



Economic activity report

Spring 2019

Kristoffer Eide Hoen and Anders Wettre
Skøyen, 11 March 2019

About Veidekke's economic activity report:

- Updated forecasts for production/revenue in construction and civil engineering through to the end of 2020
 - Thoughts concerning driving forces and uncertainties
- Macroeconomic forecasts from recognised economic analysis institutions
 - The IMF, the Swedish National Institute of Economic Research, Statistics Norway, the Danish Economic Councils, central banks, Almi, etc.
- The forecasts for the contracting market are prepared by Veidekke on the basis of
 - Automated data capture from statistics agencies, Macrobond and Veidekke
 - Digital models for forecasting
 - Internal observation points across Scandinavia

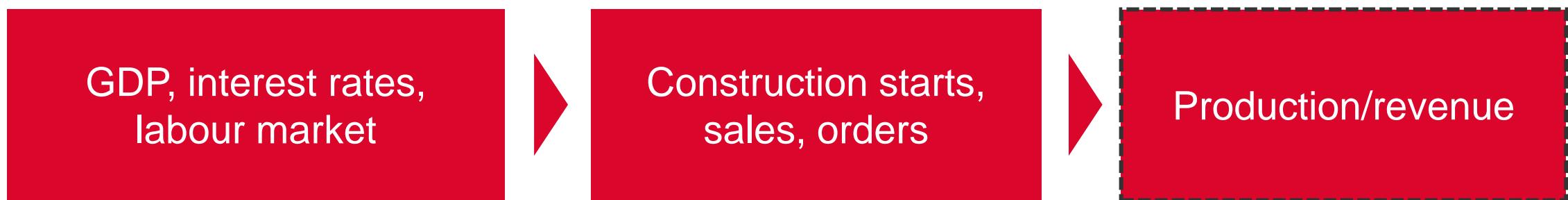
The report outlines expected developments in the Scandinavian contracting markets for the period through to the end of 2020 but does not reflect Veidekke's expectations for the Group's own development during the period.

Forecasts for contracting markets 2019–2020



Forecasts for contracting markets 2019–2020

Indicators:



Forecasts for contracting markets 2019–2020

Indicators:

GDP, interest rates,
labour market

Construction starts,
sales, orders

2019 2020

*Visibility/predictability
as per March 2019

Agenda

- 01 **Market drivers**
- 02 Main features of the contracting markets
- 03 Sector review
- 04 Summary

Global economy

Increased uncertainty about the future, but steady forecasts

GDP growth

Figures in %	2016	2017	2018	2019	2020
Euro zone	1,8	2,4	1,8 (2,2)	1,6 (1,9)	1,7 (1,8)
Germany	1,9	2,5	1,5 (2,2)	1,3 (2,1)	1,6 (1,5)
UK	1,8	1,8	1,4 (1,4)	1,5 (1,5)	1,6 (1,5)
US	1,5	2,2	2,9 (2,9)	2,5 (2,7)	1,8 (1,9)
China	6,7	6,9	6,6 (6,6)	6,2 (6,4)	6,2 (6,3)
Global	3,2	3,8	3,7 (3,9)	3,5 (3,9)	3,6 (3,8)

Comments:

- Somewhat lower growth 2019–2020
- Interest rates have fallen
- Uncertainties: financial markets and international trade
- Effects in Scandinavia:
 - Primary scenario is positive and stable
 - Risk factors:
 - Global decline in confidence and risk appetite
 - Small currencies vulnerable to turbulence

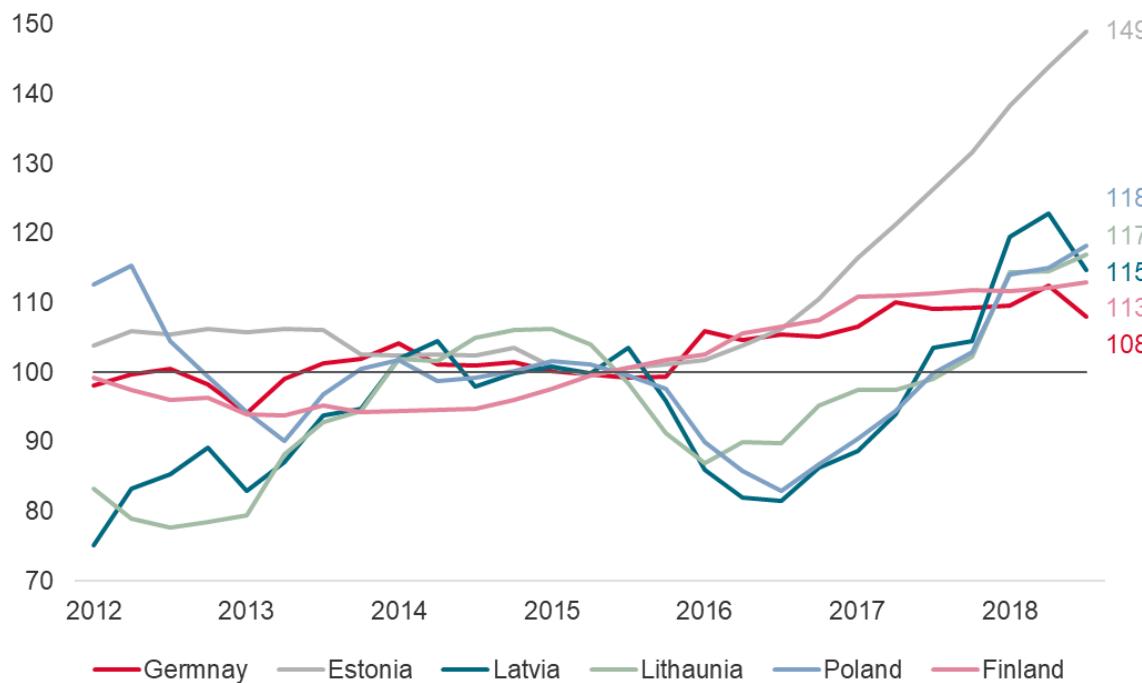
Source: IMF

Global economy

Economic upswing in the Baltics

Production index construction and engineering, Baltics excluding Sweden

Index, 2015=100



Source: Eurostat

Comments:

- Economic upswing in the Baltics
 - Macroeconomic forecasts indicate an ongoing upturn until the end of the forecast period
- Effects in Scandinavia:
 - Shift in labour immigration, especially in Norway
 - Higher prices and increased delivery times from this region

Macro-perspective, Scandinavian countries

In brief

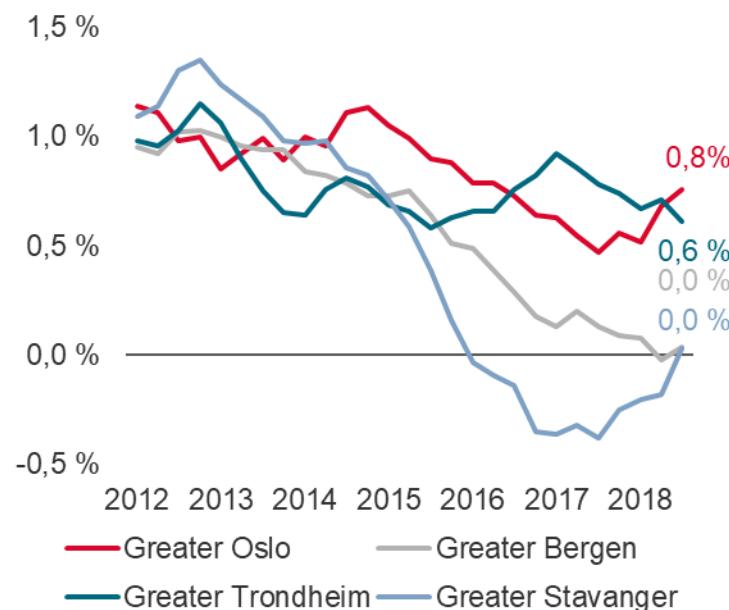
-  “There are prospects that the **upturn in the Norwegian economy will continue**, but slower growth abroad and a flattening of petroleum investment later in the projection period will likely pull down growth further out.” Norges Bank, 12 December 2018
-  “The economy is now entering a weakening phase, **although the economic upturn will continue** for the next two years.” Swedish National Institute of Economic Research, 19 December 2018
-  “We anticipate **continued positive growth** in the Danish economic, at the rate of approximately 2 per cent annually. However, there are increasing risks in the economy. These cut both ways, but there is particular reason for vigilance with respect to the risk of overheating.” Danish Economic Councils, 4 December 2018

Immigration to major cities

Important indicators in several construction markets

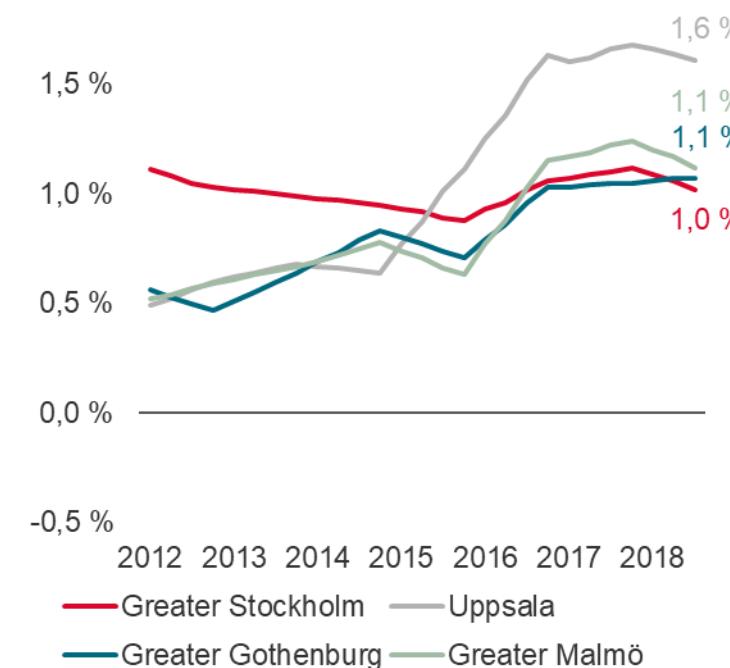
Net immigration Norway

Percentage of population



Net immigration Sweden

Percentage of population



Comments:

- Norway: positive trends in several urban regions in the autumn
- Sweden: high growth in 2018, but buyers of new residential units are not “newcomers”
 - As in the preceding years, immigration accounts for growth
 - Has contributed to a fall in median household income growth since 2016
- Approx. 40 per cent of population live in and around the capital cities or largest metropolitan regions

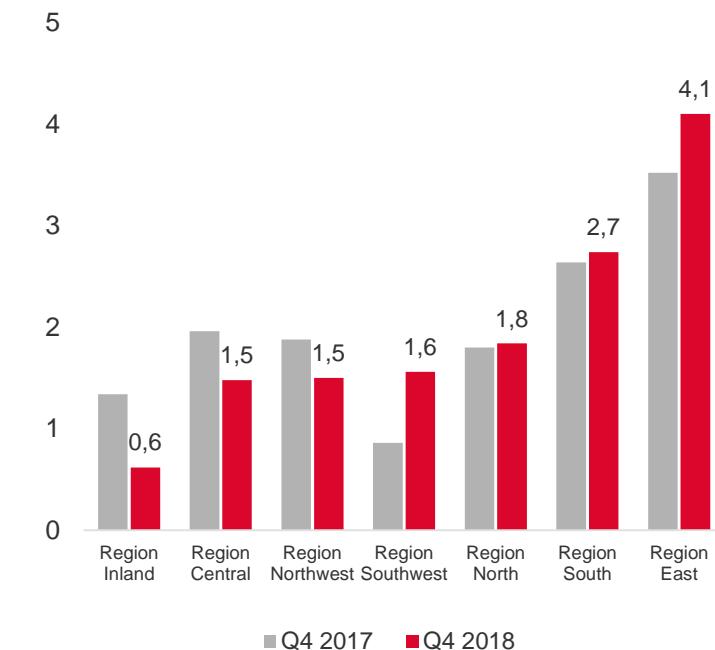
Sources: Statistics Norway, Statistics Sweden and Veidekke's market data

Regional differences in the Norwegian economy

Smaller differences than a few years ago

Production growth by region

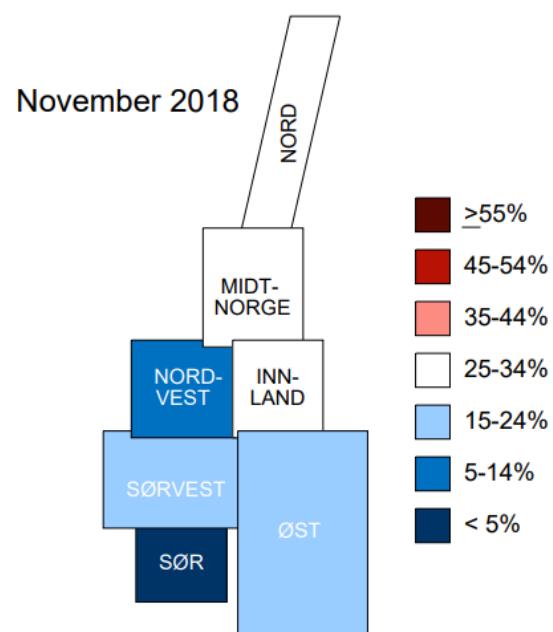
Last three months, converted into annual growth



Source: Norges Bank

Access to labour

Businesses facing a labour shortage*



*Proportion of contacts replying that access to labour is limiting production

Comments:

- More even economic situation across the regions
 - High growth in eastern Norway
- Good labour capacity in all parts of the country
 - Most reports of labour shortages from construction and engineering

Agenda

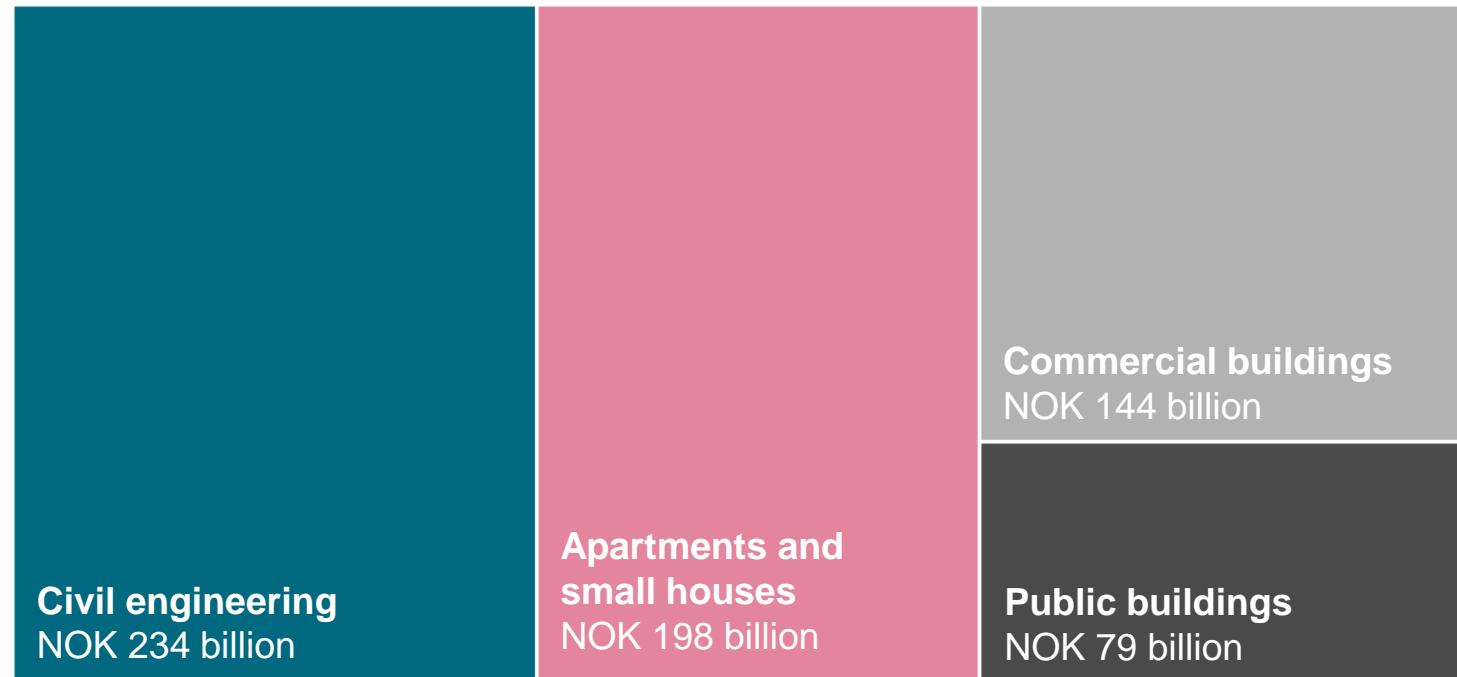
- 01 Market drivers
- 02 **Main features of the contracting markets**
- 03 Sector review
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Scandinavian contracting markets

Dominated by civil engineering and apartment blocks

Contracting market 2018

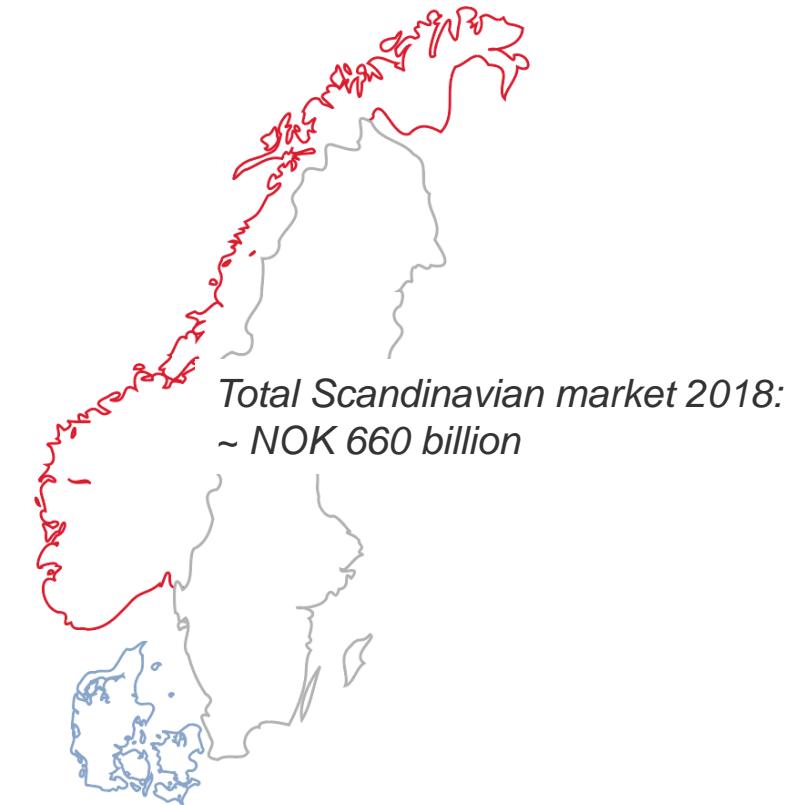
Production of buildings* and infrastructure in NOK billion



Sources: Statistics Norway, Statistics Sweden, Statistics Denmark and Veidekke's market data

13

* Residential units: All new builds, rebuilds and additions, excluding detached houses and holiday homes.
Commercial and public buildings include an estimate of the transparent rehabilitation, reconstruction and additions market for projects sizes > NOK 20 million.
Civil engineering only encompasses new builds.



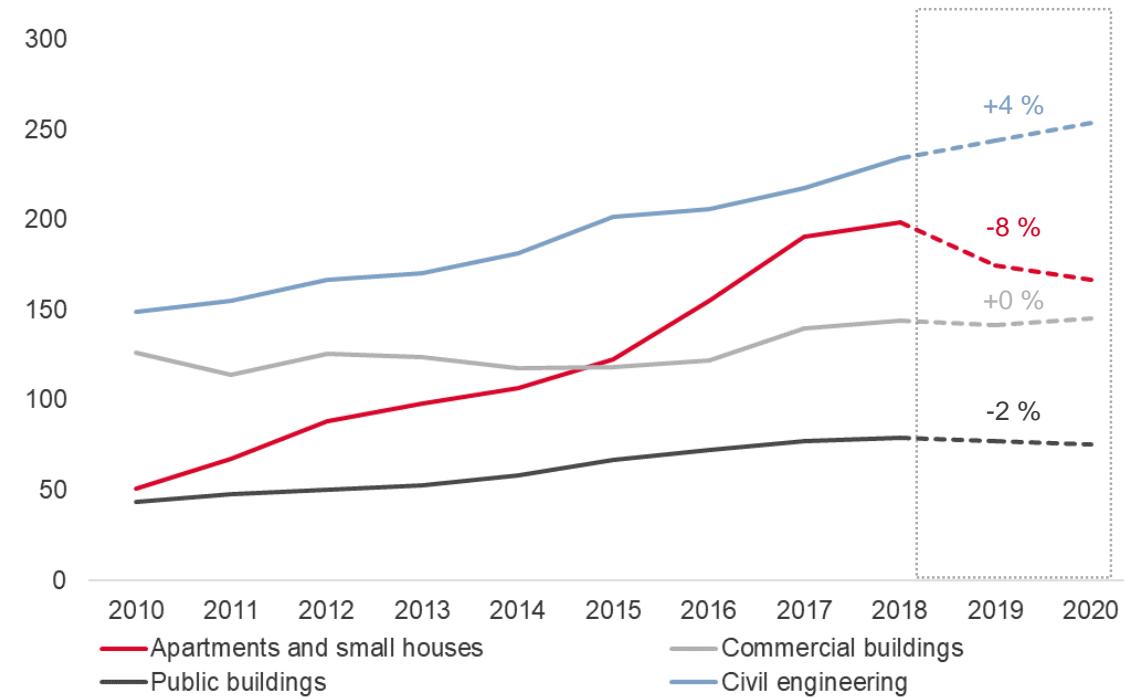
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Scandinavian contracting markets

Mild downturn from a high level

Contracting markets, annual production

NOK billion



Sources: Statistics Norway, Statistics Sweden, Statistics Denmark
and Veidekke's market data

CAGR 2018-2020

Comments:

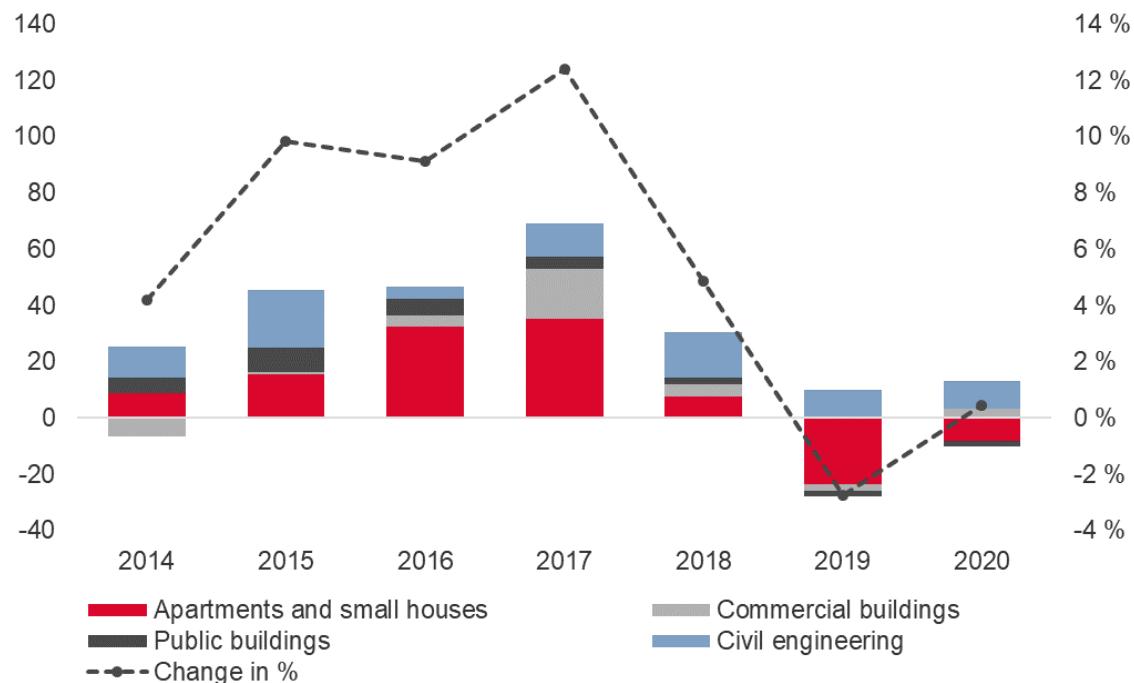
- Strong historical growth with capacity challenges in several contracting sectors
- The contracting market as a whole is well-positioned for a moderate downturn

Scandinavian contracting markets

Apartments are the key swing factor

Contracting markets*, annual production

Contribution to change in NOK billion, by sector and total in percent



Sources: Statistics Norway, Statistics Sweden, Statistics Denmark and Veidekke's market data

*Revised data from Statistics Denmark for 2014–2017 have entailed some changes in historical figures

Comments:

- Reduced apartment construction in 2019 and 2020 will have a dampening effect
- Adjustment of forecasts
 - Revision 2014–2017
 - Increase for 2018
 - Moderate decrease for 2019 and 2020

Forecast for contracting markets:

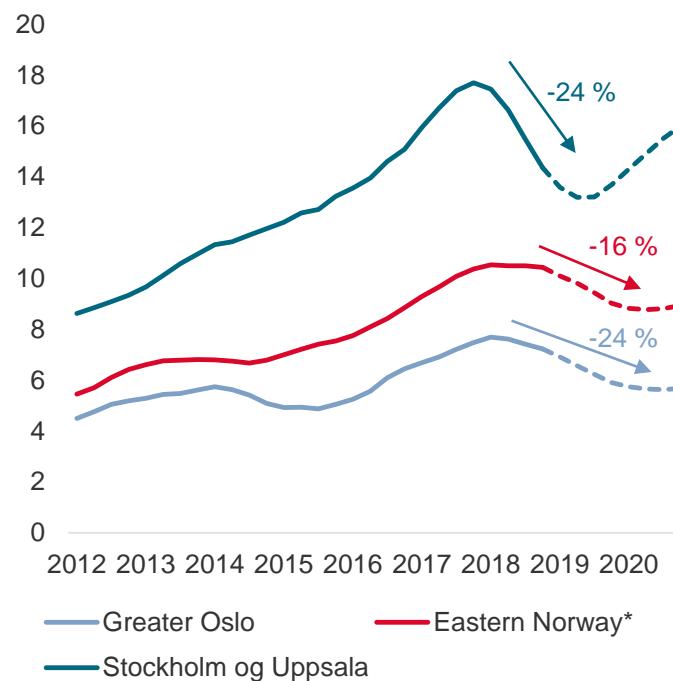
Report	2018	2019	2020
March 2019	5%	-3%	0%
September 2018	2%	-1%	4%

Geographical differences in building construction

Varying short-term prospects

The biggest players have peaked...

Quarterly production, building construction, NOK billion

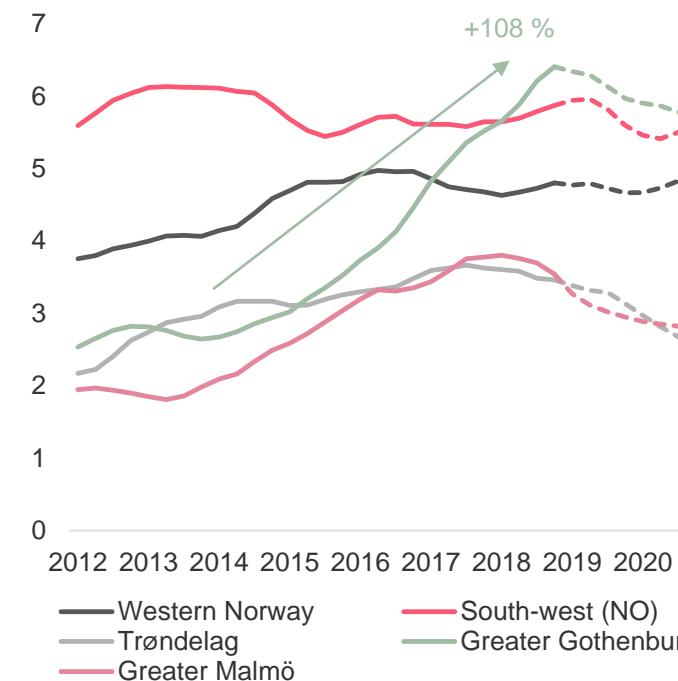


Source: Veidekke's market data

* Excluding greater Oslo

...mixed results for the second tier

Quarterly production, building construction, NOK billion



Comments:

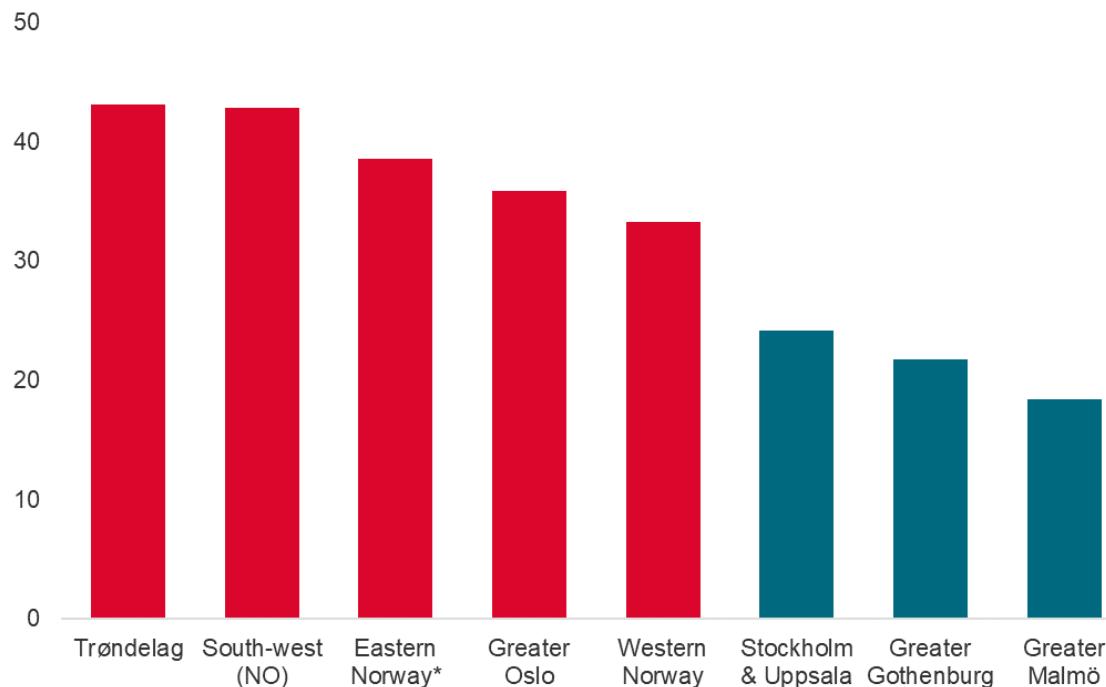
- Stockholm starts trend, followed by Oslo region
- Mixed picture in other major cities
- Less pressure in the largest building construction markets

Geographical differences in building construction

Significantly higher production in Norway

Per capita production in 2018

NOK 1000



Source: Veidekke's market data

* Excluding greater Oslo

Comments:

- Far greater construction activity in Norwegian cities in relative terms
- Economic situation powered by the petroleum sector probably a material causative factor

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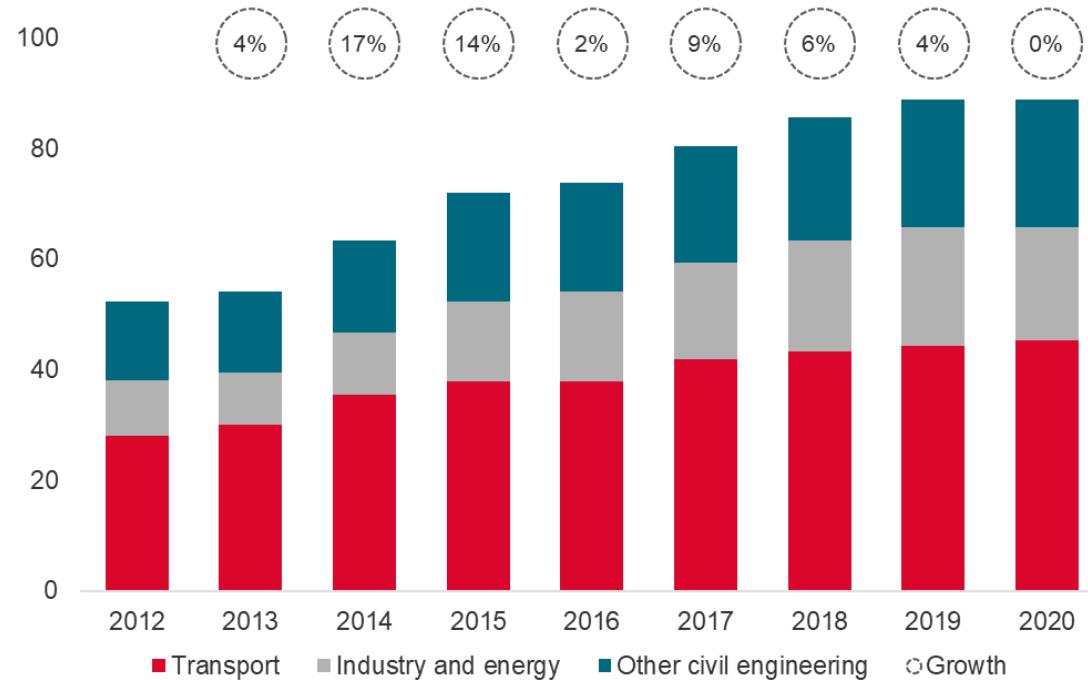
Civil engineering

Civil engineering in Norway

Lower pace of growth going forward

Production in different civil engineering segments

NOK billion, current prices



Comments:

- High activity in all segments throughout last year
- Strong contribution from wind farm developments
- Increased industrial sales and exports
- Strong momentum in the municipal facilities sector

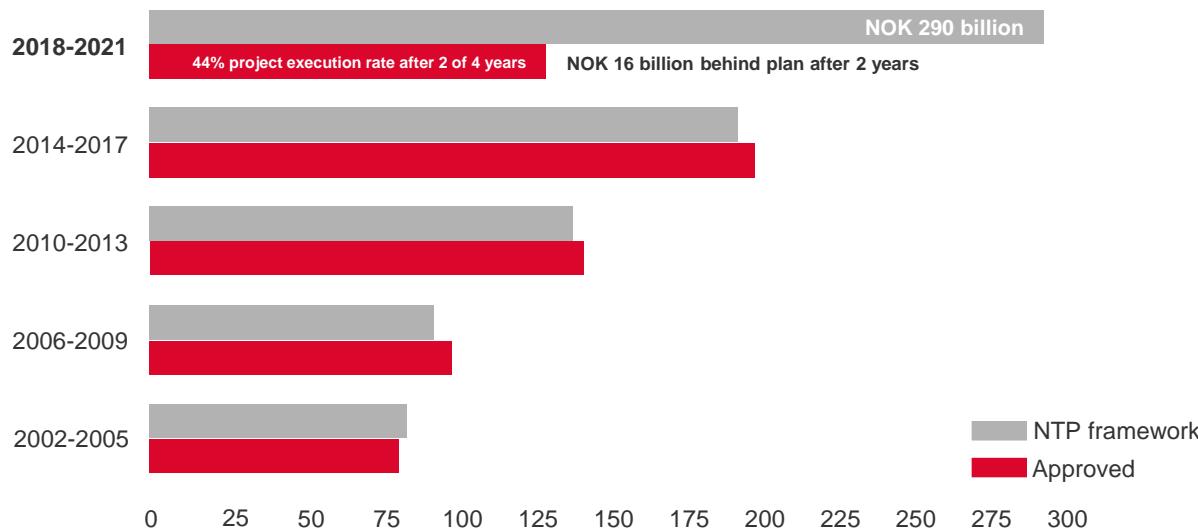
Sources: Statistics Norway and Veidekke

Transport infrastructure in Norway

National transport plan delayed

Planning periods, national transport plan (NTP)

NOK billion, current prices



Comments:

- Project execution rate of 90 percent to date
- Could become the first time since 2002–2005 that the NTP target is not fulfilled
- Indication of new fiscal policy direction?

Sources: Norwegian Government and Veidekke

Transport infrastructure in Norway

Plans vs reality



Vegvesenet må utsette
Sotrasambandet - Ap-politiker
mener OPS-prosjektet blir trenert



**Ny E16 utsettes med mer enn
ett år**



UITSATT: Nye E16 mellom Bjørumsaga (bildet) og Skaret nord for Sotnhaugda for ett års utsettelse. Foto: KARL BRAANAAS



Bane Nor vil utsette Intercity med flere år

Dobbeltsporret jernbane og raskere reisetid på det sentrale Østlandet må skyves mange år fram i tid, konkluderer Bane Nor i en fersk rapport.
Foto: TTS/TELE2. Det er ikke tilstrekkelig med plass på baneplatene til å få plass til flere tog. Foto: Bane Nor/Andreas Næs
Foto: Bane Nor/Andreas Næs



**Statens vegvesen: Må utsette byggestart
på E18**

Det nye hovedveisystemet mellom Lysaker og Asker må utsettes fordi prosjektet ikke får budsjettstøtte.



**Jernbanens prestisjeprosjekt Follobanen
utsettes ett år**

I praksis kan Follobanen nå tidligst bli tatt i bruk av pendlerne i januar 2023. Samtidig varsler ledelsen at banen blir dyrere enn 26,3 milliarder.



Fornebubanen blir forsinket

Først i 2027 vil de reisende kunne ta i bruk de nye stasjonene og metroen til Fornebu, ifølge fersk rapport. – Vi har nok vært noe for optimistiske, sier direktør for Fornebubanen.

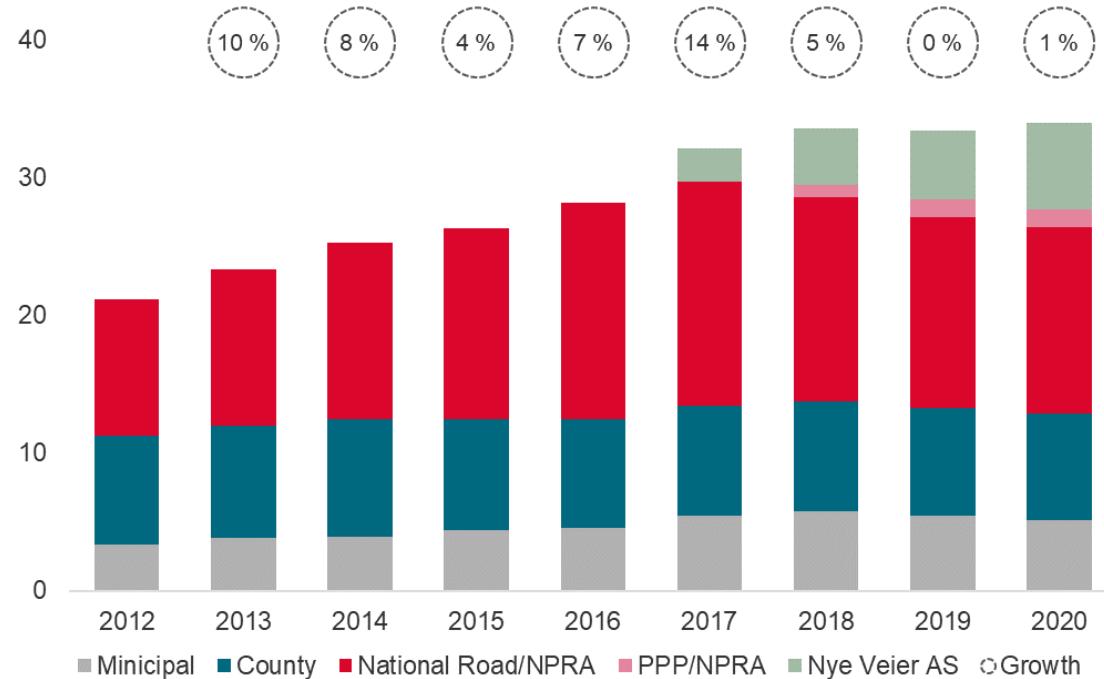
Sources: NRK, Aftenposten, Byggeindustrien

Roads in Norway

High and flat until the end of the forecast period

Road production by customer

NOK billion, current prices



Comments:

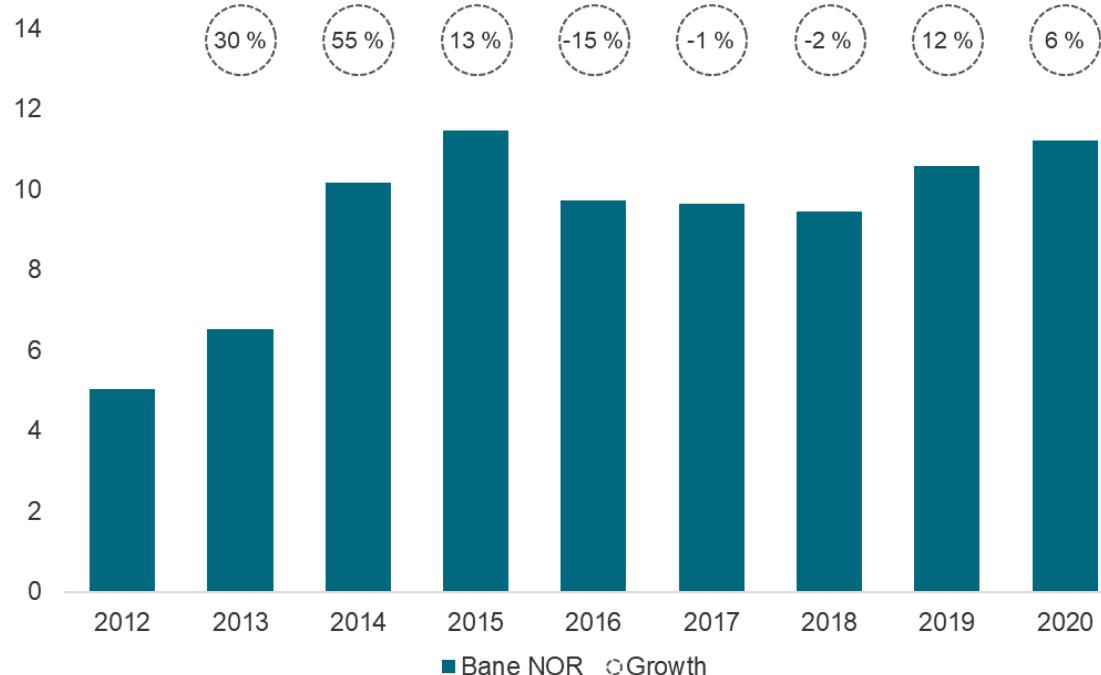
- Forecasts somewhat adjusted since September 2018
 - Updated project information from Nye Veier AS
 - PPP project delayed
- Drop in main road investments under the Norwegian Public Roads Administration

Railways in Norway

Rising central government allocations

Railway production

NOK billion, current prices



Comments:

- Unchanged forecasts
- This year, priority is being given to continuation of ongoing major projects
- Far behind NTP schedule

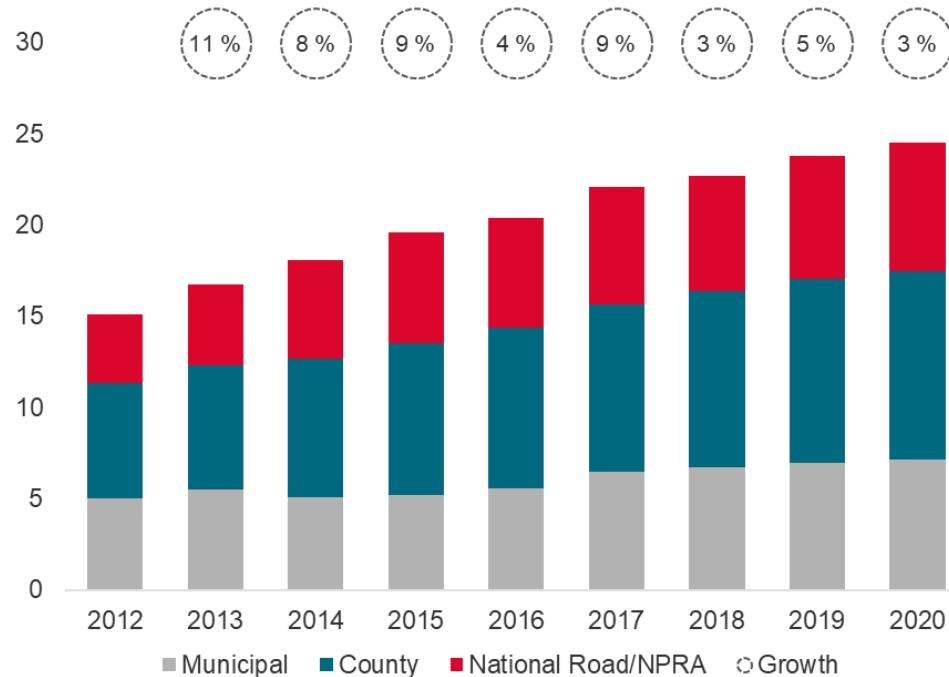
Sources: Statistics Norway, Norwegian Government, national transport plan, Bane NOR, Norwegian Railway Directorate and Veidekke

Road maintenance in Norway

High priority generates new growth

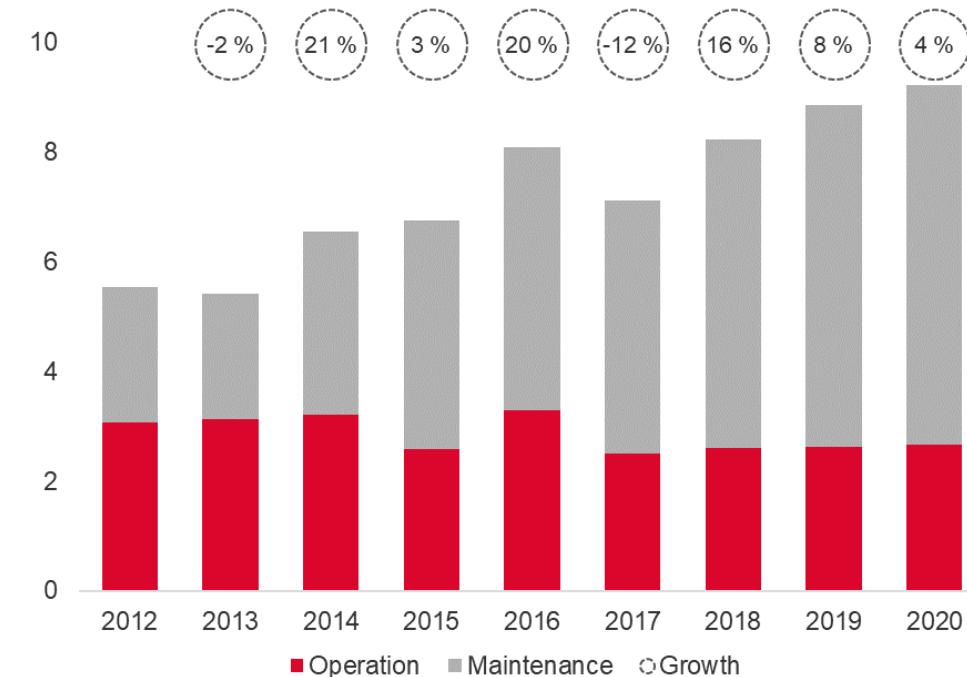
Operation and maintenance of roads

NOK billion, current prices



Operation and maintenance of railways

NOK billion, current prices



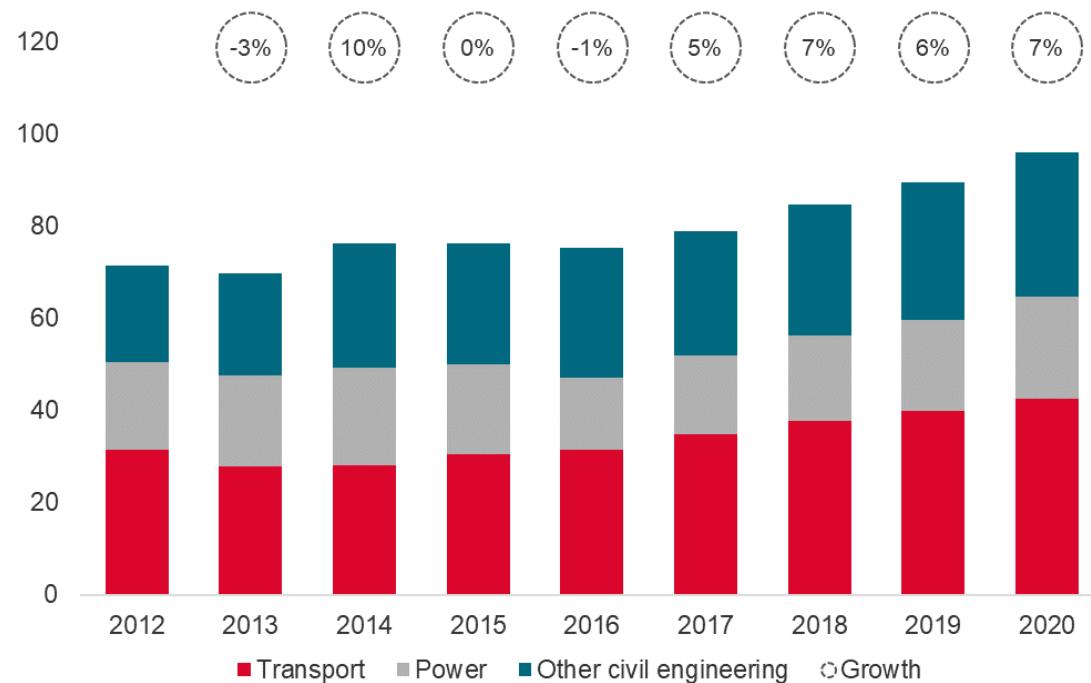
Sources: Statistics Norway, Norwegian Government, national transport plan, Norwegian Public Roads Administration, Bane NOR, Norwegian Railway Directorate and Veidekke

Civil engineering in Sweden

Outlook remains strong

Production in different civil engineering segments

SEK billion, current prices



Comments:

- High production in the first two quarters of last year
- Rising civil engineering activity in the transport infrastructure market
- Visibly positive effects in the energy sector
- The municipal facilities market is growing

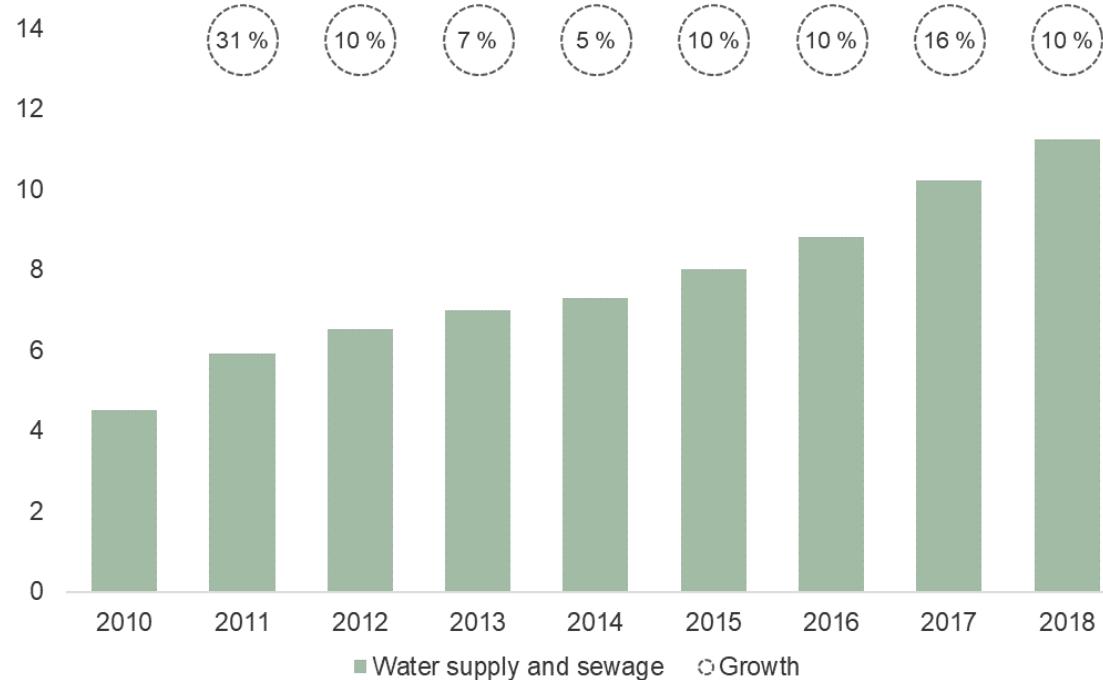
Sources: Statistics Sweden and Veidekke

Municipal facilities sector

Strong growth in the water supply and sewage market

Water supply and sewage investments

SEK billion, current prices



Comments:

- Refurbishment of older facilities
- New residential areas are boosting demand

Sources: Statistics Sweden and Veidekke

Industrial projects

Positive prospects in the mining industry

Iron ore
Price per tonne, SEK



Source: Macrobond

Veidekke's civil engineering projects in Swedish mines
Malmberget, 2017



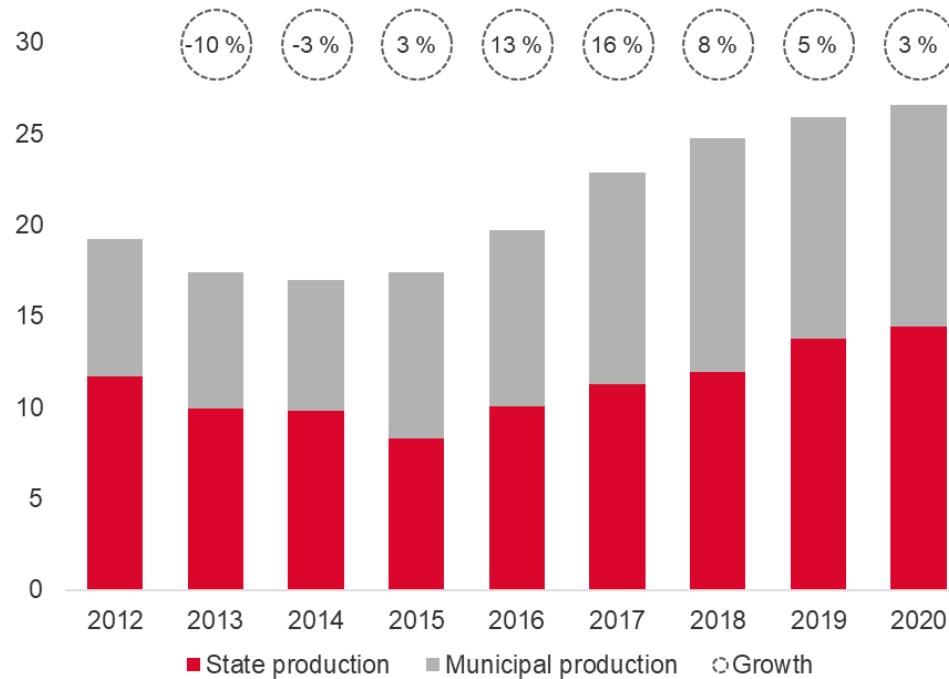
Source: Byggeindustrien

Transportation infrastructure in Sweden

Central government allocations will result in future growth

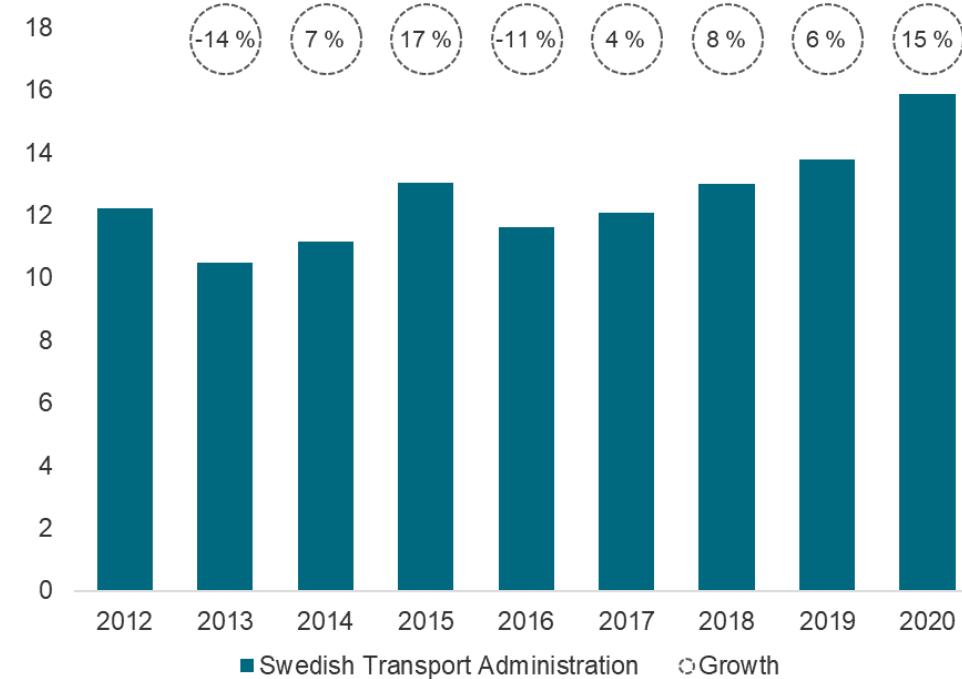
Road production

SEK billion, current prices



Railway production

SEK billion, current prices



Sources: Statistics Sweden, Swedish Government, NPT, Swedish Transport Administration and Veidekke

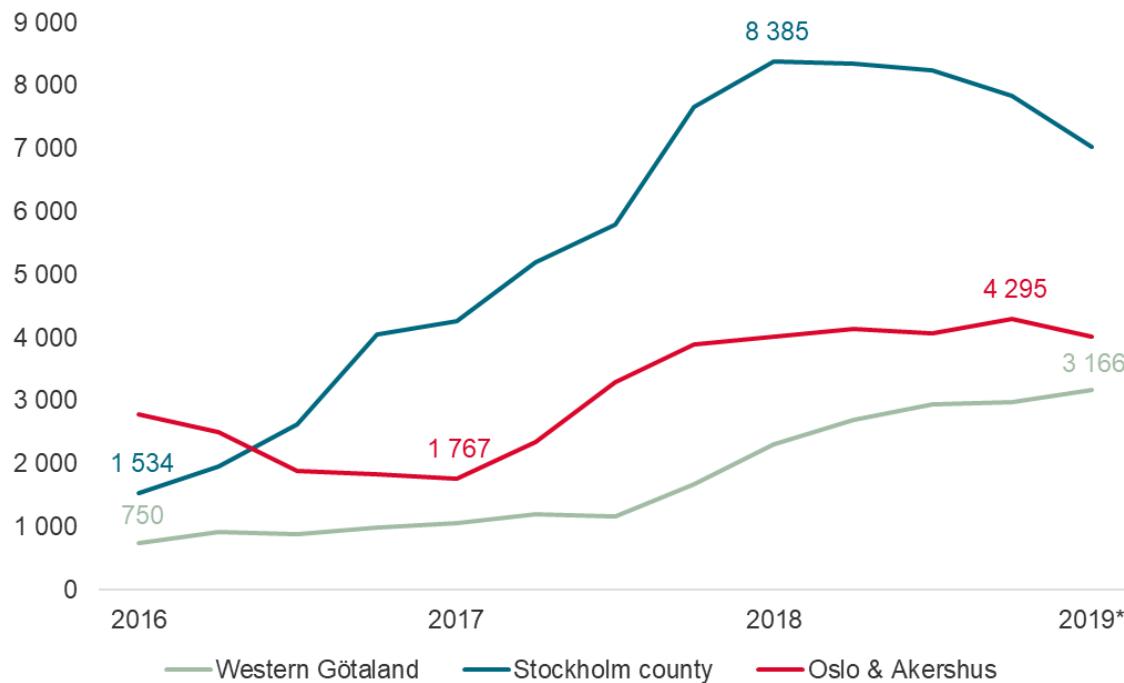
Apartments and small houses

Scandinavian residential market

Sellers of new residential units face excess supply situation

Unsold new build apartments in the largest cities

Number of units



Sources: Booli and Economics Norway

* First quarter 2019 only includes January and February

Comments:

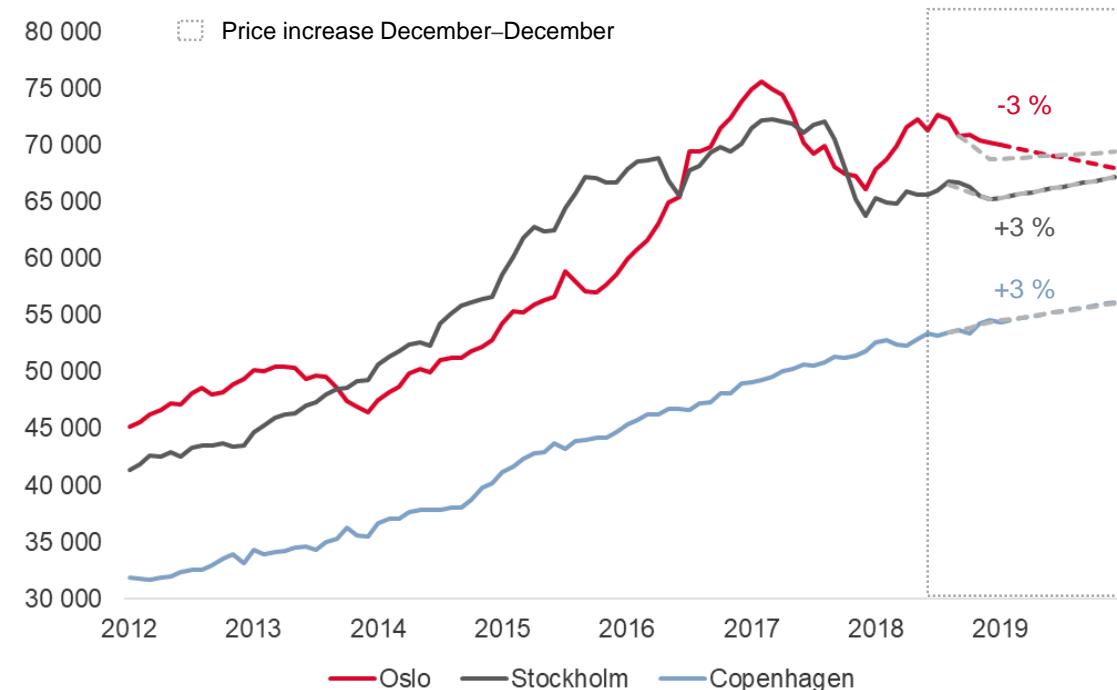
- Stockholm leads the way, followed by other major cities
- Dynamic: rapid growth may be followed by rapid decline

Scandinavian residential market

Many positive developments in secondhand housing market

House prices in the largest cities

Price per square metre, NOK



Sources: Property Development Norway, Mäklarstatistik, Statistics Denmark and Veidekke

The coloured stippled lines show Veidekke's forecast
The grey stippled line shows the September 2018 forecast

Comments:

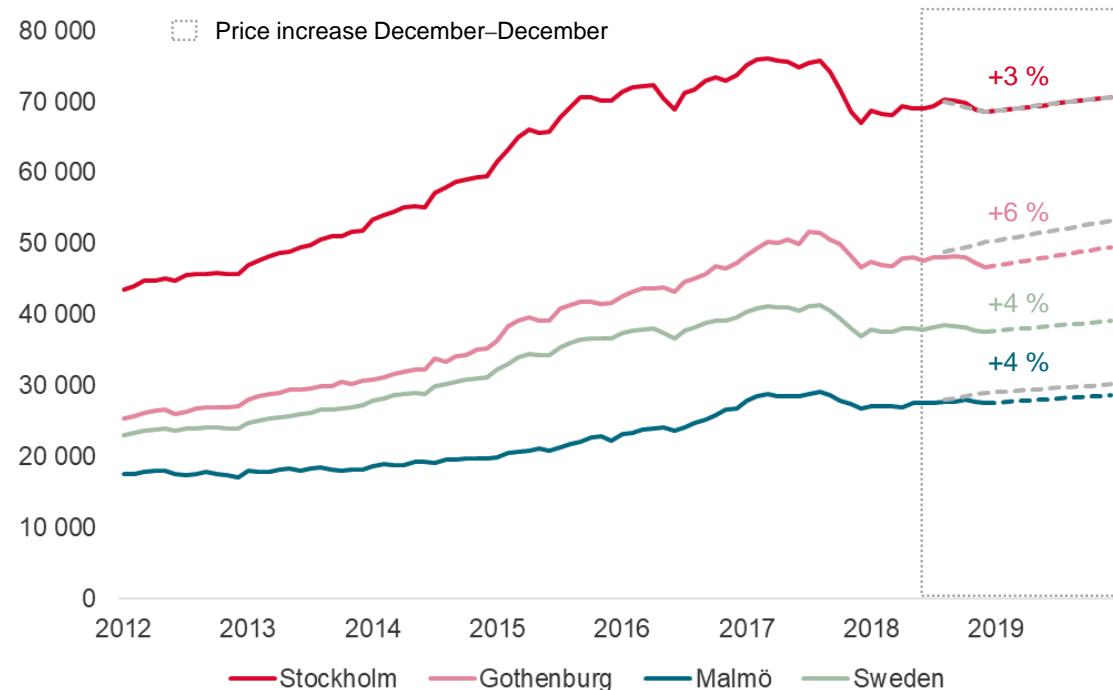
- Developments called for a few years ago:
 - Stable price and debt trends
 - Large number of transactions = good dynamics
 - High construction activity and high supply
- Oslo – minor decrease
 - Increased supply of secondhand residential units throughout the autumn

Swedish residential market

Stable trend in the secondhand housing market

Housing prices in the largest markets

Price per square metre, SEK



Sources: Mäklarstatistik and Veidekke

The coloured stippled lines show Veidekke's forecast
The grey stippled line shows the September 2018 forecast

Comments:

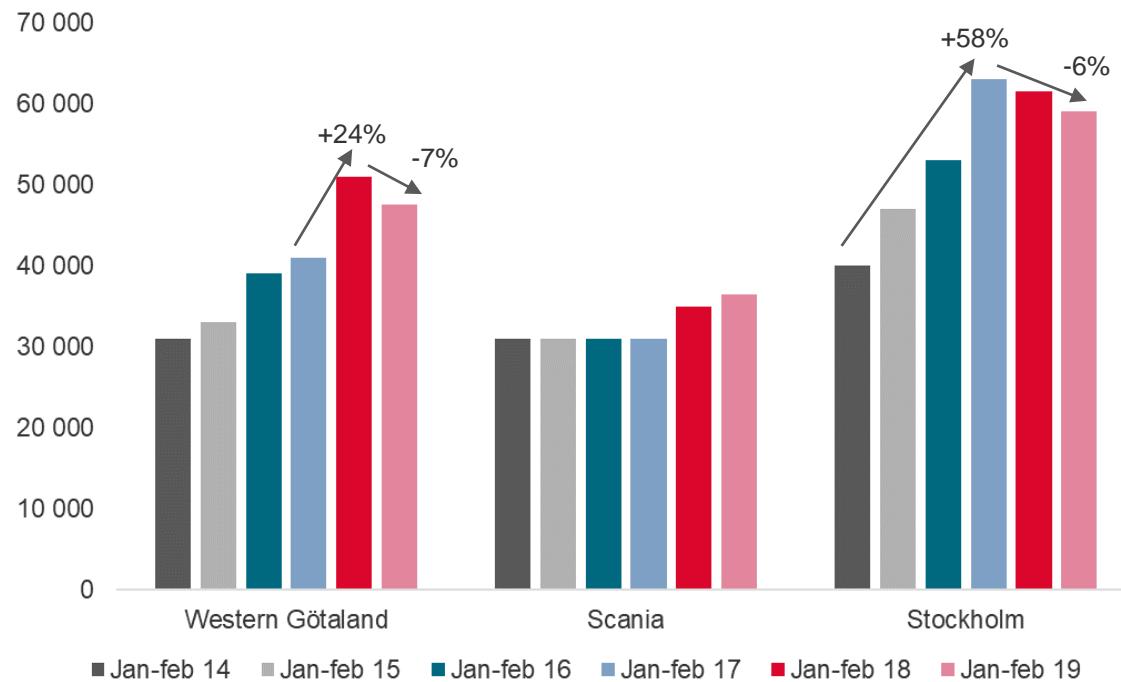
- Generally stable, flat price growth
 - However, a slight fall in recent months has stirred media coverage
- High but stable supply
- Credit restrictions have dampened debt inflation, but banks forecast growth in 2019
- Increasing uncertainty in Gothenburg

Swedish residential market

Pricing of new residential units remains challenging

Price per square metre of new build apartments at beginning of year 2014–2019

Selected Swedish counties



Comments:

- Prices of new residential units somewhat down following strong growth in 2016 and 2017
- Double squeeze with respect to realisation last year:
 - Demand side: lower willingness to pay and incentives to delay purchases
 - Supply side: purchase prices taking time to adapt to lower activity

Source: Booli

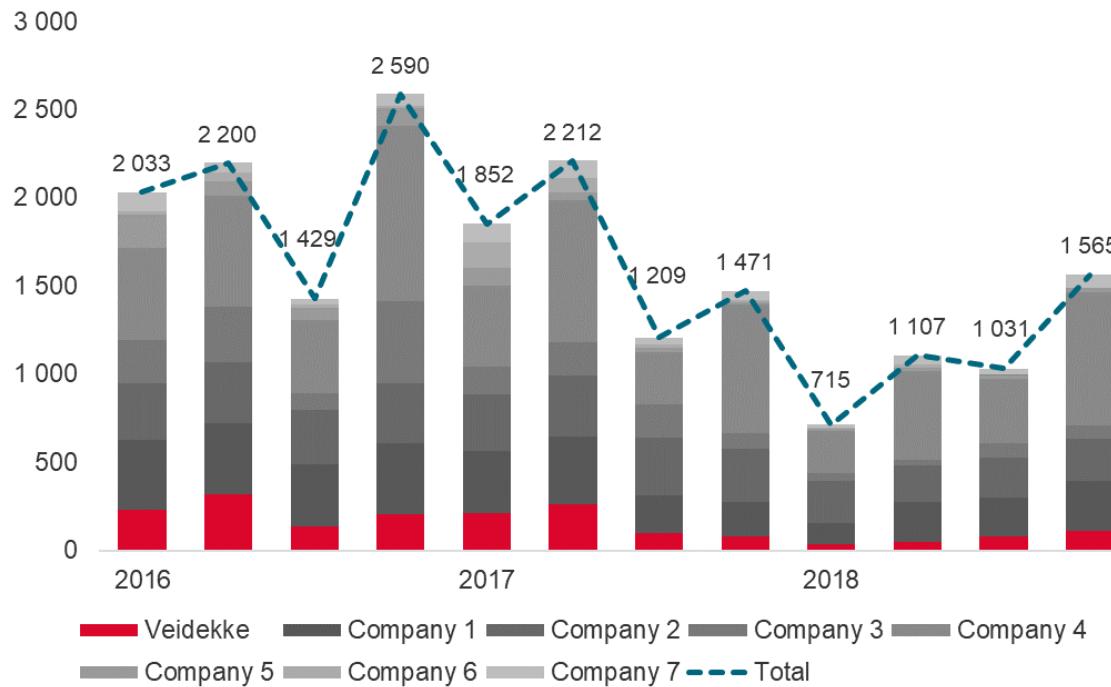
CAGR 2014–2019

Swedish residential market

Somewhat improved sales; challenging new build market

New residential unit sales in Sweden, eight listed companies

Number of units sold per quarter



Source: Quarterly reports of the companies

Comments:

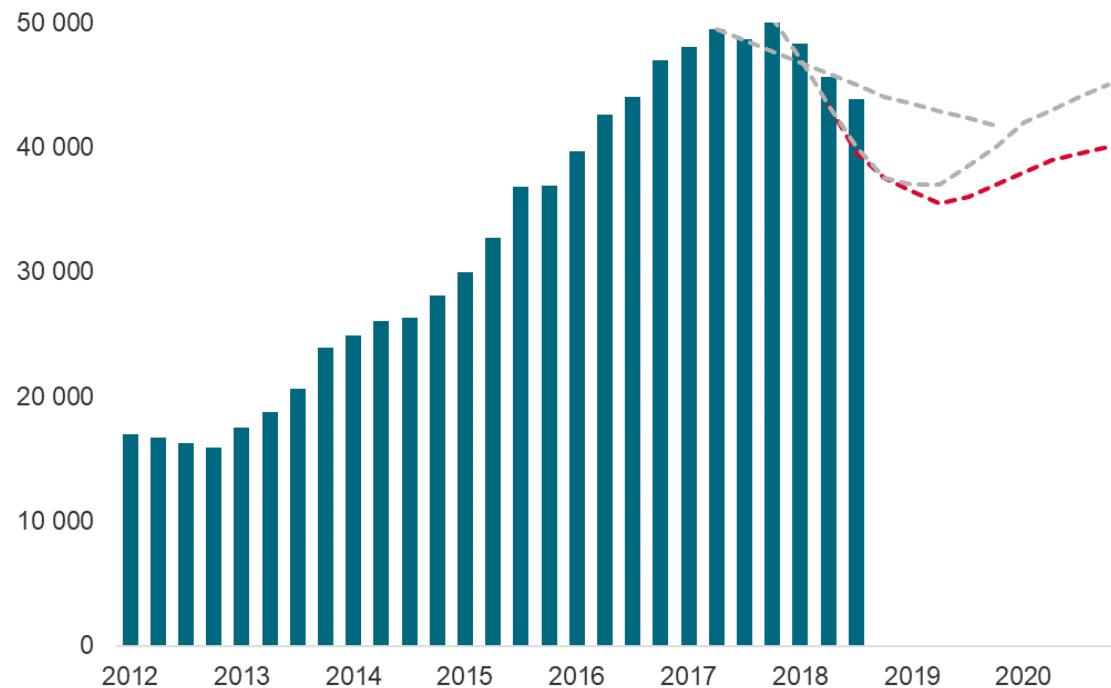
- New residential unit sales stable and moderately improved in the autumn of 2018, but far lower than in 2016 and 2017

Swedish residential market

Decline in sales reflected in building starts

Building starts, apartments and small houses

12-month rolling quarterly total, number of units



Source: Statistics Sweden and Veidekke

The coloured stippled line shows Veidekke's forecast
The grey stippled line shows the forecast from previous reports

Comments:

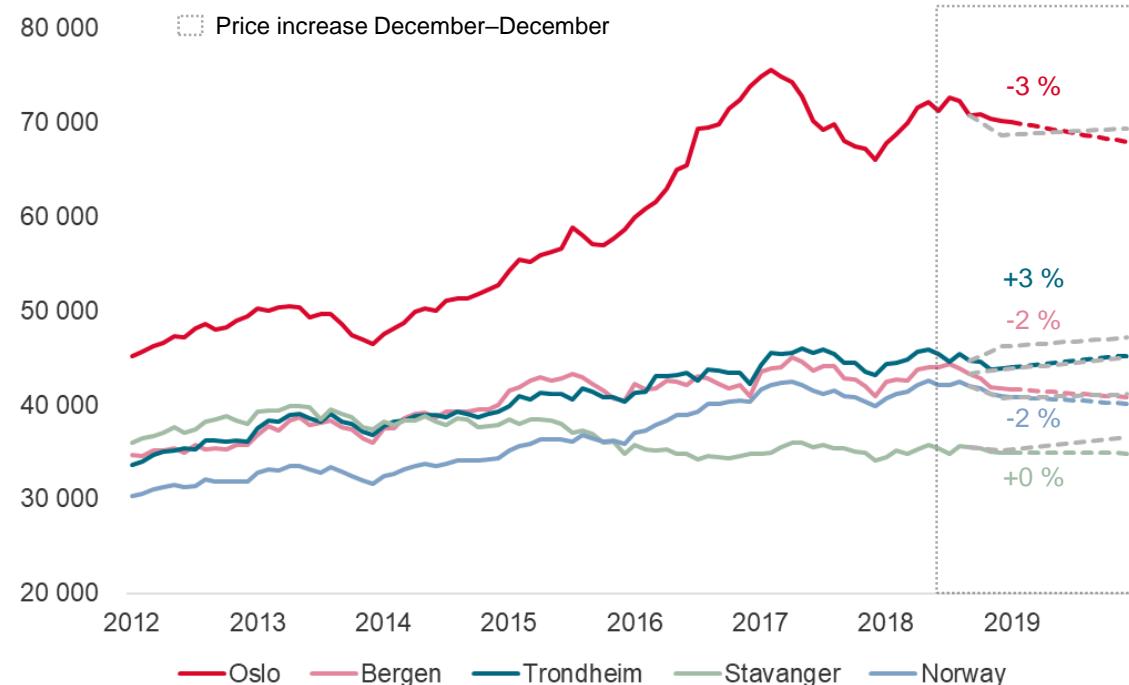
- Declining number of building starts
- Rental proportion has increased to 60%
- Improved contractor capacity in the residential segment will also impact other market segments

Norwegian residential market

An unusually strong secondhand housing market

Housing prices in the largest markets

Price per square metre, NOK



Source: Property Development Norway
and Veidekke

The coloured stippled lines show Veidekke's forecast
The grey stippled line shows the September 2018 forecast

Comments:

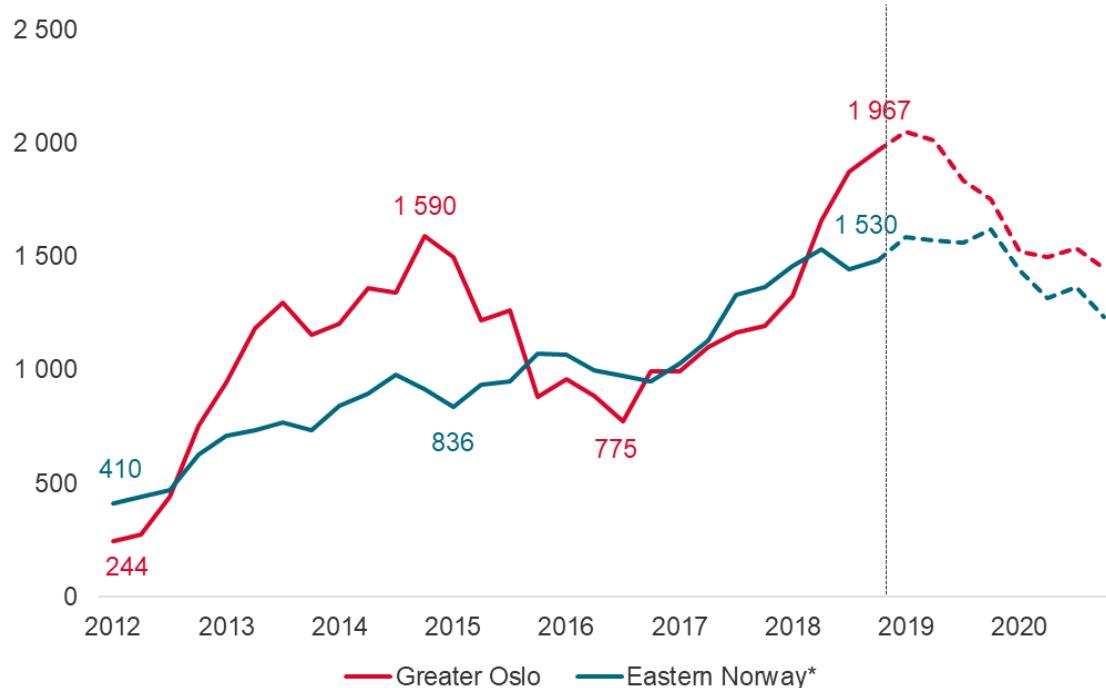
- General market forces are stable and supportive
 - An exception is somewhat weaker migration compared to previous years
- Stable price growth forecast to continue

Norwegian residential market

Growth in completions neutralised by high transaction rate

Completed apartments and small houses

Number of units



Source: Veidekke's market data

* Excluding greater Oslo

Comments:

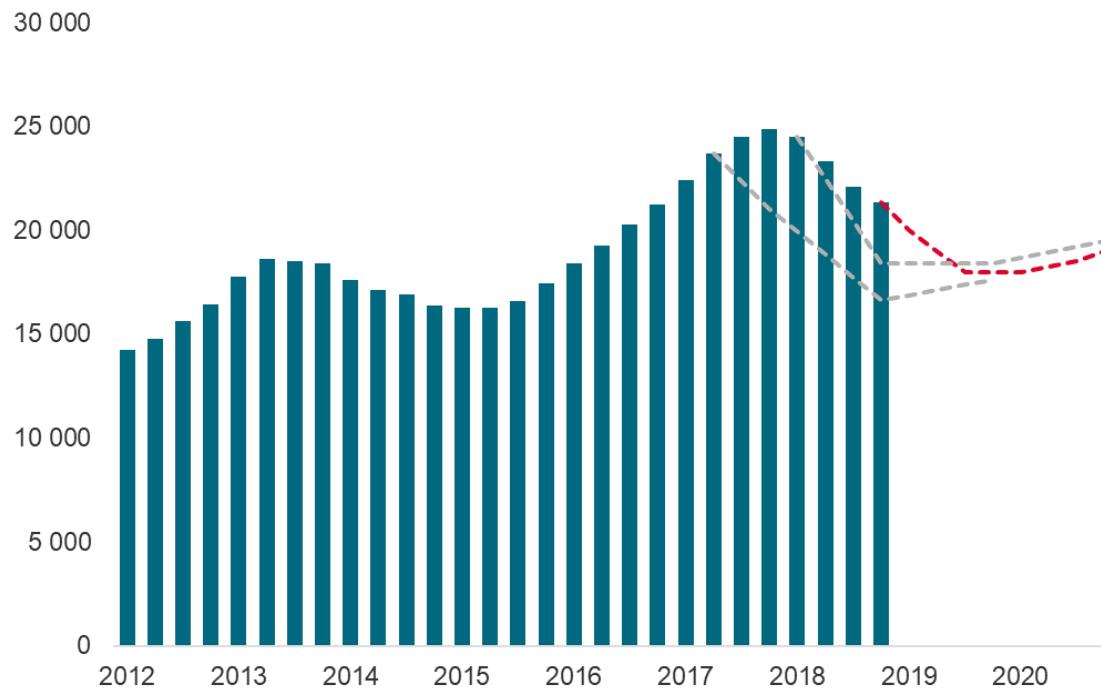
- High transaction rate is compensating for increased supply of completed units
- Marked growth in eastern Norway; more even development in other metropolitan regions

Norwegian housing market

New residential building starts track sales

Building starts, apartments and small houses

12-month rolling quarterly total, number of units



Source: Statistics Norway and Veidekke

The coloured stippled line shows Veidekke's forecast
The grey stippled lines show the forecasts from previous reports

Comments:

- Stable, “normal” sales in 2018, but far behind peak years 2016–2017
- Current sales indicate continued decline in building starts
 - But very high number of building starts registered in Q4 2018...
- Supply is generally stable, but higher than normal
- New residential unit prices generally stable

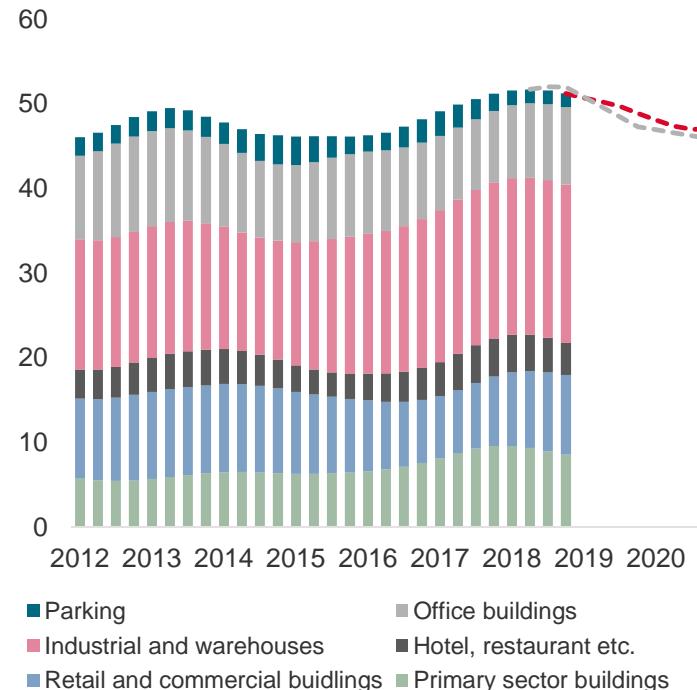
Non-residential

Commercial buildings in Norway and Sweden

Generally positive outlook despite a dip...

**Building construction production,
Norway**

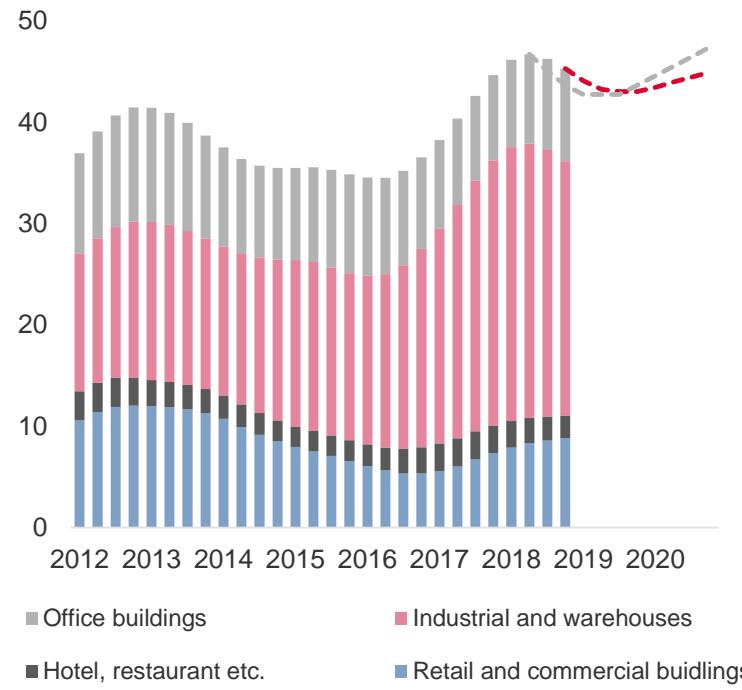
12-month rolling quarterly total, NOK billion



Source: Veidekke's market data

**Building construction production,
Sweden**

12-month rolling quarterly total, SEK billion



Comments:

- High pressure in cyclical industries
 - Manufacturing, logistics and offices
- Increased contractor competition from the residential sector
- Falling pressure – some are waiting for reduced purchasing prices...
- Structural challenges related to retail/shopping centres
 - Will become more apparent when demographic factors and residential construction decline

Commercial buildings in Denmark

Positive outlook but uncertainty in the retail sector

Vacancy rate in Denmark*

Percentage of total number of buildings

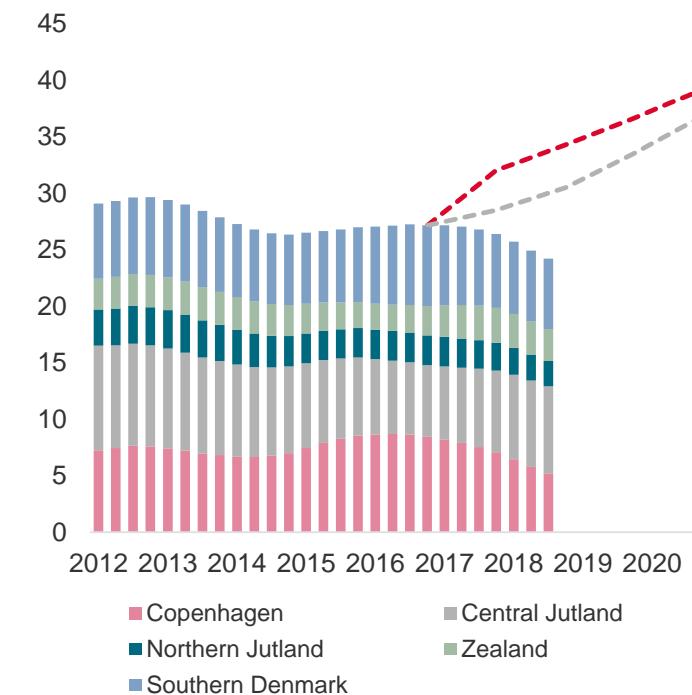


Source: Ejendomstorvet

*The stippled lines shows the vacancy rate for the region around Copenhagen

Building construction production, Denmark

12-month rolling quarterly total, DKK billion



Comments:

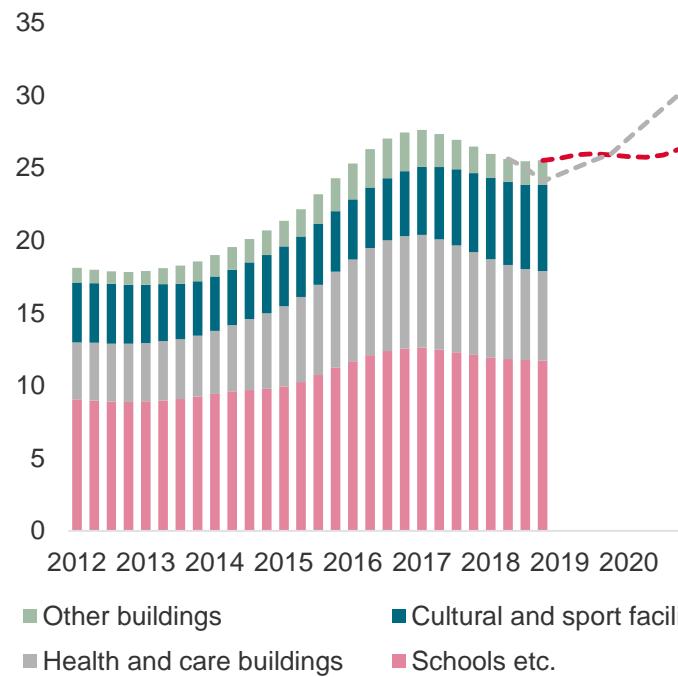
- Market trends and household finances are robust
- Positive vacancy figures, but negative trend for retail premises

Public buildings in Norway and Sweden

Strong years behind us – high activity levels to continue

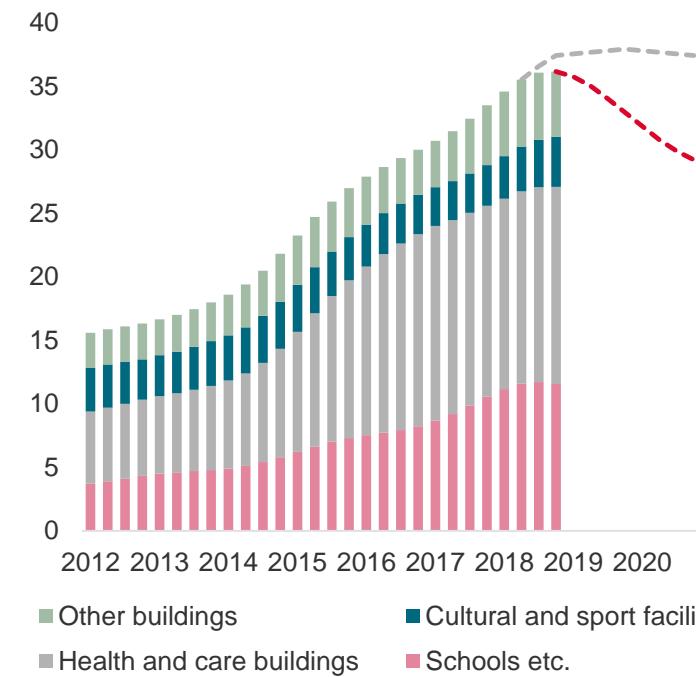
Building construction production, Norway

12-month rolling quarterly total, NOK billion



Building construction production, Sweden

12-month rolling quarterly total, SEK billion



Comments:

- Strong years behind us – high level
- The municipal sector has borrowed heavily
- Adjustment of forecasts:
 - Sweden: reflects a decline in approved space
 - Norway: postponements in the hospital sector
- General trend: more health and care at the expense of schools?

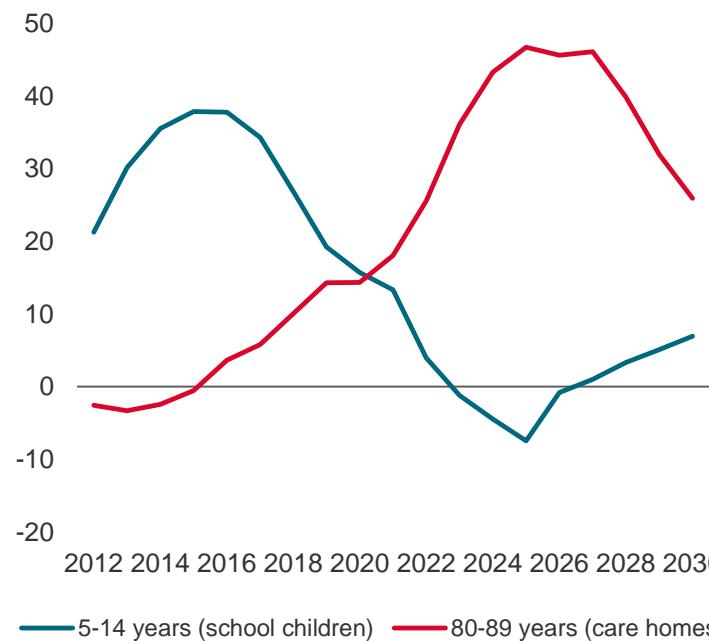
Source: Veidekke's market data

Public buildings in Norway and Sweden

Demographics suggest new priorities

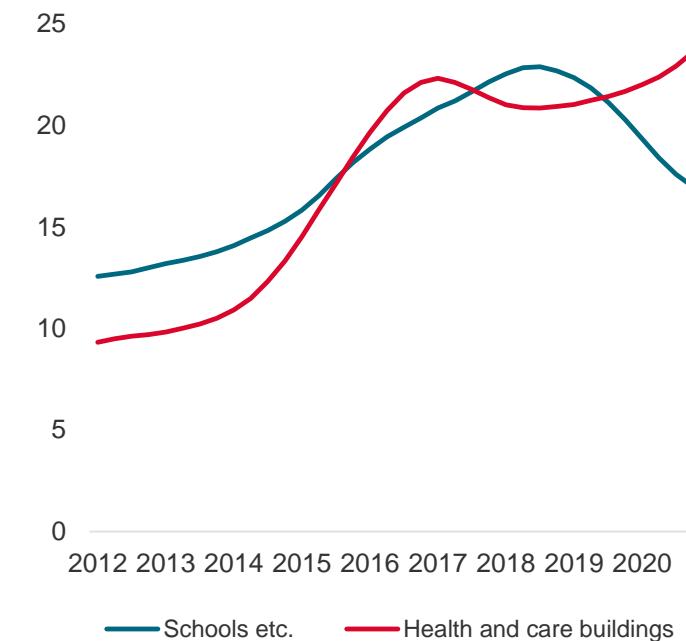
Change in age groups

1 000 persons



Building construction production

12-month rolling quarterly total, NOK billion



Comments:

- We are nearing the end of a period of strong growth in the number of schoolchildren
- The building construction market will reflect demographic changes

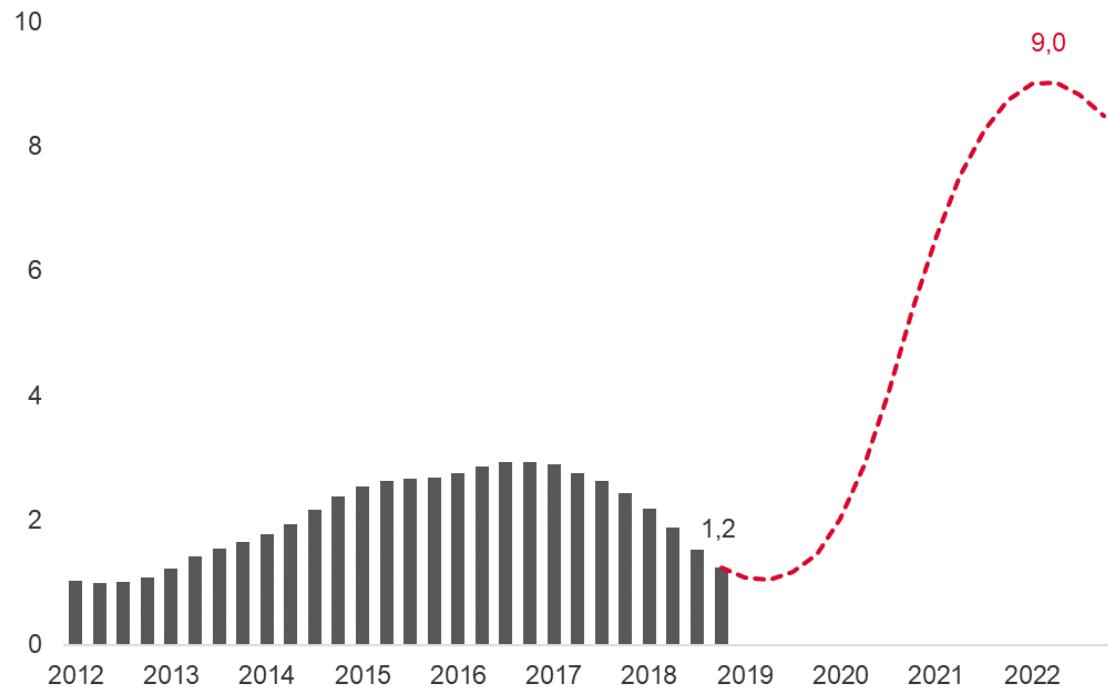
Source: Veidekke's market data

Hospital construction in Norway

Lacks coordination?

Building construction production, hospitals

12-month rolling quarterly total, NOK billion



Source: Veidekke's market data

Comments:

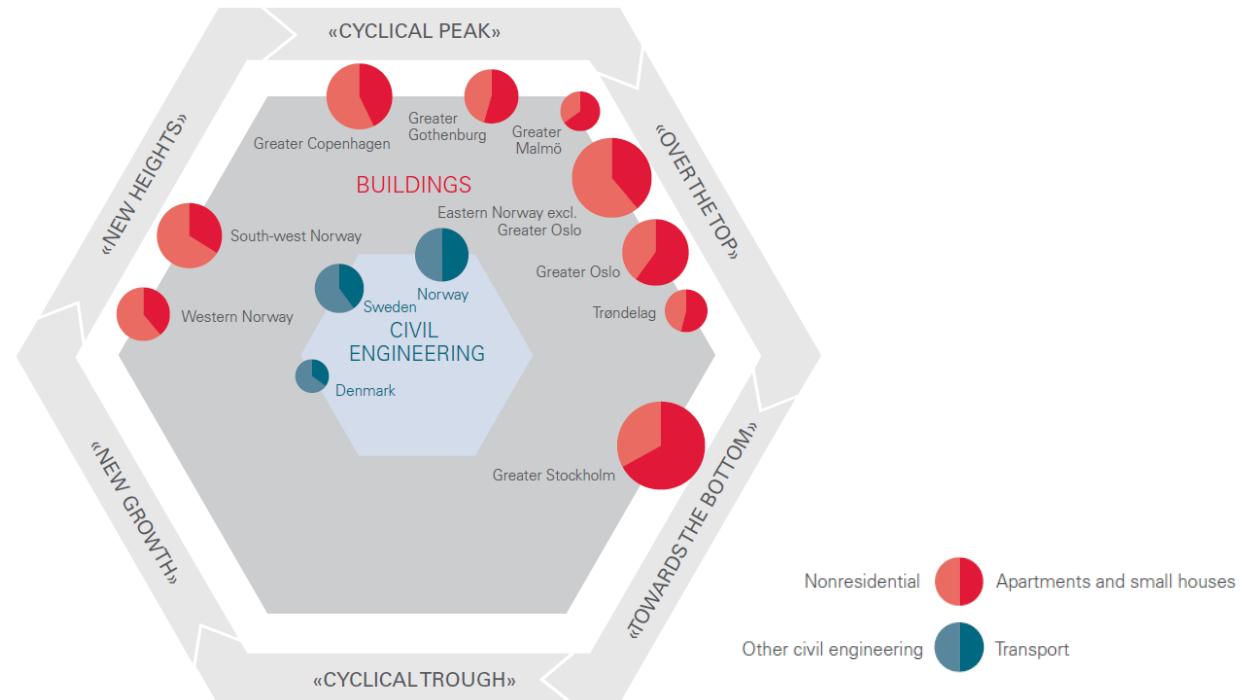
- Large number of hospital projects in Norway in the period towards 2022
- Large, technically challenging and complex buildings
- Will be challenging to execute efficiently and to a high standard
- Discussions about location may lead to a better distribution of projects over the years ahead

Summary

Reduced pressure in contracting markets

Veidekke's market overview

Assessment of current market situation*



Source: Veidekke's market data

*Measured by growth in building construction production in 2019

Comments:

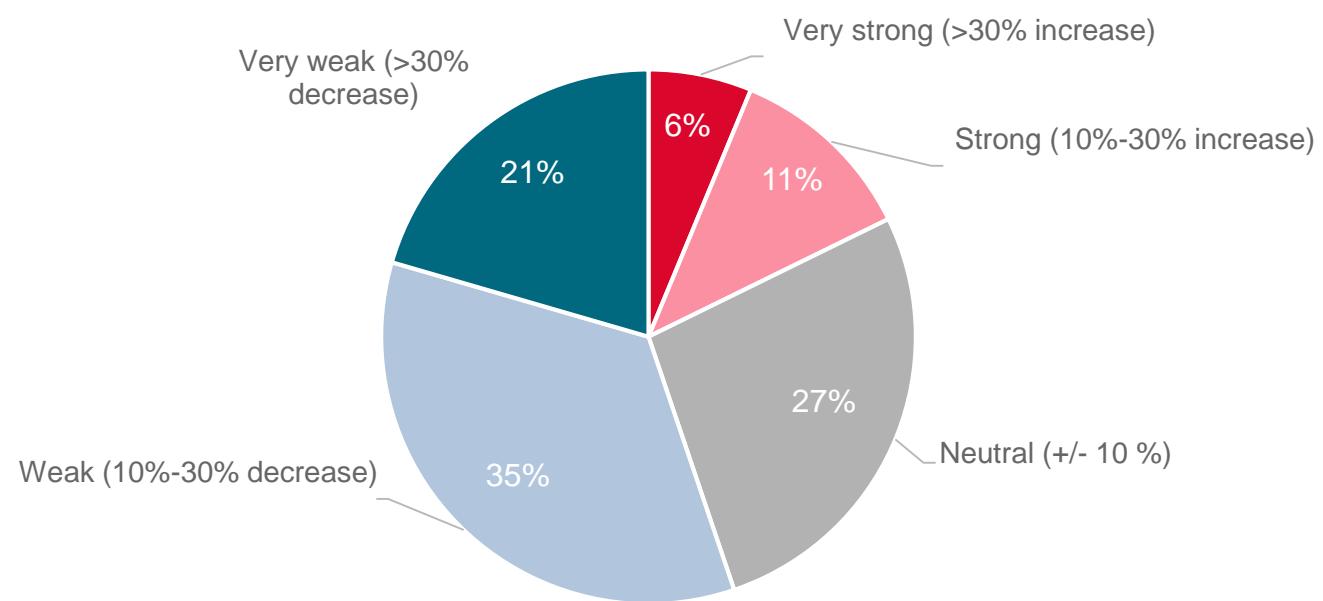
- Stockholm is leading the way in the economic cycle and will bottom out in the winter of 2019/2020
- More stable, but still challenging in the new residential unit sector
- The civil engineering market remains strong

Summary

Is the future certain?

Likely building starts Q4 2018 – Q4 2019

Calculated probabilities, building construction in Norway and Sweden



Source: Veidekke's market data

Comments:

- Stockholm has come furthest in the economic cycle and will bottom out in the winter of 2019/2020
- Greater stability but still challenging in the new residential unit sector
- The civil engineering market remains strong



Thank you

Norway

Production forecasts for contracting markets 2019–2020

Current prices, relative change (%)	Level NOK bill.	2017 Growth	2018 Growth	2019 Growth	2020 Growth	2019-2020 Growth
Apartments and small houses	63	24 %	8 %	-12 %	-15 %	-13 %
Commercial buildings	51	6 %	0 %	-5 %	-4 %	-4 %
Public buildings	26	-4 %	-4 %	1 %	2 %	2 %
Civil engineering	86	9 %	6 %	4 %	0 %	2 %
Contraction production	226	10 %	4 %	-3 %	-4 %	-4 %
Number of apartments and small houses started		25 000	21 330	18 000	19 000	

Explanation:



Forecast unchanged from EA Report September 2018



Forecast revised upwards/downwards from EA Report September 2018

Sweden

Production forecasts for contracting markets 2019–2020

Current prices, relative change (%)	Level SEK bill.	2017 Growth	2018 Growth	2019 Growth	2020 Growth	2019-2020 Growth
Apartments and small houses	104	22 %	1 %	-17 %	0 %	-9 %
Commercial buildings	51	21 %	3 %	-7 %	4 %	-1 %
Public buildings	36	12 %	8 %	-9 %	-11 %	-10 %
Civil engineering	85	5 %	7 %	6 %	7 %	6 %
Contraction production	275	15 %	4 %	-7 %	2 %	-3 %
Number of apartments and small houses started		50 400	37 500	37 000	40 000	

Explanation:



Forecast unchanged from EA Report September 2018

Forecast revised upwards/downwards from EA Report September 2018

Denmark

Production forecasts for contracting markets 2019–2020

Current prices, relative change (%)	Level DKK bill.	2017 Growth	2018 Growth	2019 Growth	2020 Growth	2019-2020 Growth
Apartments and small houses	28	22 %	5 %	3 %	0 %	1 %
Commercial buildings	34	18 %	7 %	7 %	7 %	7 %
Public buildings	15	12 %	3 %	5 %	5 %	5 %
Civil engineering	52	2 %	9 %	3 %	5 %	4 %
Contraction production	129	11 %	7 %	4 %	4 %	4 %

Explanation:



Forecast unchanged from EA Report September 2018

Forecast revised upwards/downwards from EA Report September 2018

Veidekke's market data

Historical construction data, up to Q4 2018

- From Statistics Norway, Statistics Denmark and Statistics Sweden: started/approved sites in square metres, broken down by municipality and type of building
- From Veidekke: estimate of the industry's construction contract cost per square metre excluding VAT and normal construction time for each building type; adjusted over time using construction cost indicators from the statistics agencies. An algorithm has greater effects in the event of large changes over a short period.
- Estimate of refurbishment and alteration projects involving commercial buildings are based on all refurbishment and alteration projects totalling >20 million registered in Norge Bygges and Sverige Bygges in the period 2007–2017. Estimates based on correlation with new build volumes in the same period, adjusted for different geographical areas*.
- Civil engineering data are based on data from the statistics agencies, project information and public budgets and plans.

Forecasts**:

- Forecasts are prepared for building starts by sector, county and housing prices using the same geographical areas as used by Real Estate Norway and Svensk Mäklarstatistik. These forecasts are prepared using the Recurrent Neural Network algorithm.
- Forecasts are based on observed indicators forming part of explanatory variables, primarily those available as at Q4 2018.
- Civil engineering forecasts are based on different sources/analyses of investment activity, financing capacity and project databases.

* This has been tested without finding confirmation that the ROT (rehabilitation, reconstruction and additions) and new build markets have different economic cycles.

** To date, the forecasting tool is only available for Norway and Sweden.

Explanatory variables in the model for building starts

- The construction sector's own historical data
- Local and national cyclical indicators
 - Employment market
 - Exchange rates
 - Residential market, prices and transactions
- Interest rates
- Demographic factors
- Public finances
- Borrowing restrictions
- Psychological factors

Variable (Norway)	Variable (Sweden)
<i>Construction start</i>	<i>Construction start</i>
<i>Approved</i>	<i>Conversion</i>
<i>Conversion</i>	<i>Net immigration</i>
<i>Net immigration</i>	<i>Population statistics</i>
<i>Population statistics</i>	<i>Occupancy rate</i>
<i>Occupancy rate</i>	<i>Municipal profit</i>
<i>Municipal profit</i>	<i>Municipal debt</i>
<i>Municipal debt</i>	<i>Bankruptcies</i>
<i>Bankruptcies</i>	<i>House price growth</i>
<i>House price growth</i>	<i>Resale housing sales</i>
<i>Credit lending indicator</i>	<i>Credit lending indicator</i>
<i>Sales of new homes</i>	<i>EUR-NOK</i>
<i>EUR-NOK</i>	<i>USD-NOK</i>
<i>USD-NOK</i>	<i>SEK-NOK</i>
<i>Oil price</i>	<i>2 year government bond</i>
<i>2 year government bond</i>	<i>Unemployment rate</i>
<i>Unemployment rate</i>	<i>Forecast construction</i>
<i>Oil county</i>	<i>Forecast households</i>