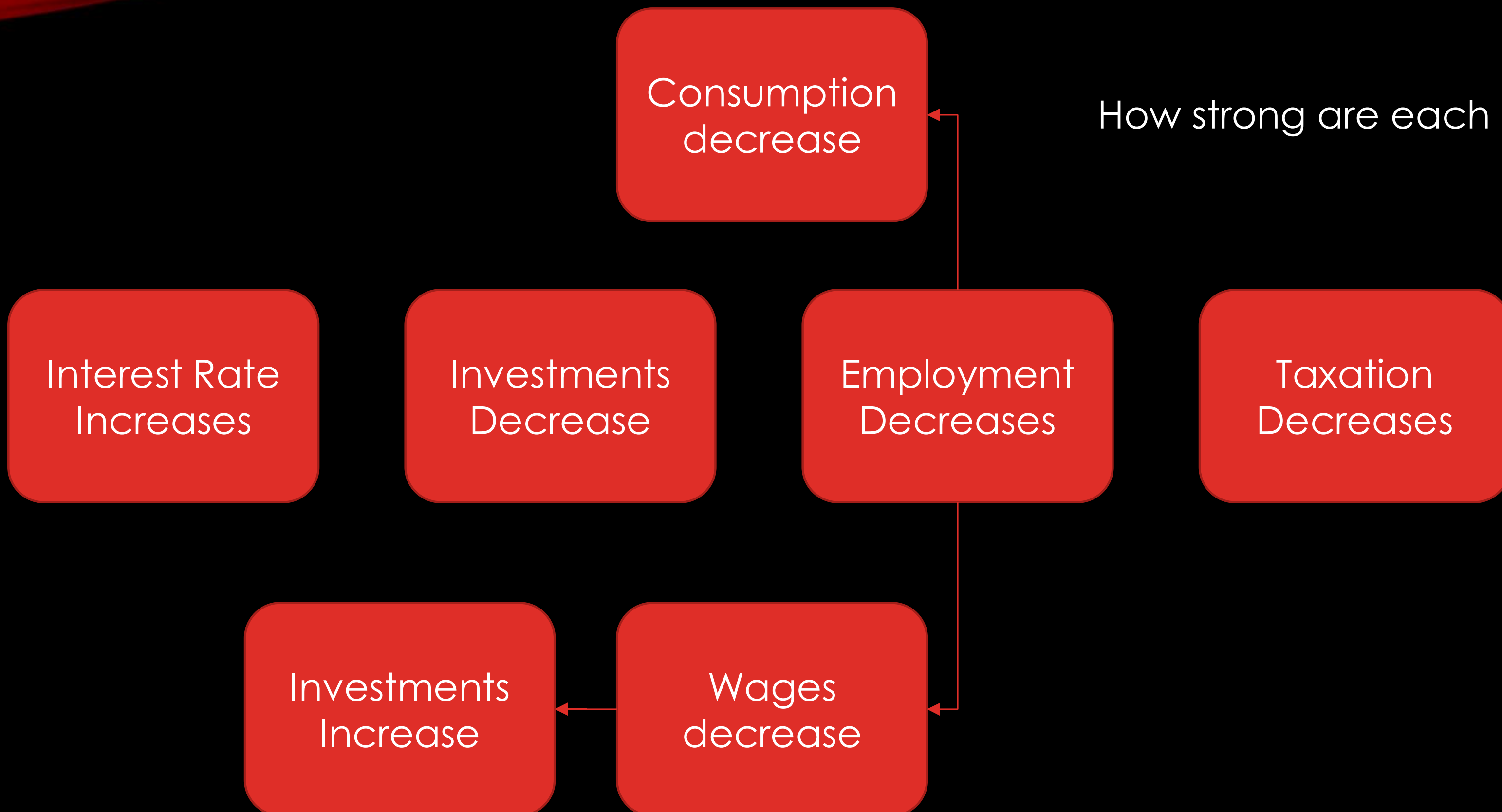
Marginality

- A company sells 200 products a month. The production price is 1 USD a piece. The sales price is 5 USD per piece. The company can produce 400 pieces.

- It is being suggested that lowering the price to 4 USD will result in an increase in sales to a total sale of 300 units.

- Would you lower the price? What is the marginal revenue? The marginal earning?
- Why is marginal views important?

Factor Effects (Multiplier)



How strong are each factors?

GDP

DANMARKS STATISTIK

SØG

Statistikbanken | Nationalregnskab og offentlige finanser | Vælg fra tabellen NAN1

Åbn / gem som... Excel (*.xlsx)

Inkl. koder i sep. kolonner

Inkl. fodnoter mv.

Rediger tabel Pivot: Drej med uret

Beregn

Grafisk præsentation Kurvediagram

Sorter data

Udskriv

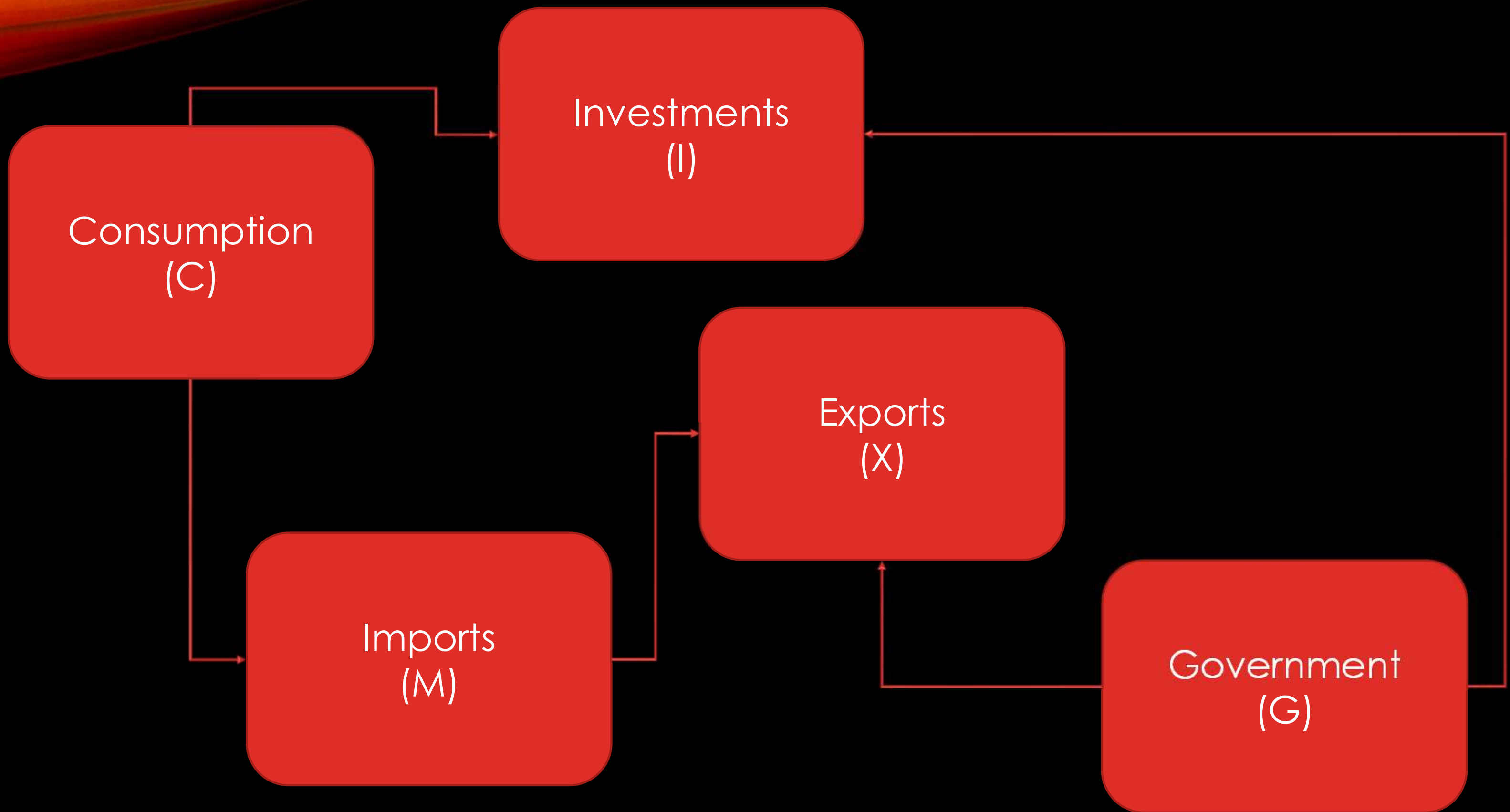
Forsyningsbalance, bruttonationalprodukt (BNP),økonomisk vækst, beskæftigelse mv. efter transaktion, prisenhed og tid

	2018	2019	2020
B.1*g Bruttonationalprodukt, BNP			
Løbende priser, (mia. kr.)	2 253,6	2 335,0	2 323,7
2010-priser, kædede værdier, (mia. kr.)	2 094,2	2 153,9	2 095,0

GDP (BNP in danish) is the value of the total output in the country, either in nominal prices or real prices

How would you explain the development in 2018,/2019 and 2020?

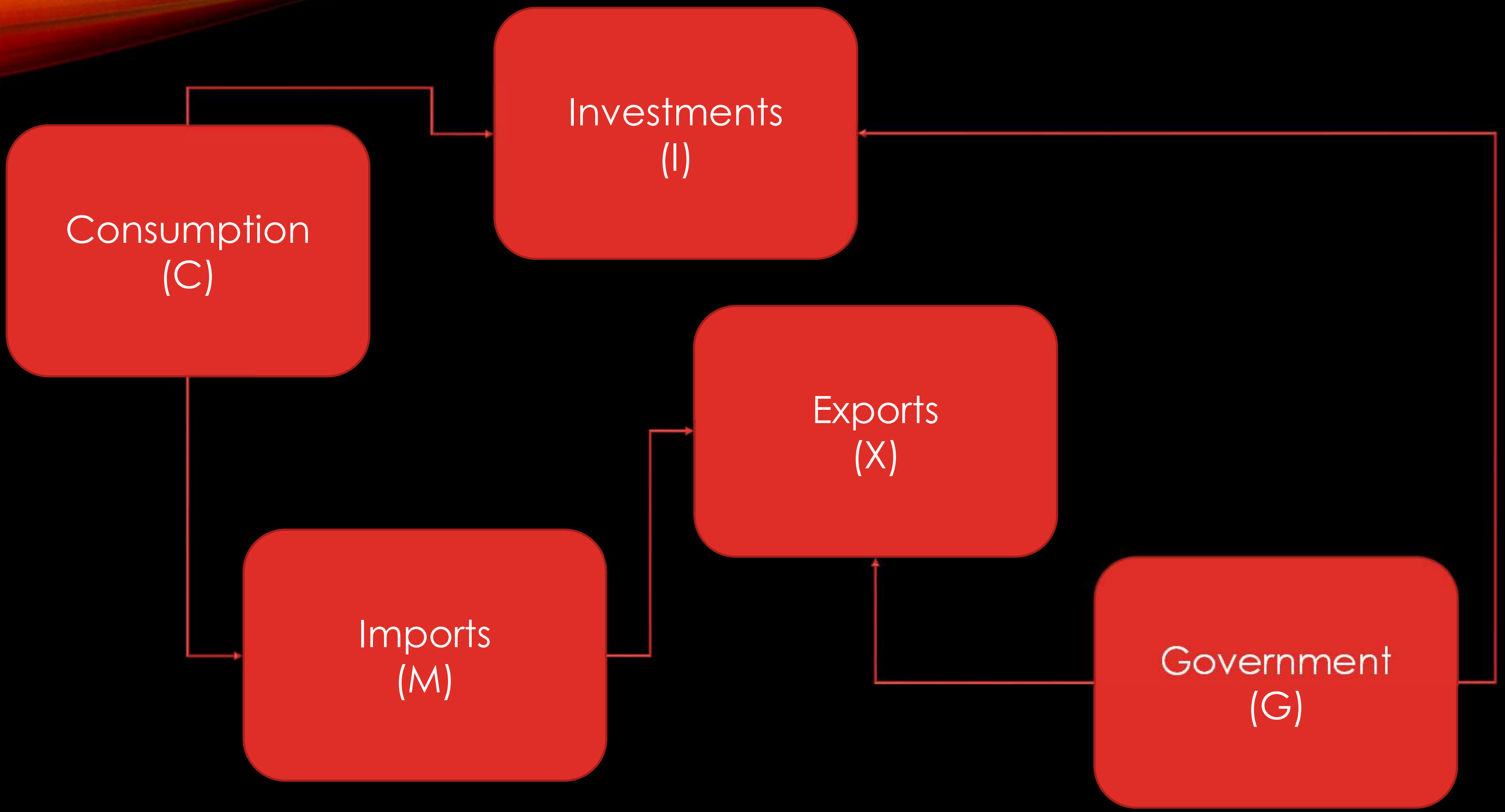
Aggregate Demand



$$AD = C + I + G + X - M$$

*Du skal kunne nationalregnskabets formler

Aggregate Demand



$AD = C + I + G + X - M$

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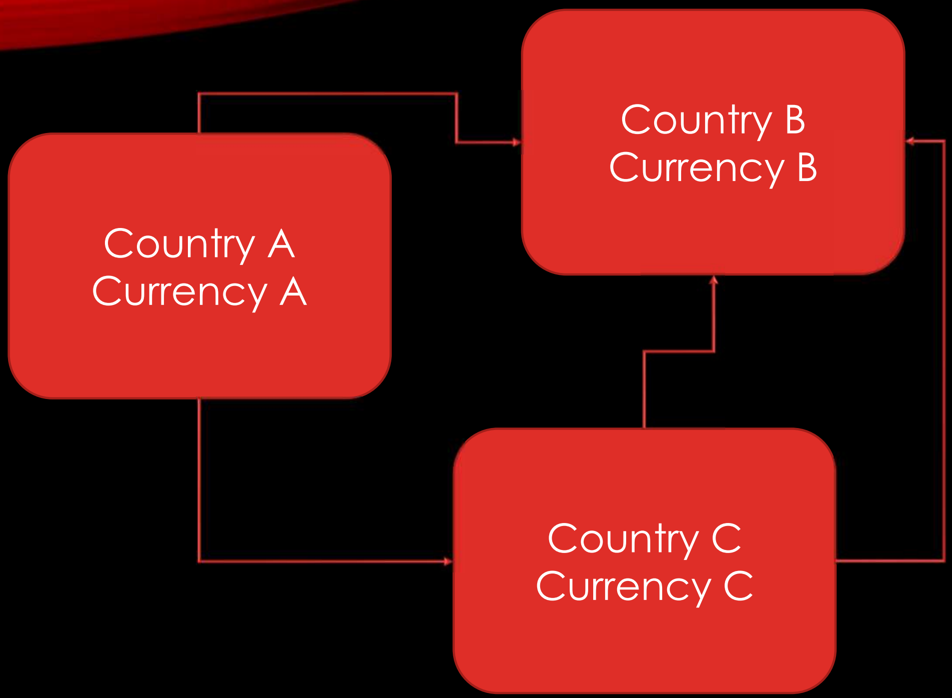
Balance of Payments (Account)



First Stage: All currencies are equal

Country A sells for 100
Country B sells for 800
Country C sells for 400

What will happen to the exchange rate?

Compound Interest

Compound Interest										
Peter Nordgaard										
Interest p.a.	8%									
Starting deposit	100									
Year	1	2	3	4	5	6	7	8	9	10
	108	117	126	136	147	159	171	185	200	216
	108%	117%	126%	136%	147%	159%	171%	185%	200%	216%

At an annual interest rate of 8%, your deposit doubles within 9 years.
If you keep you money at home, in a drawer, for nine years, then you have lost 50% of your money

Derivates

Forward/Futures	Contractual terms are set and an obligation exist Often leads to standardization of terms
Options	Contractual terms are set and a right exists
Swaps	Swapping different contracts against each other

**Peter Nordgaard, 2018, Hanoi*

Nominal and Real figures

Lær dig Indekstal - Peter Nordgaard					
	2015	2016	2017	2018	2019
Income (Nominal)	100,00	102,00	104,04	106,12	108,24
Indeks	*100*	*102*	*104*	*106*	*108*
Inflation		2,0%	2,0%	2,0%	2,0%
Income (Real - 2015 Prices)	100,00	100,00	100,00	100,00	100,00
Indeks	*100*	*100*	*100*	*100*	*100*

Nominal values are the absolute values in the current year. Real values are corrected for inflation, so that they represent a value that has the same purchasing power

Stock Markets

Shares

Ownership

Bonds/Convertible Bonds

Debt/Rights to Ownership

Shortselling

Bull

Bear

Certificates

All business are either a business for which a physical person is legally responsible or a business created as a legal unit. A legal unit can be named A/S, Aps, AB, SA, Ltd and has the ability to meet in court, although presented by a physical person

Net Present Value

All business are either a business for which a physical person is legally responsible or a business created as a legal unit. A legal unit can be named A/S, Aps, AB, SA, Ltd and has the ability to meet in court, although presented by a physical person

Data Conclusions

Moral Hazard

When buying an insurance for your bike makes you less worried about your bike getting stolen, which will lead to more bikes being stolen.
Insurance prices are (at first, at least), set by the data indicating the number of bikes being stolen, without people now buying insurance
Or
Data is a mixture of bikes being stolen, owned by insured and non-insured people


Macro/Micro
Micro Economy
Is the study of individual
companies and individuals

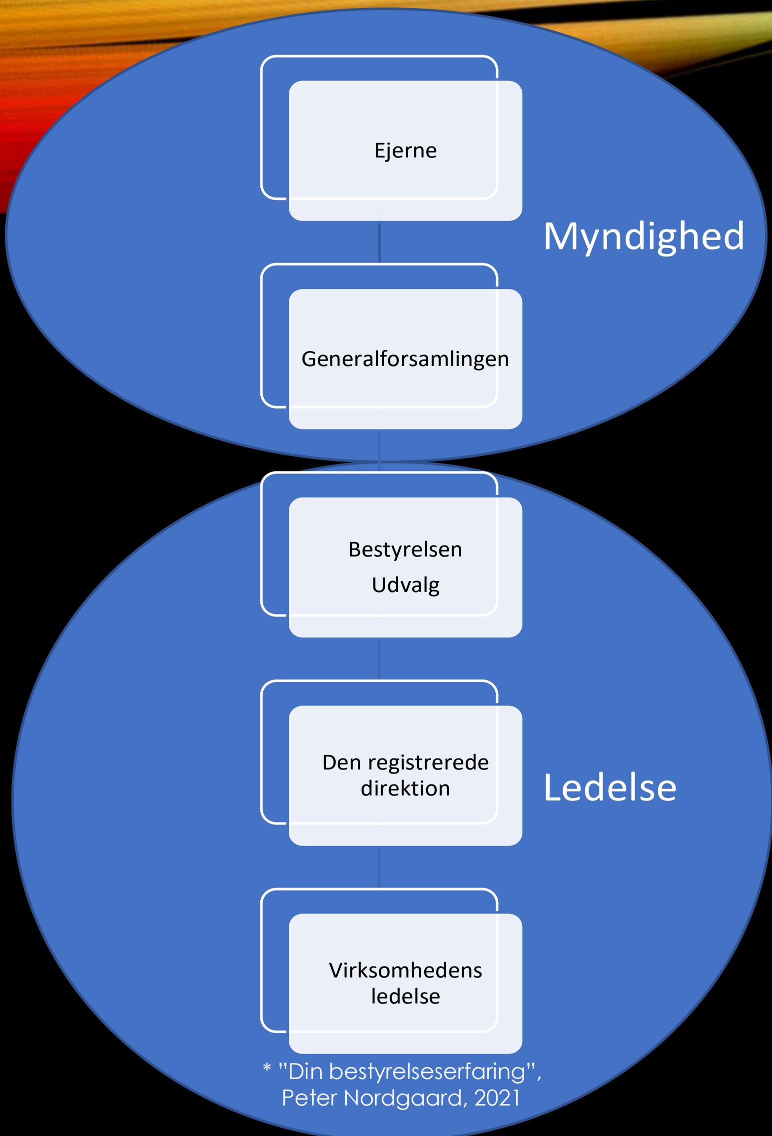
Personally lead business

Legal Vehicles

”Ability to go to Court”

All business are either a business for which a physical person is legally responsible or a business created as a legal unit. A legal unit can be named A/S, Aps, AB, SA, Ltd and has the ability to meet in court, although presented by a physical person

GOVERNANCE STRUCTURE



The highest authority in a company is the General Assembly.

The General Assembly elects the Executive Board

The Board appoints the Executive Management

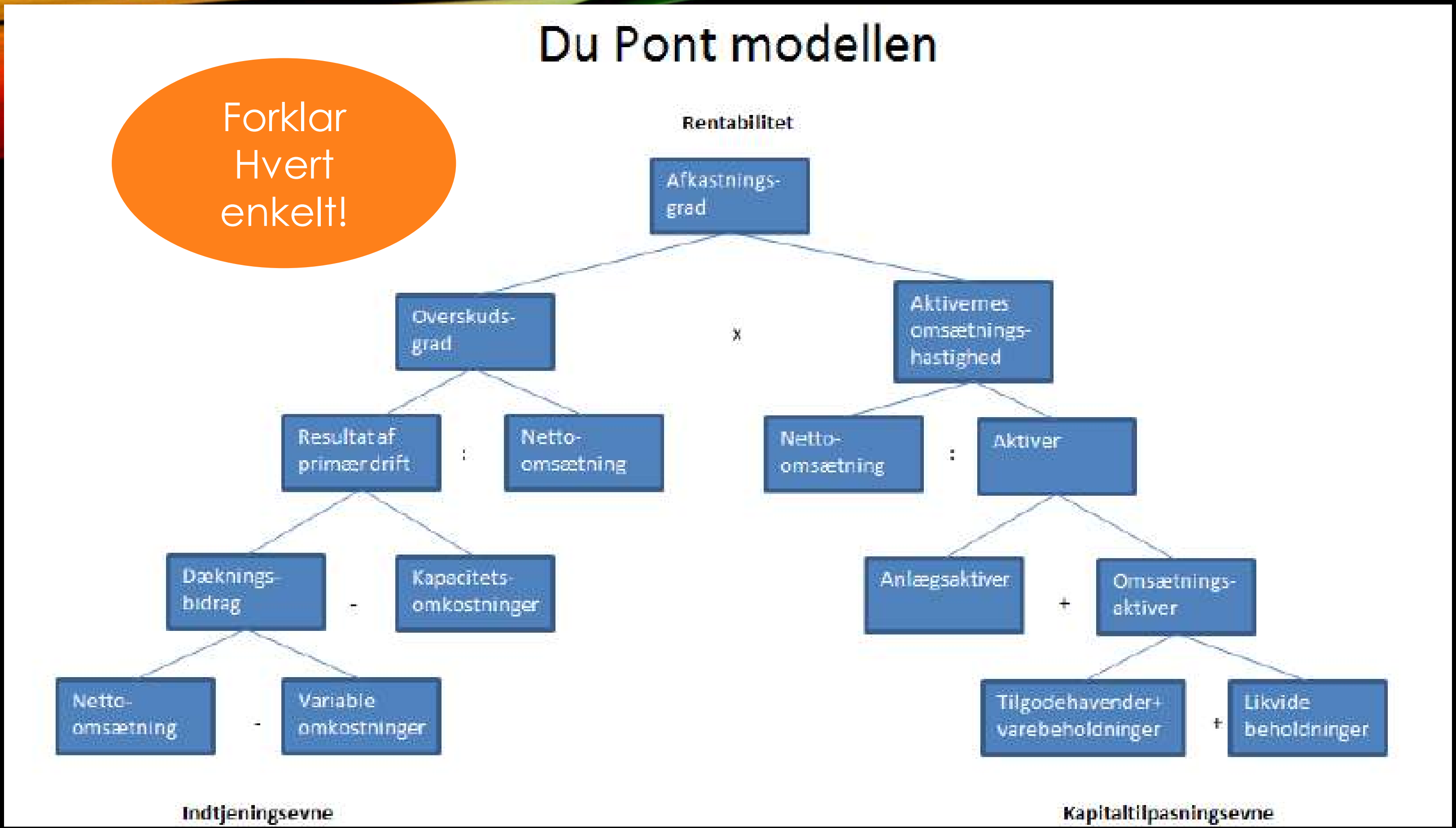
The Executive Management appoints the management.

Aktiver

1. Controlled
2. Identifiable
3. Future Cashflow

- **Tangible Assets (Materielle Aktiver)**
- **Intangible Assets (Immaterielle Aktiver)**

- **Fixed Assets (Anlægsaktiver)**
- **Current Assets (Omsætningsaktiver og likvide aktiver)**



Engelske begreber – Primær drift: EBIT

EBITDA - (Earnings Before Interest Taxes, Depreciations and Amortizations

EBITA – EBIT (before Interest and Taxes)