



Roadmap 2021

Deep digital will run
even faster



Speed read

The virus episode has changed how we live

2020 turned out to be one of those years that change things for generations. Going into 2020 it was an attitude of 'more of the same'. Going out of 2020 and into 2021 it's a new perspective;

The road bump in 2020 provided clear evidence of humanity's skillsets. A vaccine was developed in record time and digital communication such as video calls kept things going at good pace despite severe lock-downs

Deep digitalization will change how we live. New and very large clusters of economic activity have become much more visible. Traditional businesses that do not embrace digitalization will struggle and businesses that are well positioned for the future will prosper

Digitalization will increase productivity growth and hence 2021 will see continued strong performance for companies that will be the signature companies in 10-15 years time

Enjoy the journey

2021 roadmap

Roadmaps can be quite static as the route you see on a map is very much different in reality. Without roadmaps it's difficult to navigate and without navigation you don't know where you're going. So even if a roadmap is not correct or accurate it's useful for directions.

You have to be open-minded and change route if road conditions or weather forecasts change substantially

Traditional components in roadmap 2021

1. Economic growth will be strong in 2021, however before we are back to activity levels of 2019 it's probably 2022 or even 2023
2. Monetary conditions will continue to be accommodative until the economic pace is good and/or inflationary forces start to pile up
3. Corporate performance will show an upward jump in revenues and earnings not seen for decades due to normalization of activity
4. Valuation expanded in 2020 as investors disregarded the bad apple in the box (2020) and looked to the next apples (2021-25). With interests rates below zero investors are motivated to move out on the risk curve i.e. buy more equities. This could generate a decline in the historical levels for equity risk premium and a massive stock market rally
5. Stock market returns in 2021 will likely be very good (up to 20%) in the first half. Once activity normalization is clear and monetary conditions start to normalize, there's increased likeliness of a correction. 2021 will most likely end as a 10-15% return year
6. Risks factors are plenty as always. In the last 50 years there has been 4 episodes of 40%+ declines and 9 episodes of 25%+ declines (MSCI World). On average one out of four years is a down year episode. March 2020 cleared the sky, but always be prepared for bad weather or road works.

This report is for inspiration and education only. Read the disclaimer slide in the end

2020 review

Covid-19 changed a lot of things in 2020. Check general media for comments and updates as they are much better for that than this roadmap

Siting in your locked down situation in mid March 2020 certainly proved that the roadmap for 2020 was completely wrong

A small blip on the risk map called 'pandemic' and with reference to 1957 pandemic was useful and made navigation easier

2020 was much more of a roller coaster than investors like, however the ride ended well for all long term oriented investors



2020 roadmap and what happened

The roadmap for 2020 (from mid-December 2019) assumed 3% global GDP growth, modest inflation and low interest rates. Corporate earnings were seen 5% higher and combined with low interest rates and continued flow of capital towards stock markets, the stock market returns was expected to be 7-13%.

The headline of the Roadmap 2020 turned out to be more accurate than the actual forecasts. The bull market continued most of the time in 2020 and measured in DKK global stock markets managed to get back to 'dry land' and finish 2020 with a gain of 5% (mid Dec 2020)

The illustration below shows earnings roadmap for Stoxx 600. The re-direction of roadmap is quite obvious and fortunately investors were rational and didn't throw everything overboard in the volatile days in March 2020.

The learnings from 2020 are many. Corporate agility turned out to be much better than one would have imagined. Despite significant declines in revenues management teams and employees managed to manoeuvre in a good way (mostly) and the reward has been higher credibility to corporate robustness in difficult times. Unfortunately, not all businesses will make it and there's a bill to be paid from bankruptcies once the dust settles.

Stoxx 600 roadmap. EPS per index unit



The horse race

Bill Miller, a renown US investor, made a very educating article in 2009 about odds in the so called Triple Crown i.e. winning the three most prestigious horse races in one season.

A very successful horse with several wins was about to make the Triple Crown. The horse had already won the first two races and odds was 77% that it would win the third race too and claim the famous price. If it won it would be the first horse in 30 years to win the Triple Crown.

The horse came in last and didn't get the Triple Crown....

The macro view showed that 29 horses had won the first two races over 130 years, but only 9 made the Triple Crown. And 8 of these did it before 1950.

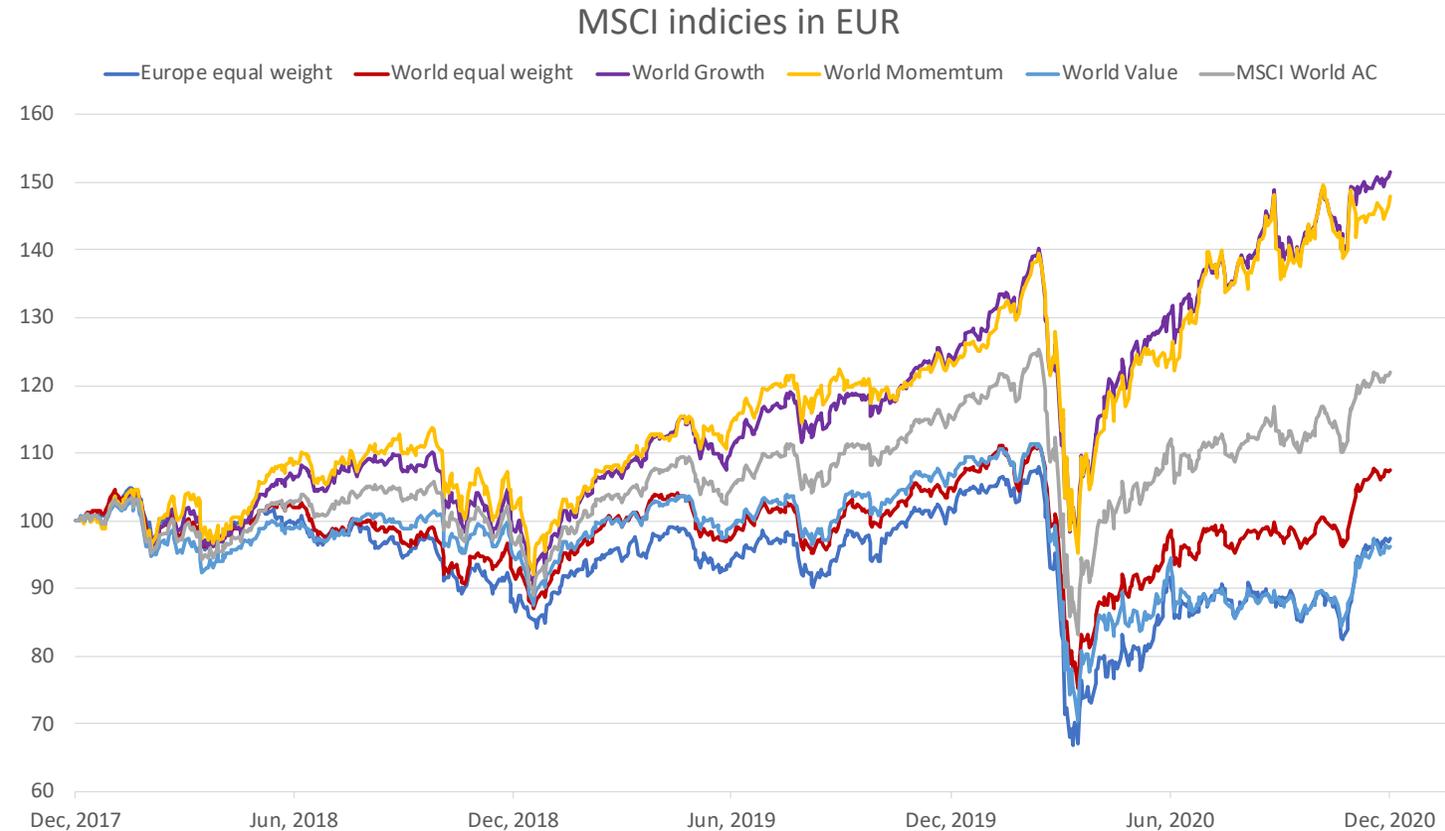
The odds of making Triple Crown was therefore significant less than 77% probability

Past winners are not necessarily the best odds for the future, so check the macro view before placing your bet

Preferences in the stock market

Since 2017 the best returns have been accomplished in Growth and Momentum. Driving on those two avenues even worked well including the sudden stop in March 2020.

Since the positive vaccine news in November 2020 the slow moving assets like Europe and Value have started to pick up. They will probably continue to do so into 1H 2021, but it doesn't make them sustainable long term winners. The stock market is long term forward looking and consequently the business areas with sustainable growth and good profitability will continue to be the winners.



10-15% return in 2021

With interest rates close to zero and inflation at 1% you lose future purchasing power on your risk free savings

The only liquid savings alternative is stocks, so stock price performance should be the key focus for investors

No-one knows how stock prices will move in 2021. However, the net present value of future cash flows gives a good indication of where things should change hands.

Each of us can have our own views, so feel free to choose your own fair value level of S&P 500 in the table below. Current level is 3.700 (mid December 2020)

S&P500 long term growth in earnings and discount rate in a negative real risk free rate world

		EPS growth rate					
NPV for S&P500		2%	3%	4%	5%	6%	7%
Discounting rate	3%	3321	3596	3901	4243	4625	5023
	4%	2996	3233	3497	3791	4119	4486
	5%	2714	2919	3147	3402	3685	4000
	6%	2469	2647	2845	3065	3310	3582

The run up and roadmap 2021 in one chart

Stock market returns in 2021 will likely be very good (up to 20%) in the first half. By summer 2021 the vaccine programs hopefully have their expected effect and economic activity gets back towards pre-Covid 19 levels. Consumer savings are high and normalization could unleash a consumption boom that force the central banks to slam the brakes. Tighter monetary conditions could cause a significant correction in valuations. By December 2021 the most likely outcome is a 10-15% return year



Traditional forecast

Going into 2020 the global GDP growth was expected at 3.3%. Covid-19 virus and subsequent lock-downs completely changed that roadmap. We leave 2020 looking back at a 4% slump on global activity and millions of people unemployed.

It will be a while before activity levels are back to the level before Covid-19 and inflation is unlikely to pick up until then.

Global GDP growth of 4.2% in 2021 would make 2021 one of the best years since 2000, but it will probably be 2022 before we're back to 2019 activity level

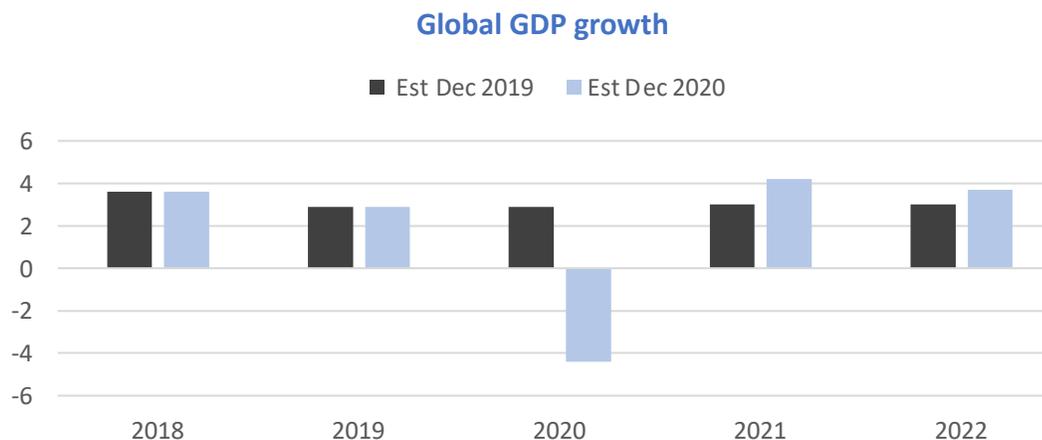
Interest rates will likely remain low in 2021 and 2022 barring a rapid and inflationary jump in consumption.

The glacier speed forces, like population growth and productivity, point to annual growth of 2% in the longer term. Hence, interest rates will probably stay low for very long

We could potentially see better productivity in the coming years as deep digitalization gets implemented and utilized

2021 numeric forecast

Global economic growth has been declining from 6% in 1960s to around 3% in late 2010s. Productivity and population growth points towards lower economic growth in the coming decades. The underlying growth in global affluence will however continue and with Emerging Markets in lead as those economies grow double the speed of developed markets



Key economic indicators	Size	2018	2019	2020	2021	2022
US GDP	19.5trl\$	3,0	2,2	-3,7	3,2	3,5
Euro area GDP	12.3trl\$	1,9	1,3	-7,5	3,6	3,3
China GDP	12.5trl\$	6,7	6,1	1,8	8,0	4,9
Global GDP	85trl \$	3,6	2,7	-4,2	4,2	3,7

Inflation rates						
		2018	2019	2020	2021	2022
US inflation		2,1	1,5	1,2	1,2	1,4
Euro inflation		1,8	1,2	0,3	0,7	1,0
China Inflation		1,9	2,9	2,8	2,3	2,1

Source: IMF and OECD and annual change in percent

Possible detours on the roadmap

Roadmaps are fine to give some sense of direction. It is however guesswork being very specific about road conditions along the route.

The middle of the road forecast suggest 10-15% return for global stock markets in 2021.

2020 earnings and 2021 projected earnings growth are almost useless as forecast tools. Using longer term normalized earnings and low interest for many years one gets to conclude the 10-15% return year simply as a function of continued capital flow to stock

A new significant driver for stock pricing is millions of private individuals seeing negative rates on their savings account. Their investment approach is not the traditional one you can learn in a business school. Trading costs are close to zero so this group is more active and momentum driven. Misallocation of capital could come from this group

Surprises and what to do

Event	How it unfolds	Action plan
Global stocks rise more than 25%	Millions of new investors enter the theater and bid up prices via index funds or direct investments	Enjoy the ride. Monitor frothy reverse signal indicators, common sense and government interaction
Renewable energy cost plummet and power gets less expensive	You can see the change from year to year but not from week to week. Science leaps fast forward so monitor new land winds in renewables space	Try to avoid traditional assets that most likely will be stranded in 2040 or 2050
US confrontatory policy towards China normalize and aggressiveness decline	USA gets back to normal and China become more globally responsible. Geo-political risk decline	Asian stocks will become less risky and Asian is the hottest market in 2021

Event	How it unfolds	Action plan
An unexpected revival of the virus and further lock-downs. Stocks correct 20% down	The virus spread mutates into a new version. Several industries goes into permanent lockdown and banks start to report huge loan losses on airlines, hotels etc	Monitor general media. Investments in travel, entertainment and tourism should be avoided or kept with low weight
Consumers splash out after being locked up and the economy overheat	Savings are record high and consumers want to travel and have fun. To avoid overheating central banks push up rates and stocks decline	Monitor consumption and economic indicators. Reduce exposure if growth exceed 5% and inflation exceeds 2.5%
Financial markets collapse due to algo/robot trading running amok	Daily trading is dominated by machine trading. It will happen as lightning from clear sky	Stock exchange authorities must pull the power plug from all connected computers and stop trading activities
Tax increases to fund Covid-19 slump	UK has already sounded the idea. It's a political process so takes time	Will reduce consumption or corporate profitability and put a stop to stock and housing markets for a while

Risk radar

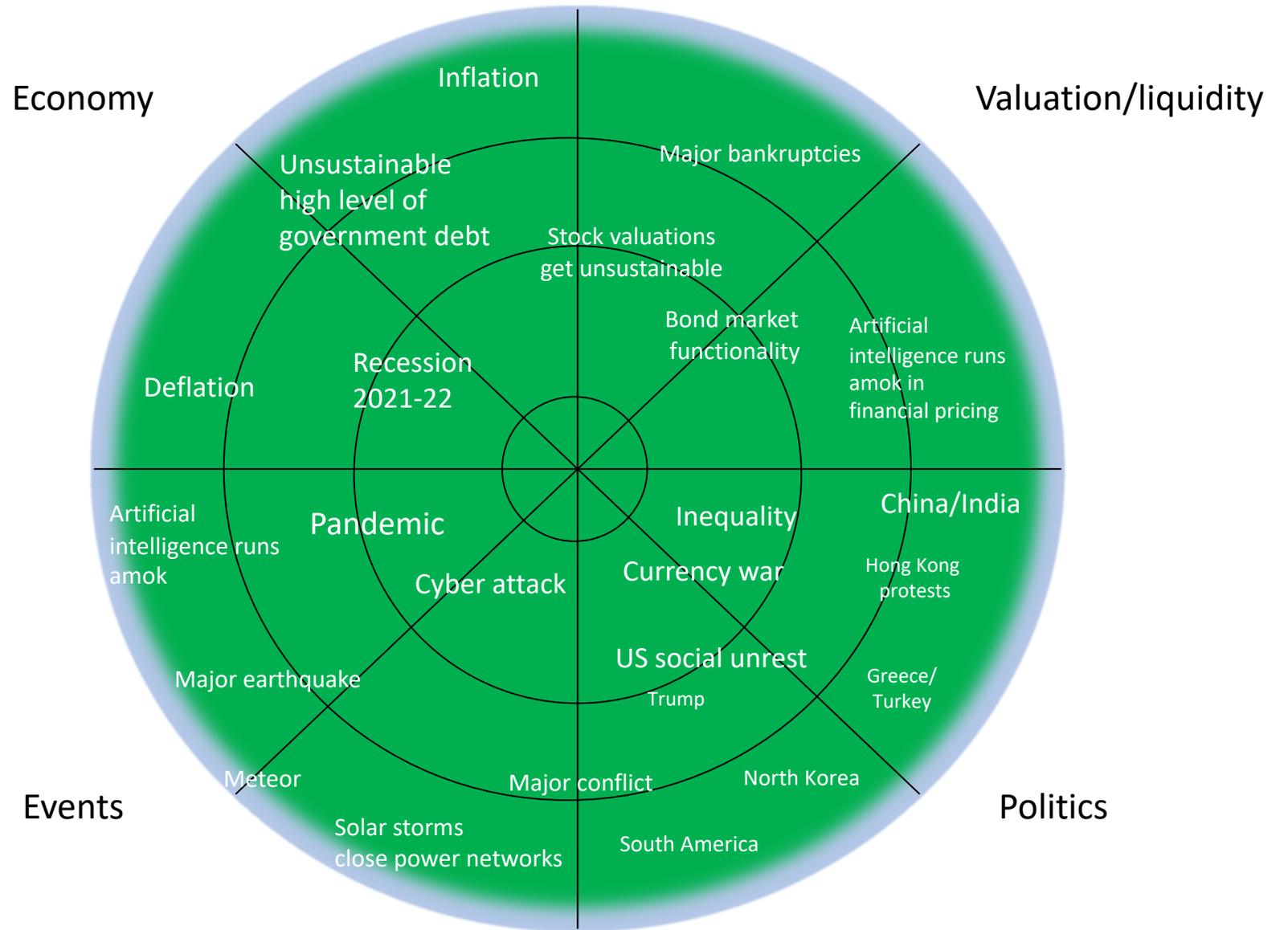
Risk is basically volatility. Real risk is the complete loss of capital (bankruptcy)

Larger decline episodes happen occasionally. Since 1970 there's been 4 episodes of 40%+ decline and 9 episodes of 25% decline. Prepare for bad returns approximately 1 out of 4 years

The factors that really move things negatively are;

- 1) Recession in economy or earnings. In many cases this factor is triggered after a period of too aggressive bank lending growth
- 2) Valuations get out of sync with reality and then normalize as seen after the TMT bubble in 2000
- 3) Shock to the system like war, terror or lack of trust in the financial system

The radar screen to the right gives some suggestions for risk factors to keep in mind





Deep digitalization roadmap for 2020s



The great innovation leap

Deep digital

The 2020s looks to be the decade where digitalization is applied into everyday life and it lifts productivity massively for the successful enablers.

The usage of deep digital understanding will gradually spread out to potentially all businesses. This in turn can improve their market position, operation costs and and increase ROIC. First movers will have most of the benefit

What we are about to see in 2020s have to a large extend been in labs and development for years. It's only now we've really figured out how to use it as convergence of technologies enable the full benefit

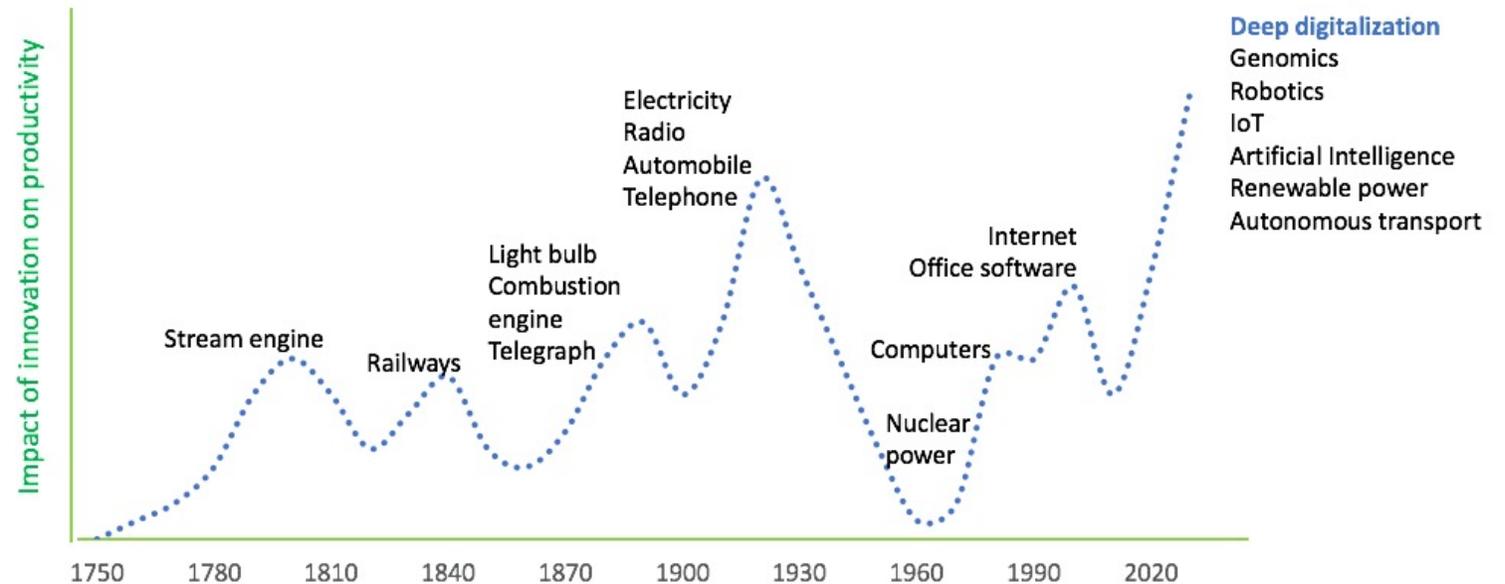
Singularity is getting closer



It takes time to work out how to use powerful new technologies effectively

The IT bubble 20 years ago was ridiculed by many investors as the animal spirits and hopes for enormous wealth took over from rational and fact based investment methods. Fast forward 20 years and the business ideas have developed into the most successful businesses in the world. In the next 10-20 years all kinds of new services and technologies will emerge based on convergence of technologies. Higher productivity will follow as illustrated in figure below

Taking a ride in a robotaxi in 2028 will not be a sensation unless it's your first tour



Own design inspired by history charts, books, findings on web and future surveys

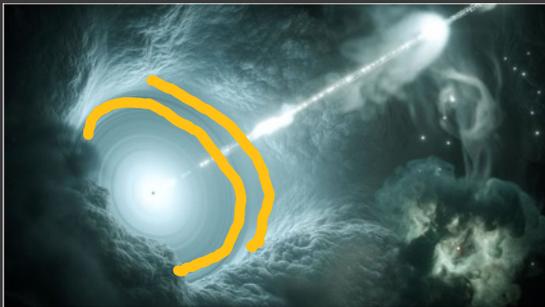
BRAIN revolution

In 2020 BCA, the Canadian research house, termed the developments in biotech, robotics, AI and nanotechnology as BRAIN.

It's a good term and emphasize that we have just started on a new journey for human kind

Within the next few years human kind will pass the 3 million barrier for scientific articles. It's a useful measure as it illustrates the vast accumulated knowledge made by humans

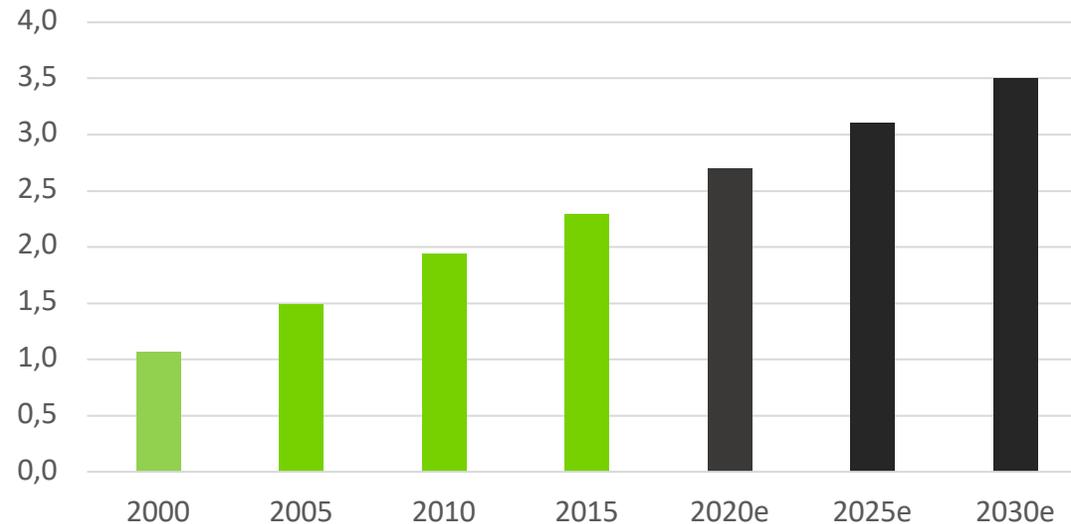
It's impossible for a single person to comprehend all that knowledge. So AI is going to play a vital role in future innovation and scientific leaps. And these in turn will bring new investment opportunities and new business clusters.



Science is the big driver behind innovation

Human creativity and innovation is the big driver for what shapes the development on our planet. On-one can claim to have the scientific paper for invention of the wheel or how to make fire. However since Newton wrote about gravity forces in Principa Mathematica in 1687 the about of scientific articles have exploded. In 2000 it passed 1 million and by 2030 it will pass 3.5 million. It will probably be 2035 before the findings in todays scientific research is translated into commercial business models.

Scientific and technical journal articles
In millions



Source for historical data: The World Bank

What a difference a year makes

In roadmap 2020 there was a section about electric vehicles and penetration rate of EV's going forward

Fast forward and only one year later the roadmap have changed significantly.

With the lockdowns the air quality improved and visibility got better. And lots of people used the lock down time to look for a new car and surprisingly many decided for EV or hybrid

Oh, and by the way, electric vehicles (EV) will be cheaper to make than diesel and petrol powered (ICE) cars by 2023

Volkswagen ID.3



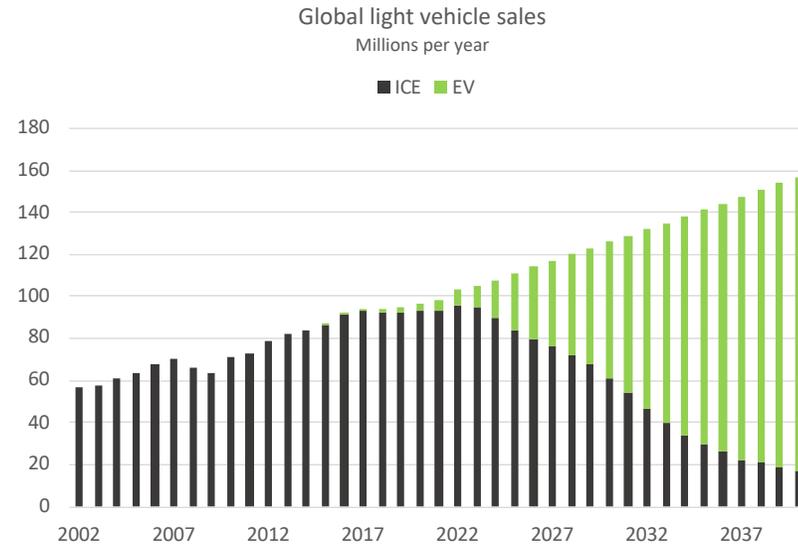
Global light vehicle sales profile towards 2040 has changed

The decline in global car sales in spring 2020 caused major disruption in all automotive related industries. During summer 2020 car sales recovered and with the interesting observation that 35% of all new car sales in Germany were EV or hybrid powered vehicles. And unless there's a very strong rebound then 2019 looks like peak year for internal combustion engine (ICE) car sales.

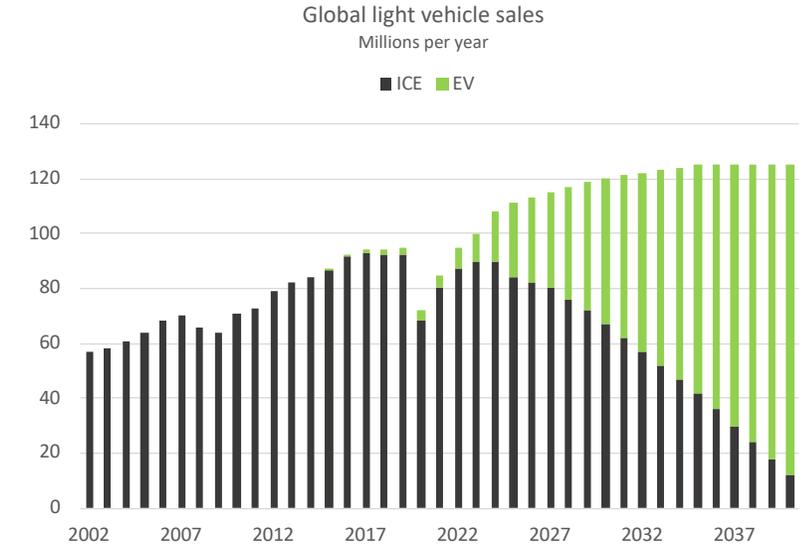
The roadmap for light vehicle sales towards 2040 has also changed from peak unit sales 140 mill down to 125 mill. This is caused by estimated increased use of vehicle sharing models and robotaxi's coming on to the streets in 2023 and onwards.

For the large auto manufacturers it's a change process from being a auto manufacturer to become a mobility service provider. Let's see how that plays out in the coming years

Roadmap 2020



Roadmap 2021



A brand new market

The global market for light vehicles was 2.800bn USD in 2019 and with Toyota and Volkswagen as the biggest with 10% market share each

The automotive market is well defined and regulated, so new players seldom show up in that game. At least until Tesla and several Chinese EV makers came to market in 2010s.

Slide 12 showed how global automotive sales are expected to flatten out at 125 million units per year. The puzzle of the future is how the traditional automotive will adjust and be relevant in a mobility service economy

Robo-taxi's and robo delivery services will free up billions of hours wasted in traffic jams. Consumers use their car 45 minutes per day can free up car ownership costs for a 'price per kilometre' that is estimated to be 50-75% below the ownership price, hence releasing means for other kinds of consumption

Buckle up and enjoy the ride !

Self driving cars and mobility services

Autonomous cars and robotaxi's is a very very small market in 2020. It is until today difficult and dangerous to have a 1.5 ton machine drive around on public roads as the technology and security is not good enough. It has not been possible until semiconductors, sensors, radars, cameras etc are at a reliability level, where they are today.

Self-driving cars is the crown-jewel of convergence of technologies.

Now it's coming now and it's going to be a big market. KPMG estimates that the intelligent transportation market will be 24 billion USD by 2024. And by 2040 the self-driving / robo-taxi market is estimated to reach 2.500 billion USD from nothing in 2019.

In 2021 the expected volume of robo-taxi's to go onto the roads is 50.000 units. In 2023 robotaxi's will move around in plain sight in all major metropolitan areas. More self-driving units will ease congestion and indirectly improve productivity.

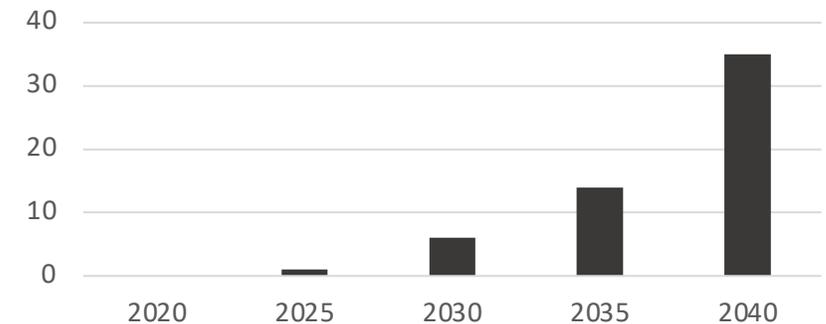
Taking a ride in a robotaxi in 2028 will not be a sensation unless it's your first tour

Transportation time becomes more productive



Source: Infineon 2 minute video about self-driving future [link](#)

Number of self-driving vehicles on the roads
In mill units



Source: IHS Markit

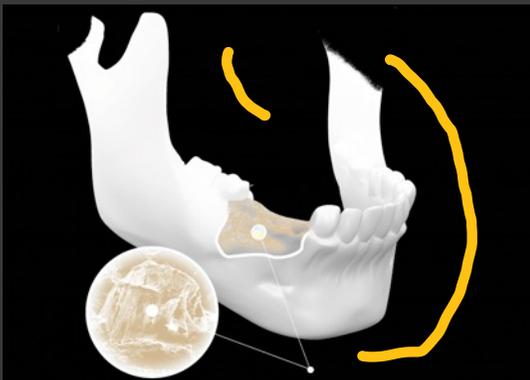
New economic clusters

The changes that are about to happen for transportation is just one new industry that will form the 2020s

The convergence of technologies has not been able to happen until the components for the processes was in place. And that happens to be something that is taking off now

3D printing had a strong start in 2010-13, but the sales growth faded as the scalability of local 3D printing didn't compete with mass-production in Asia shipped to the market. 3D printing has become better and in 2020 about half the 3D printing is mass-production and the other half being project-printing.

3D printed 'spare-parts' for humans



3D printing, exoskeletons, edge computing. New economies grow everywhere

Deep digital is moving fast. You only need to watch a Boston Dynamics YouTube video below to see the change over the last couple of years to find out how fast and by how much robotics improved. Roll it forward to 2025 or 2030 and it's easy to imagine the rescue job on the beach is supported by a robotic viewer to monitor dangerous situations in the water.

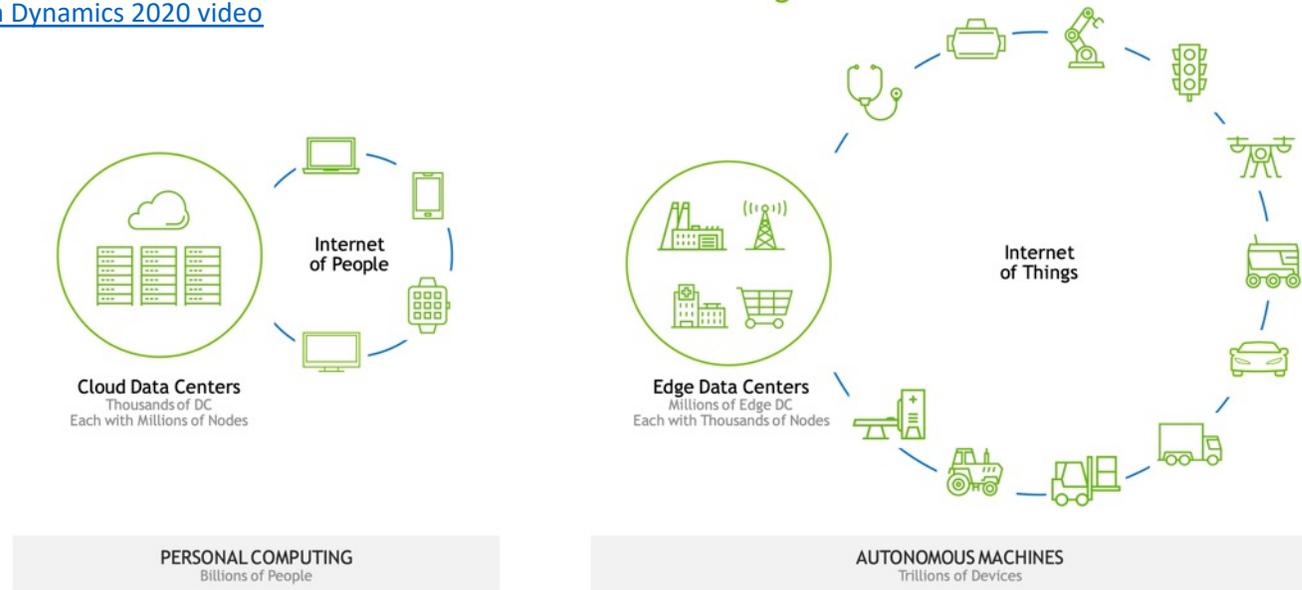
Edge computing is one of the next evolution steps in humanity's digital journey. By putting powerful processing and storage closer to end users, it will deliver the ultra-low latency the killer apps of today and tomorrow require. The connected devices generate data and need to be processed and used. Ericsson sees the total market worth 8.000 billion USD in 2030 as everything starts to work together and run by machines and software.

[Ericssons report on connected future](#)

[Boston Dynamics 2020 video](#)

THE AGE OF AI

From Cloud to Edge



Genomics

In 2019 the global market for cancer treatment drugs was 145 billion USD. And it is expected to grow to 310 billion USD by 2026. That is just the cost of the drugs and on top comes hospitalization, lost income for the patient etc.

A 25-year old have annual healthcare costs of 1.000€, a 50-year old is at 2.000€ and an 75-year old is at 7.000€.

The increase in more people in need for healthcare makes prevention and early treatment even more valuable



Deep digital

Analysing DNA data is complex and requires ultrafast computer processing. Hence the genomics structural growth hold wider perspectives for software and semiconductors too

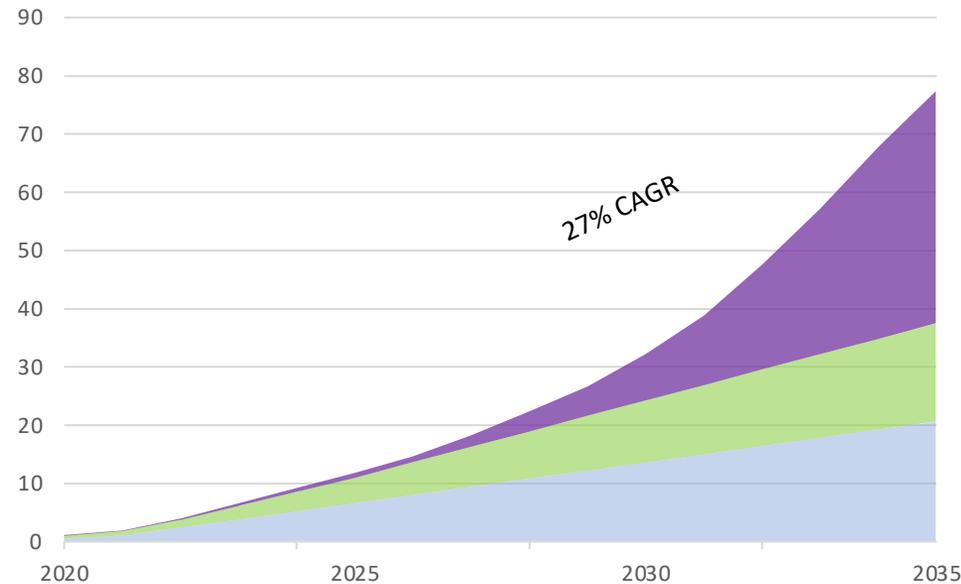
Genomics – digitizing biology

Next generation DNA sequenced oncology detection will take off in 2020s as the cost of genome sequencing have declined from 100 million USD to 1.000 USD. And it will decline further going forward

Genomics sequencing has only come within economic range in recent years. Opening the box of information in our genes to prevent diseases is a valuable way to prevent diseases early and to improve life quality. As example; it's estimated that hemophilia will genetically be eliminated by 2040. Some individuals will probably oppose giving DNA, but it is the least costly way forward to improve health standards via prevention rather than treatment in a society facing ever increasing healthcare costs due to larger part of population in the expensive category.

Cancer screening and treatment with genomics profiles

Revenues in billion USD



Screening

150 million tests of population with increased risk profile

Selection

7 million tests for population diagnosed with cancer

Monitor

20 million tests for response check and recurrence check

Source: Illumina

An ocean of data

A self-driving vehicle generate 4.000 GB of data per hour when it drives. Most of the data will be thrown out shortly after use and only a small part will be stored for analysis

A human genome sequencing requires 100 GB of data storage. As gene sequencing costs decline the data storage need for the healthcare industry rise exponentially

All the stored data need to be somewhere and there's in late 2020 541 hyperscale data centres globally.

By 2023 data centres are estimated to be the biggest electricity consumer in the world

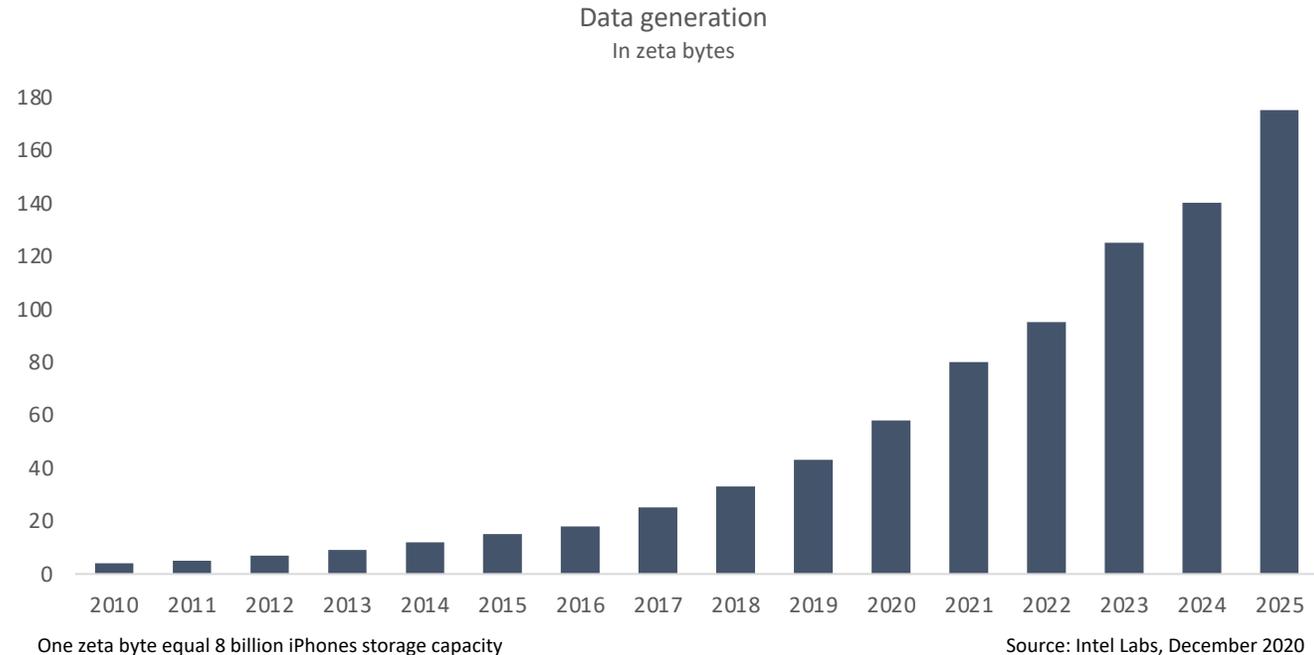


Data generation, analysis and understanding is set to explode in volume

We are generating data at a faster rate than our ability to analyze, understand, transmit, secure and reconstruct in real-time

We will have billions of connected devices and generate intelligence and decision-making data for how to do things better. The amount of data is massive as seen in figure below.

It takes time to work out how to use powerful new technologies effectively and in 2020 it's still a bit unclear how all the generated data will add value. In the previous slides there was a few examples of how data pile up, so here's the accumulated annual data generation;



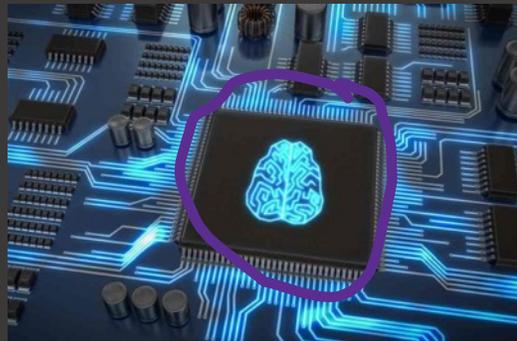
Semiconductors

The little thing that makes the wheel go around

Deep digitalization can only happen with evermore fast semiconductors

Processing and storage of data is a critical components to get the whole thing moving

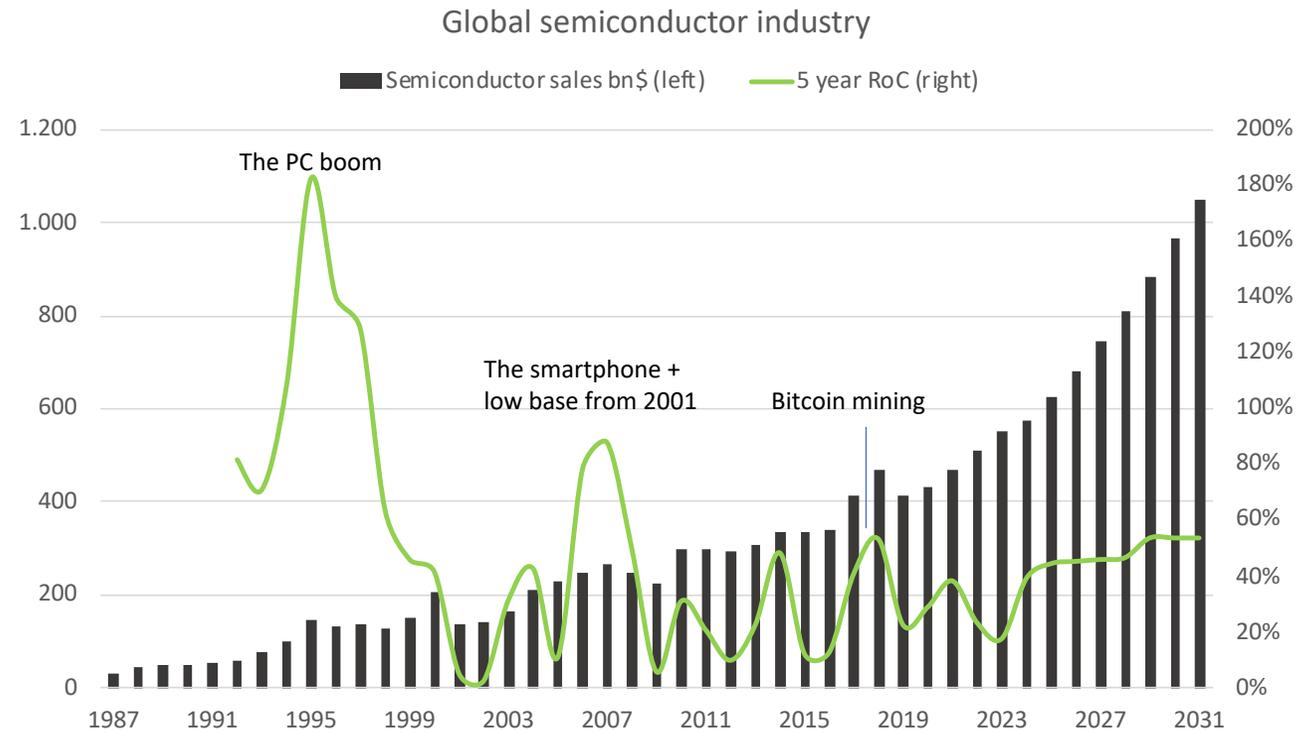
Investors that do not bother to spend much time on where to invest in the deep digitalization transformation can simply invest in a semiconductor index fund. That provides exposure to the key components and solid growth for the next many years



Deep digital transformation is driven by semiconductors

Deep digital is moving fast and so is development in semiconductors. State of the art fabs are testing 3 nanometer bandwidth. And from there they can't shrink more, so next chapter is 3D layered and integrated systems on chip (SoC). Apple has just launched their M1 SoC chip and according to experts is the best ever

The industry used to be fragmented and with volatile earnings. Over the past 20 years the industry has consolidated and in the memory space (25% of total market) it's three players and in processing (20% of market) it's also three players.



Power needed

2020's will be recognized as the decade where digitalization changed things dramatically. Electric cars that drive by themselves, screens that write what we say and digitalization of genes/ molecules will speed up the healthcare industry to unprecedented pace. And many more things.

5G, IoT and all the other abbreviations are middle stations along the route towards deep digitalization

It will require computing power, semiconductors, electricity and new infrastructures that will create new industries that have a size of 10% of the global economy today.

As example, Ericsson forecast the 5G evolution will be a 8.000 billion industry by 2030 or equivalent to 10% of the global economy today

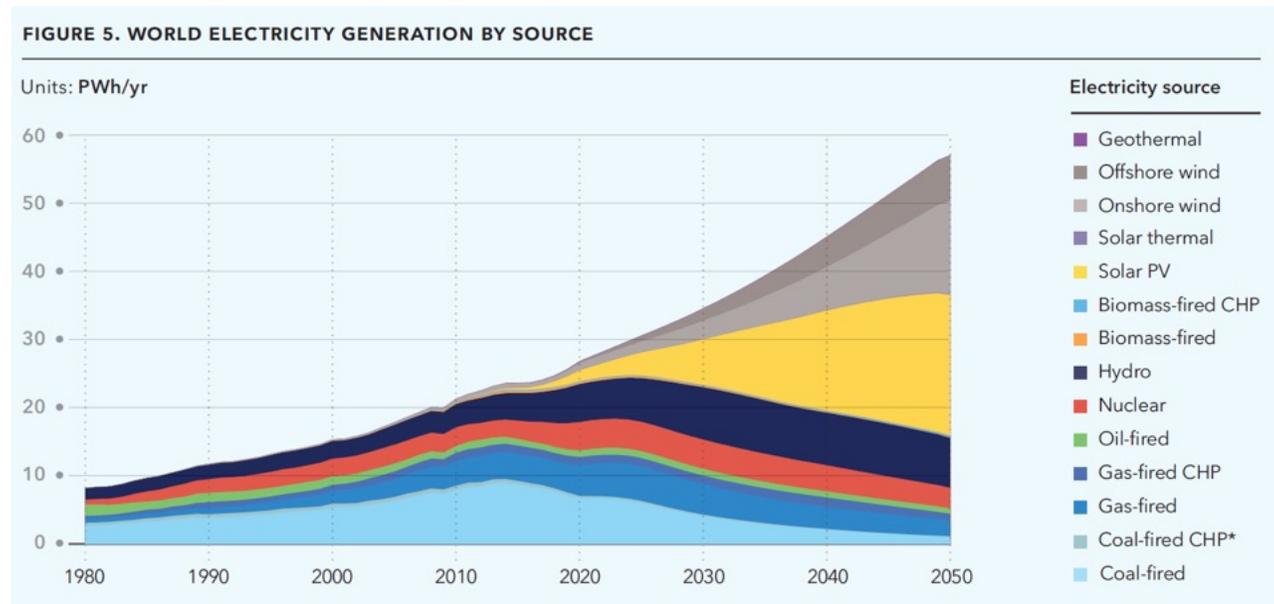


Deep digitalization is going to triple electricity demand over the next 30 years

Try to think back on how many electric/digital devices you had in 2000 or 2010. You probably had a mobile phone and a PC. Now its not unusual to have smartphone, iPad, laptop, robotic lawn mover and lots of digital displays in your house and car. And you're going to have many more going forward.

There's a common denominator for all the digital devices; they use ordinary power i.e. electricity that comes out of a socket. Various energy forecast platforms agree on the power demand curve going forward, but when it comes to the source of the power, they vary a lot. Renewables energy is going to be the big winner. And the journey has already started.

For investors, the challenge is many of the companies feeding into the renewable power future have high sales growth, low profitability and high valuation. The solar power bubble of 2005-08 is a good illustration of the valuation risks in that segment. Hence, AC Vision Fund gets exposure to this very interesting transition via companies that indirectly benefit from the trend. Hexagon Composite hydrogen activities is such an exposure.



Source: DNV

One more thing

2019 might have been 'peak oil' year.

Humankind needs massive amounts of more electricity going forward as the automotive sector goes from fossil fuels to renewables power sources.

Trucks, ships and even aeroplanes will move to hydrogen from green sources and hence demand for fossil fuels will decline

When and by how much is difficult to predict, but the direction is clear

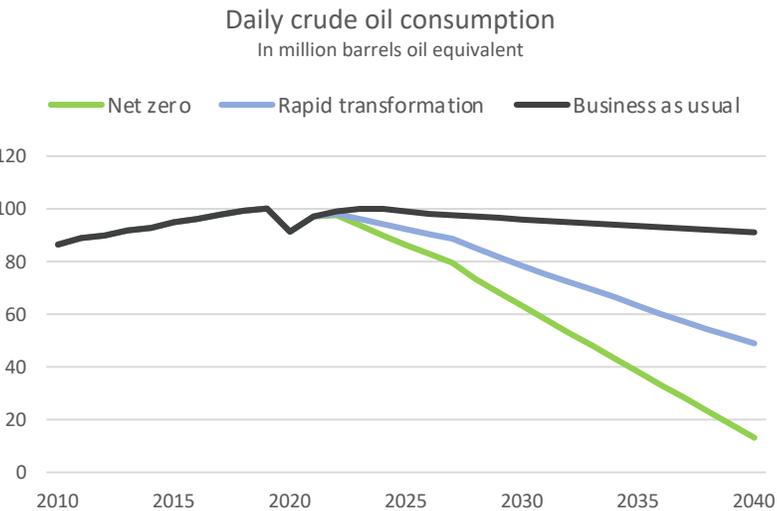
The cost of renewable power has declined significant in the last few years and the economics of renewables do not work in the favour of fossil fuels



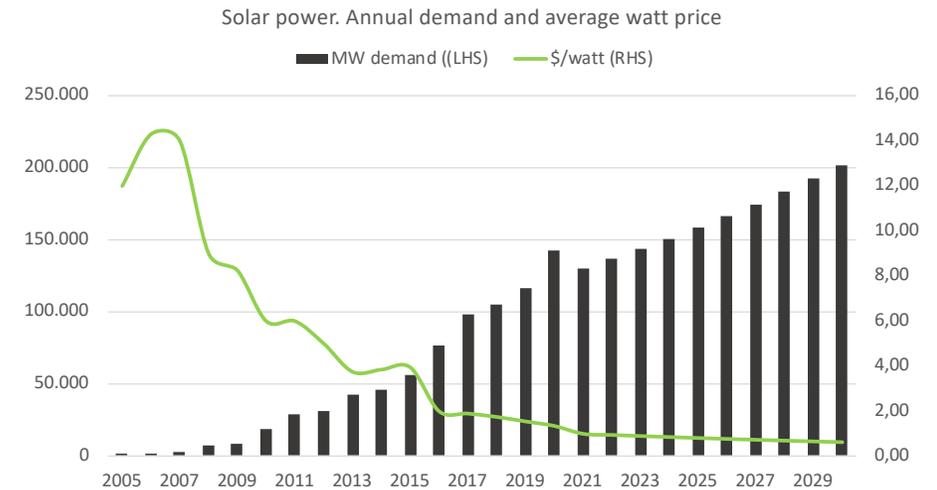
Fossil fuel is toast

The past 100 years humankind has expanded transportation, heating, electricity generation with the use of fossil fuels with some unwanted consequences for global climate. The innovation and science put into renewable energy sources have at long last become commercial and economic. And with current cost structures and forward efficiency gains the renewable power space will gain even more share.

The annual investments in oil & gas exploration and production is 500 billion USD. The annual investment sin new solar and wind power is around 280 billion USD. The previous slide showed how it looks for electricity demand and sourcing going forward. All said, natural gas will continue to be relevant for many more years, and oil for production is various chemicals including plastics will provide a lower limit to how much the market can decline



Source: BNEF





Regional views



A new game plan in China

The China-US trade rhetoric's started to get tougher in 2017. In late 2018 and during 2019 the Trump tweets got even more confrontatory. And in 2020 USA has banned Huawei, the largest Chinese tech company, from buying essential high tech components from US and its allies.

Covid-19 started in Wuhan in China and Trump has not missed a chance to call it the China virus.

When the two largest economies in the world treat each other as we're witnessed the last couple of years you need to pay attention.

In the last week of October 2020 China Communist Party held its 5-year plan meeting. And its even stretching to 2035 on some parameters

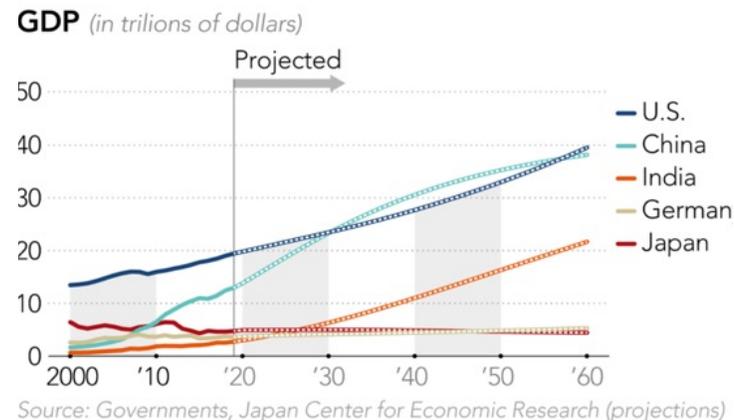


Chinese five-year plan change the game plan

In late October 2020 most of the media focus is on Covid-19 spread and the US presidential election. Below the radar was the 14th China Communist Party meeting to sign off the next five-year plan.

The key components in the plan are;

1. Stimulate and grow domestic demand in China. In essence less dependability on economies and trading partners outside China
2. Build and expand the Chinese technology sector. Less dependance on US and Taiwan made semiconductors, software and other critical components in a digital economy
3. Invest in renewable future and China aim to be carbon zero in 2050. Lots of new solar/wind power projects as well as smart grids for distribution of the power
4. Gradually opening China capital markets as a key source of global funding and trading. The Yuan will sooner or later be a free float currency
5. No specific GDP number was announced, but observers think its around 5% growth per year. With that pace China will overtake USA in this decade



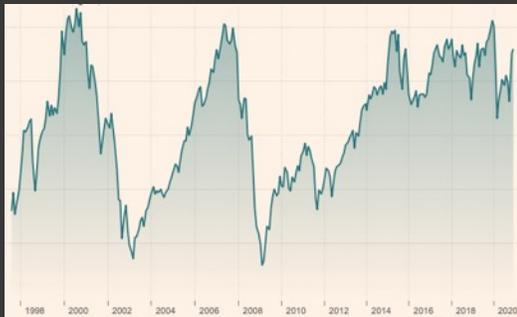
Can Europe come back?

Europe is seen as the most dysfunctional major region in the world. EU is seen as bureaucratic and slow moving and Brexit have exposed the cracks in the system

The debt levels in some countries are unsustainable, however with ECB given a mandate in 2020 to issue ECB bonds there might be light at the end of the tunnel. At least for the cost of servicing the debt

Major reforms are needed in education, healthcare and pensions, so it's a complicated political process. Not much is factored in of a success, but Europe could surprise on the upside once things gets moving

European stock prices (ex dividends) have not performed much since 2000

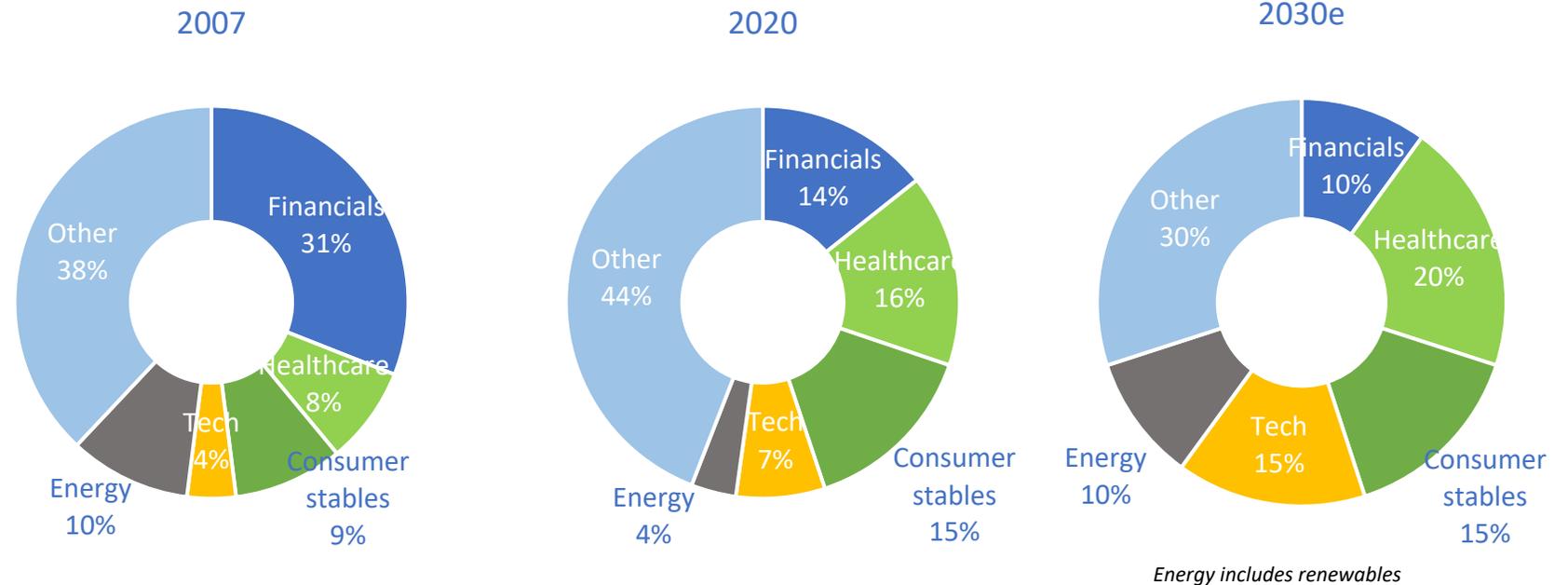


European stocks are at same level as 20 years ago

Europe has a lead in several sectors such as healthcare, selected technology segments, renewable energy and luxury goods including high-end cars. These sectors are characterized by 5-10% growth, which can't see on the index level as financials and energy have faded year in and year out. The dynamics of growth vs no-growth will change the face of Europe going forward. Given Europe is successfully move forward in higher growth and good profitability areas then EPS for Stoxx 600 could reach 50.00€ by 2030 (implies annual growth of 8% per year from current normalized EPS of 23.50 €)

The 2030 sector composition would justify an 20x multiple (5% earnings yield) in a low interest rate environment and hence the upside for Stoxx 600 is 1.000 vs the current 400 level

European sectors over time



USA

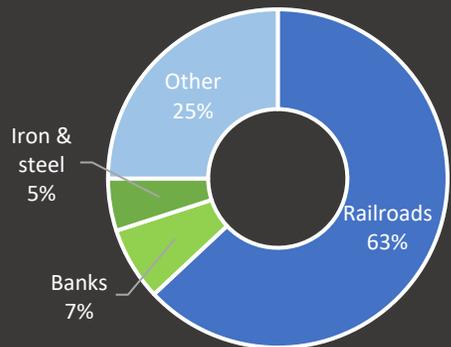
USA has the highest stock market exposure to deep digitalization.

And they will probably keep that lead position for the next many years

The US market is the most dynamic as the market forces change things faster than in other regions

The growth in tech is a good example of that, but the value added to not land equally so with the increase in wealth is USA there's been a increase in inequality. See the risk radar

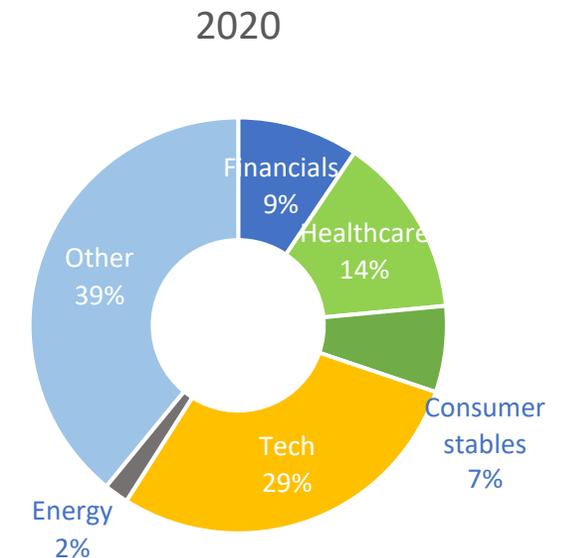
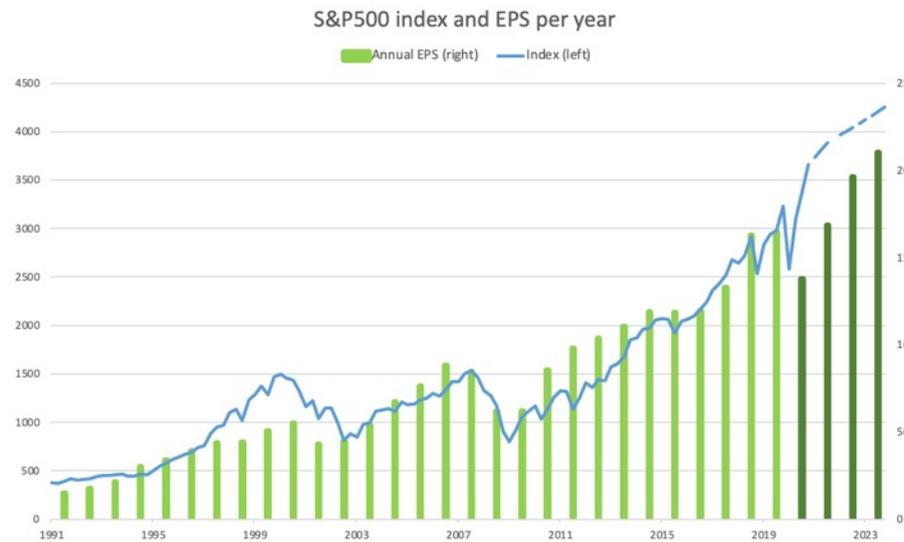
Just for historical comparison check the US when it was still considered an emerging market in 1900:



USA is the global drum beat with almost 60% of global market cap

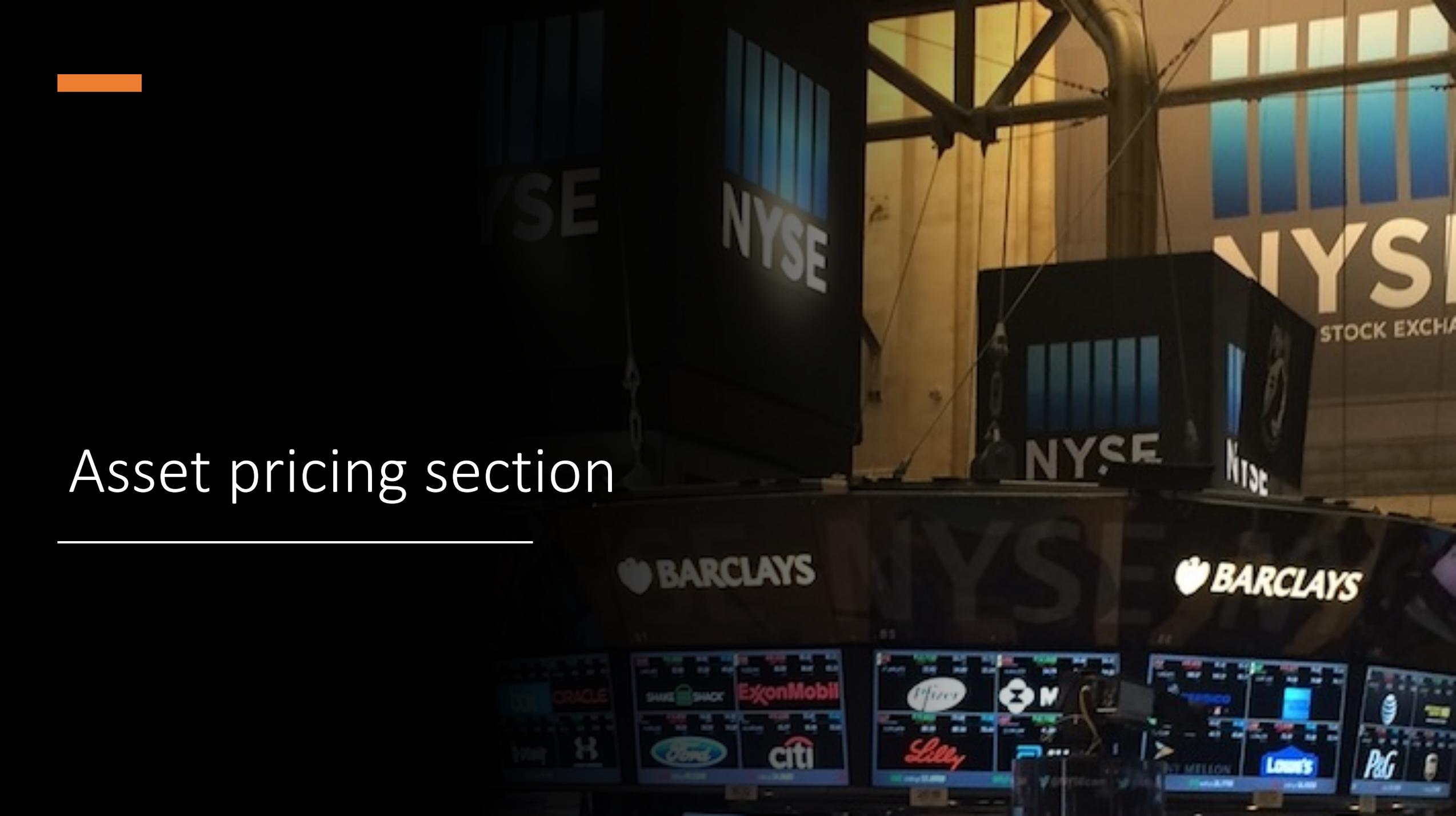
Over the past 30 years S&P500 earnings have grown 9% per year and the index is up 8% per year plus dividends. The composition of S&P500 was completely different in 1990 as the largest companies were IBM, Exxon, General Electric and Philip Morris. By end 2020 the largest components are Apple, Microsoft, Amazon, Alphabet and Facebook. And Once Tesla is included on 21 December 2020 it's among the top 5.

The dynamics in S&P500 reflect how the US market evolves over time. In 1958 the average life time of a company in S&P500 was 61 years. In 2020 it's 18 years. McKinsey forecast that by 2027 a staggering 75% of the current 500 companies in the index will have left the index.





Asset pricing section



Slower pace ahead

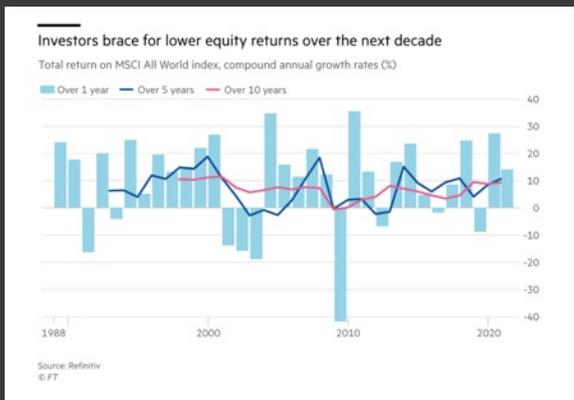
Economic growth can be decomposed into three factors;

1. Population growth
2. productivity growth
3. price increases

The same factors form corporate revenues and earnings.

Global population growth is around 1%, productivity growth is 1-2% and price increases are 1-2%. So at best we're looking into a future with 3-5% nominal growth, which translates to the same pace for growth corporate revenues and earnings.

5% annual return for 2020s seems to be best guess. That's half of what investors are used to in the last 10 years



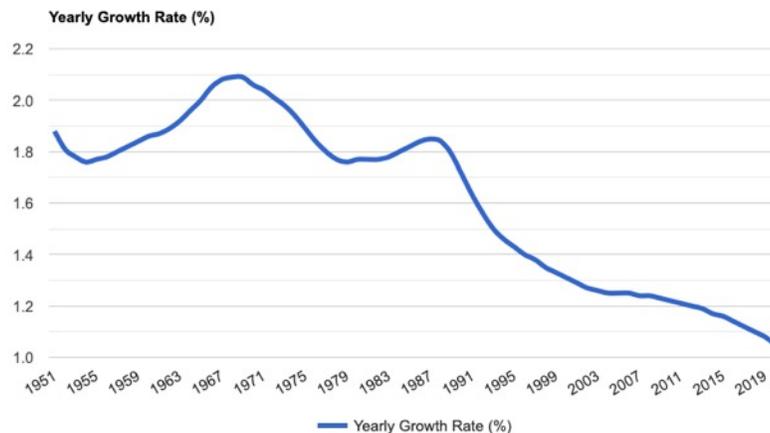
Lower returns for the next decade?

In the past 50 years annual returns in the stock markets have been 8-10%. Earnings have grown 6-7% per year in the main indices of the most elite companies. Interest rates have declined from above 15% in early 1980s to below zero in 2020 – a decline that has motivated capital to move from bonds into equities.

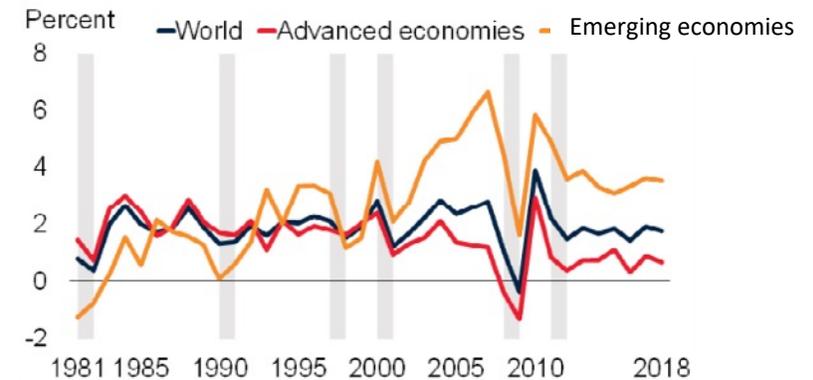
Several studies and surveys find that investors should brace for lower returns going forward and there's growth and earnings;

1. **DWS**, a German asset management company with 760 billion € under management, forecast a nominal return of 5% per year for MSCI World for the next decade
2. **JP Morgan Asset Management** forecast 5.4% for US equities
3. **GMO**, a Boston based asset management company, forecast negative returns for almost all major asset classes in the next 7 years....

Population growth (% per year)



Productivity growth (% per year)



An opportunity for higher returns

One thing is modest earnings growth, another thing is how the absolute earnings are discounted into fair value levels for stock prices

The history shows investors want a margin of safety of 4-5% i.e. when risk free rates are 2% then equity investors want 6% or equal to a P/E of 16.6x

There's millions of retail investors that are fed up with negative interest rates on their savings. It's easy to trade and invest on a smartphone app and 2020 has proven to be the year for break through for the retail investors.

And these investors don't care about risk premium of 2% or 10%. They just want good returns

If risk premium is reduced to 3% from the current 5% it would generate a bull market that would take the major indices up 50-70% from current levels

There's obviously no certainty for this happening, but keep an eye open in that direction

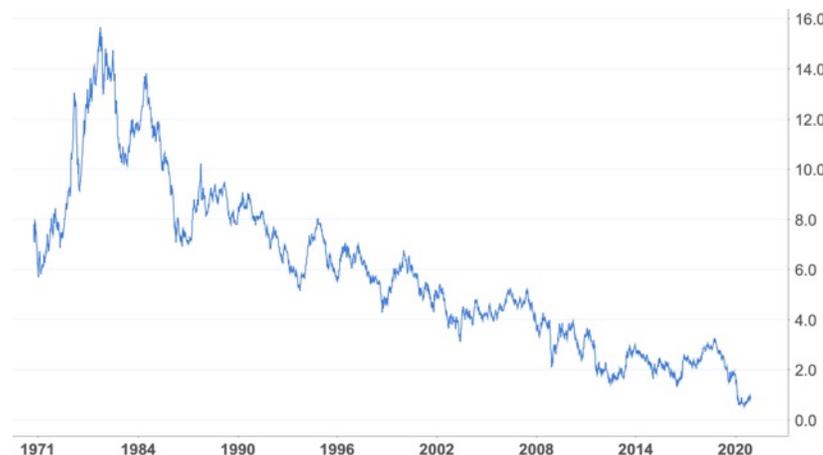
Risk premiums are anchored views

2020 is characterized by the deepest global recession in modern times and yet stock prices are at record highs. Media is full of stories that stocks are way too expensive and a major crash is imminent. A major correction might well come with little warning. It would require millions of investors agreeing at the same time that things are terribly wrong. A global recession and a pandemic could not trigger such a sentiment move apart from 10 weeks around March 2020, so one have to wonder what it will take to kill the bull-market

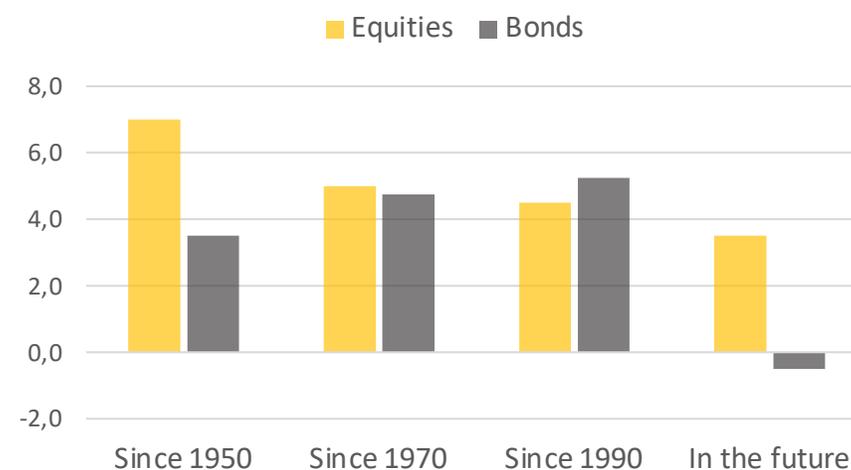
In a evermore digitized world corporate management teams get data about operations almost real-time and can adjust were needed to optimize the performance. As such the risk factor is less of an issue than 20 or 50 years ago when market reports where show and often inaccurate.

There's another risk. Real interest rates are minus 1-2%. If that change bonds are going to be a lousy investment and the lower risk premium scenario will not become a reality.

US 10-year bond yield since 1971



Global annualized real returns in %



Source: Credit Suisse Annual Return Book, 202 and Martin Wolf, FT

The risk of overpaying

Investors are in general optimistic people. And often investors get caught in FOMO – fear of missing out.

No-one have 100% visibility of the future. But in order to pay more than 10x sales for a business that's valued at more than 5 billion USD the underlying business has to provide solid growth for the next 10 and 20 years.

In late 2020 there's 400 companies globally priced at more than 10x sales and valued at at least 5 billion USD. A record.

All 400 will not make it, so one have to very selective when looking for investments in that pool

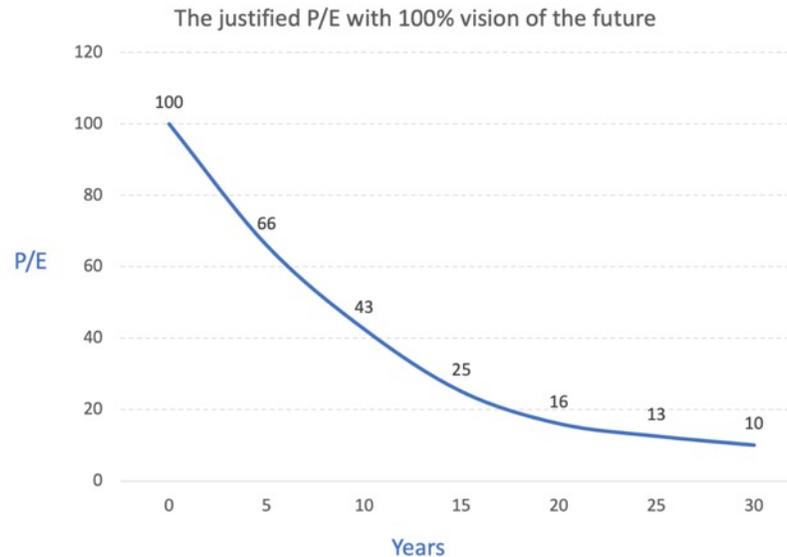


The P/E 100x curve

If risk premiums decline i.e. P/E levels rise from the averages observed for the past 20-50 years a lot of traditional investors will sell as they don't get their margin of safety.

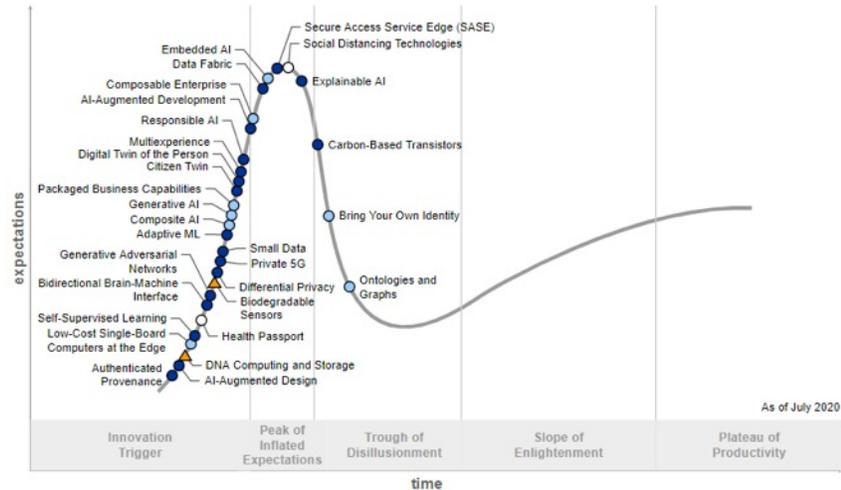
However, imagine you have 100% vision of the future i.e. you know with 100% certainty how the future will be. A company that is small today, but you know it will be very big in 20 years, would be worth much more today than you would normally consider reasonable.

Investors being more comfortable with lower valuation hence tend to flock into mature businesses. In a rapid digitizing world that can be a very dangerous route as lots of the traditional businesses risk being run over by newer and more relevant business models



Source: Own design

Roadmap for new businesses towards 2040



Plateau will be reached:
 ○ less than 2 years ● 2 to 5 years ● 5 to 10 years ▲ more than 10 years ✖ obsolete before plateau

Source: Barclays

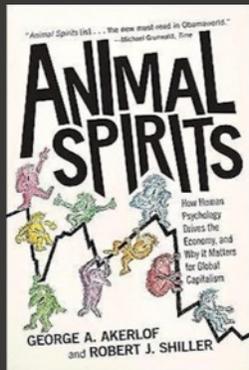
Herd mentality

Financial markets history is full of bubbles and busts, which in its core boils down to the animal spirits in humankind

The tulip bubble in Netherlands in 1636 serves quite often as example of the insanity and mass delusion of an asset that grows out of the ground

How to use the herd mentality to potentially generate outstandingly good returns?

Be early at the potential party that is in most cases an asset class promising big changes to our future. Be patient even when things seem to get crazy. Never over-expose as the valuation collapse risk is big



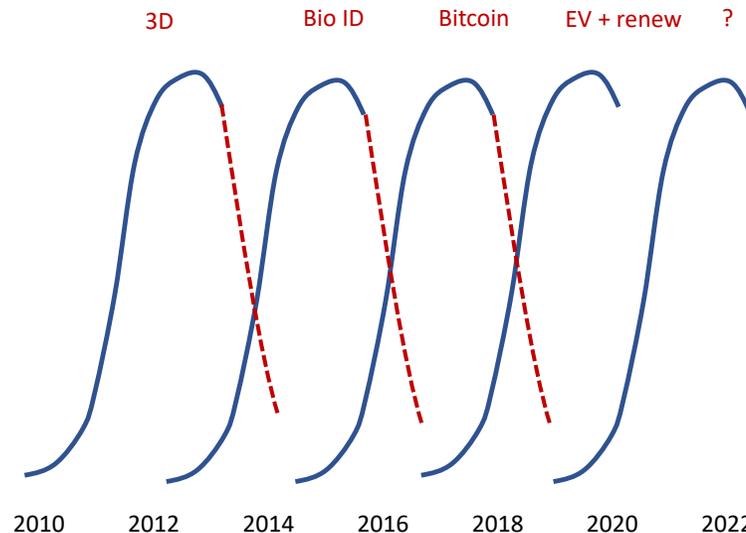
Thematic bubbles

There's absolutely nothing wrong with a good party unless you arrive very late and end up doing all the cleaning

A 'party' in the stock market is often only seen by more investors once prices are up 1-2 times in a relatively short period of time. That triggers curiosity. If the prospects for the asset are seen as good then the party continues as more investors flock to the party.

Some parties are years in the making until they suddenly roar ahead like electric vehicle (Tesla, Nio etc) and hydrogen related stocks did in 2019-20. The previous multi-bagger parties in 3D printing, biometric ID (Fingerprint Cards a.o.) and Bitcoin had subsequent declines of 60-90%. So don't go all in if you're late at the party

5-10x the money in 1-2 years bubbles



Nel ASA and Tesla in the past 2 years



Can stocks predict the future?

Stock markets are often labelled as unpredictable and crazy.

The underlying driver for long term direction of stocks is earnings. Put in another way; it's the old story about the stage coach and the dog in a long leash. The stage coach (earnings) drives from A to B and the dog (the stock market) is all-over the place but tied with the leash. It can never too far away and in the end the dog also move from A to B.

Time will show if the valuation increase in Apple since 2019 is substantiated with new high-margin revenue streams in the coming years.

The Apple roadmap includes several new products and services not seen before



Apple as illustration of financial markets predicting ability

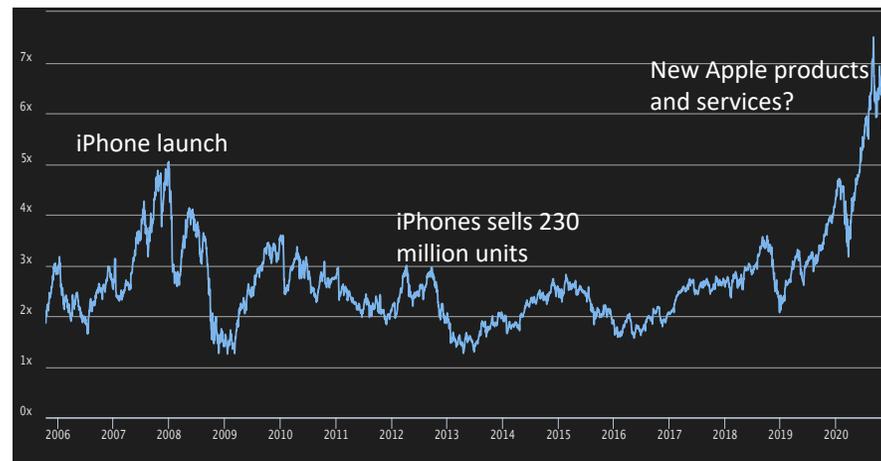
Apple with 2.2 trillion USD market cap is the largest company on that measure in the world. The journey to that point has largely come from the fact that Apple iPhones launched in 2007 with 1 million units sold have moved to a platform of 250 million units sold annually plus a whole range of adjacent products and services.

When expectations were high for iPhone sales in 2007 Apple trades at 5x EV/sales. As the market grew and growth matured EV/sales declined. In 2019-20 the EV/sales ratio has picked up again – why? It only makes sense if there's new large revenue pools coming to Apple in the coming years. There could be an element of index-fund inflow pushing up Apple, but it's more likely a reflection that Apple is moving into new areas:

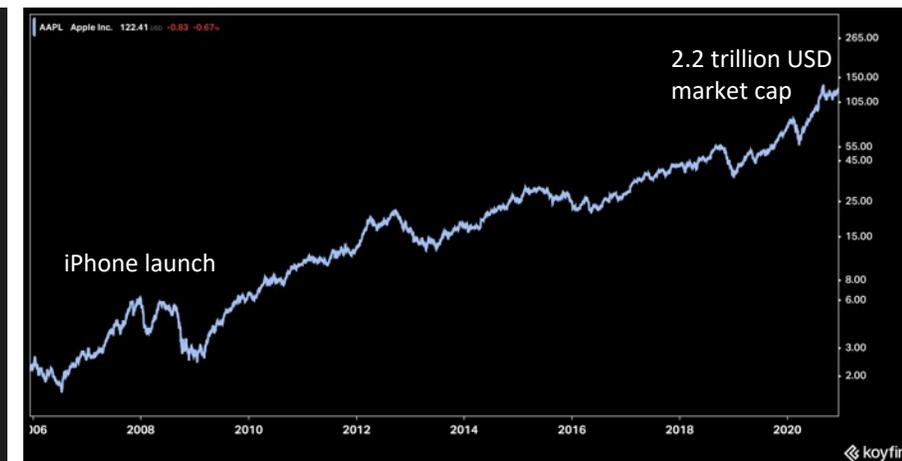
- 1) Apple M1 chips is the best integrated chip ever made according to experts. It launched in 4Q 2020.
- 2) Apple Pay as a financial services arm can take on the traditional banking industry with a huge revenue pool
- 3) Apple rental model of hardware, software and content, which makes Apple 'own' the customer

Time will tell if the market is right about the Apple business for the next 5-10 years

Apple EV to sales since 2006



Apple stock price since 2006



One more thing

If you find this presentation of interest please do not hesitate to reach out

For corporate strategy, investor relations profiling orlsaglas pls contact

www.nordic-investment-partners.com

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www.advicecapital.eu

Key investment view towards 2030



Economic pace in 2010s have been highly dependent on fiscal and monetary stimulus provided in the aftermath of the 2008 crisis. The stimulus have however created imbalances such as government debts. This will probably continue even as it gets beyond sustainable in some countries



Global economic growth has been declining from 6% in 1960s to around 3% in late 2010s. Productivity and population growth points towards lower economic growth in the coming decades. The underlying growth in global affluence will however continue and with Emerging Markets in lead as those economies grow double the speed of developed markets



There's nothing wrong with modest GDP growth, but many investors have been accustomed to 8% annual earnings growth, while the realistic forward growth is more likely to be around 4-5%. Dividends of 2% comes on top. Annual swings are likely to remain in the 15-20% interval, so the occasional declines will continue



In an investment world on those conditions Advice Capital Vision Fund focus on identifying companies and business clusters with unique multi-year structural growth drivers and then invest in these when growth/profitability/valuation triangulation justifies it. The investment focus in Advice Capital Vision Fund is on identifying, holding and harvesting multibaggers based on these principles. Good stewardship and ESG applies to the companies invested in.



The traditional business and inventory cycle still applies, so from period to period growth and inflation will change. In a world with evermore data and analytics the efficiency of eco systems will likely reduce the magnitude of economic swings as end-to-end value chains reduce slack and inefficiency. Risks of financial mis-allocation of capital is the same

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