

Contents

Summary	2
PART 1	
Oslo Outlook	4
PART 2	
Labour	9
PART 3	
Business	13
PART 4	
Attractiveness	17
APPENDIX	
Method	22

Summary

Labour

Labour market tightness remains low compared to historical levels, indicating a cooling market, driven by rising unemployment and a slight drop in job vacancies. However, Oslo's labour force has grown steadily since 2021, surpassing long-term averages and reaching a record high by end-2024. Meanwhile, median nominal wages in Oslo have risen steadily over the past decade, stabilising in 2024. With a growing labour supply and stabilising wages, labour market conditions are improving relative to both historical data and 2024Q3.

Business

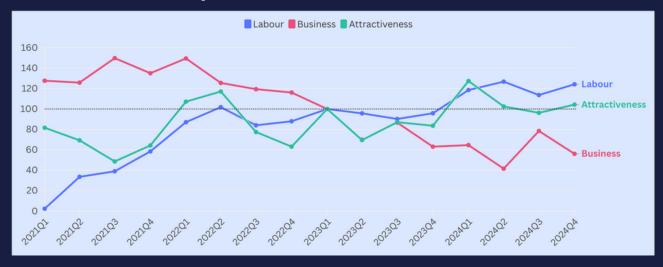
While Norges Bank's business survey shows that business confidence in Oslo remains stable and slightly optimistic, this has not led to more business formation or investment. Although firm formation has slightly increased in the last two quarters of 2024, it remains low compared to previous years, and bankruptcies have risen. The main factor behind the decline in the summary score is the continued drop in venture capital rounds, reaching their lowest point in Q4 2024 since 2020. As a result, the "Business" category remains below historical levels.

Attractiveness

Oslo has experienced positive net migration each year, though the number of international migrants in 2024 is lower than in recent years. Visitor numbers have risen since 2020, indicating a positive tourism trend. The house price-to-income ratio remains in line with historical average, requiring 6-8 years of gross salaries to purchase a median-priced home. Additionally, purchasing power has gradually increased from 2016 to 2024, with a slight stagnation in 2024. While the decline in net migration and stagnation in disposable income negatively affect Oslo's attractiveness, the growth in tourism combined with stable housing affordability leads to an overall improvement in the category compared to previous years.

Oslo Outlook Index

Historical development of index



Source: Oslo Economics

Note:

For the methodological note, see Appendix A. A line above the dashed line indicates that the indicators in this category have shown a more positive outcome compared to historical levels, with 2023 as the reference point.

Index 2024Q4 vs. 2024Q3



Source: Oslo Economics

Oslo Outlook

ON THE REPORT

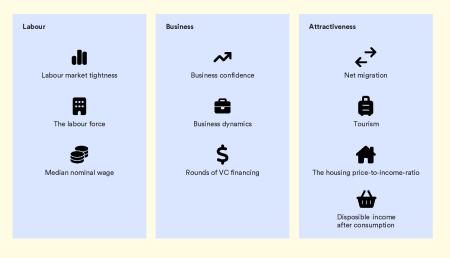
"The purpose of this analysis is to provide a comprehensive overview of Oslo's economic development for decision-makers, investors, and other stakeholders."

Oslo Outlook

The purpose of this analysis is to provide a comprehensive overview of Oslo's economic development for decision-makers, investors, and other stakeholders. The analysis is based on themes and indicators that offer insights into the economic development of the Oslo region and are intended to highlight the region's attractiveness and competitiveness, both nationally and internationally.

The analysis is centred around the themes of: "Labor Market," "Business," and "Attractiveness," and analysed through a number of indicators which influence each of these categories (Figure 1). The selected indicators have been chosen based on their ability to best illustrate the development trends within the three categories. However, it is important to note that the inclusion of specific indicators may impact the results for the Oslo region in each of these categories.

In addition to reporting the quarterly developments in these indicators, we analyse the key developments and set them in relation to the general trends of the Norwegian and Oslo Business cycle. In computing the categorical scores, we incorporated the following indicators.



Themes and underlying key factors in Oslo Outlook 2025

Labour market

The Labour market category includes the following indicators: labour market tightness, labour force, and median nominal earnings.

Labour market tightness measures the balance between the supply (unemployed individuals) and demand (vacant positions) for labour and expresses the tightness in the market as a ratio. It reflects the dynamic development in the labour market, provides insight into future employment and wage levels, and is highly correlated with business cycles. The indicator is commonly used by both national and international analysts to track employment trends.

The labour force represents the total available workforce in the region as a stock measure, indicating the capacity of the labour market. Changes in the size of the labour force can offer insights into demographic trends and labour market participation, highlighting developments that influence the labour market.

Median nominal wage is an indicator that reflects a key cost for businesses, as it shows wage expenses per employee. It is used to analyse trends in wage pressure and costs for employers in the region, offer insight into how wage levels influence both labour market competitiveness and business expenses.

Business

The business category aims to provide an overview of the development in within the regions private sector, focusing on four indicators: business confidence, firm entry and exit, and rounds of venture capital (VC) financing.

Business confidence is derived from Norges Bank's quarterly regional network survey, which captures businesses' assessments of the current economic situation. It reflects sentiment in the business sector and provides early signals about firms' expectations regarding growth or downturn. This measure complements traditional macroeconomic indicators by offering timely insights into real-time developments.

Business dynamics are analysed through examining the level of business formation and bankruptcies. A high rate of entry indicates a high level of entrepreneurship while an increase in bankruptcies could signal economic challenges. This information is important for assessing the region's attractiveness to business owners and investors. When computing the categorical score for the development in macroeconomic developments, we focus on the number of bankruptcies, where a higher number of observations reduce the categorical score, when considering the level of business formation, we use the percentage measure.

Rounds of VC financing reflects the level of venture capital investment in the region's new businesses and growth companies. It provides insights into the availability of risk capital and indicates how attractive Oslo is for innovative-driven businesses. An increase in venture capital is thought to reflect a favourable investment climate, and to indicate a high rate of innovation in the region.

Attractiveness

The attractiveness category seeks to highlight the regions' ability to attract talent and includes the following indicators: net migration, tourism, the house price-to-income ratio, and disposable income after consumption.

Net migration offers insight into the regions ability to attract new residents and examines the difference between both national and international immigration and emigration. Positive net migration often signals favourable labour market conditions, high quality of life, abundant economic opportunities, a high level of amenities, and a positive reputation, which may contribute to population growth and the availability of a skilled workforce.

Tourism measures the number of visitors to the region, highlighting its appeal to both business and leisure travellers. It serves as a key indicator of the region's international visibility and reputation and can drive economic growth by boosting demand for local goods and services.

The house price-to-income ratio compares the cost of housing to income levels, providing a clear picture of housing affordability in the region. This indicator is essential for assessing how financially accessible it is to live in the area.

Disposable income after consumption measures how much an average income can purchase based on a standard consumption basket. It uses HICP data from Eurostat combined with average income data from Statistics Norway (SSB). The calculation takes into account the actual costs of goods and services in the region.

Labour

on the Labour Force
"The workforce in Oslo has been steadily increasing since 2021 and continued to grow into 2024"

Labour

Labour market tightness

Labour market tightness measures the ratio of job vacancies to unemployed individuals on a quarterly basis. A lower level of labour market tightness suggests that the supply of labour exceeds the demand for workers.

After a period of above trend levels of market tightness, the labour market tightness has fallen and stabilised around a level of approximately 0.5 for in the third and fourth quarters of 2024. The measure indicates that the labour market is cooling down, both compared to the national average and to its long run trend (See national data, available from Statistics Norway, tables: 05110 and 11587.).

The change in the indicator has been driven primarily due to an increase in the number of registered unemployed persons, coupled with a small decline in the number of job vacancies (Figure 2 and Figure 3).

Ratio of job vacancies to unemployed



Figure 2
Labour market tightness

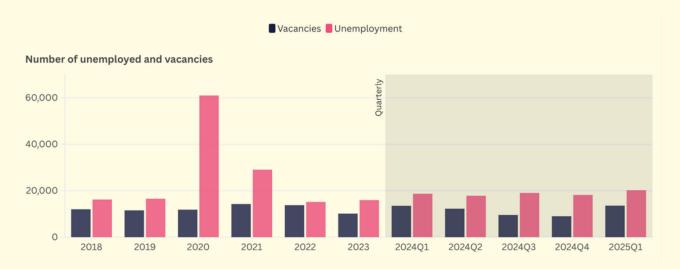


Figure 3
Number of unemployed individuals and job vacancies

Source: NAV

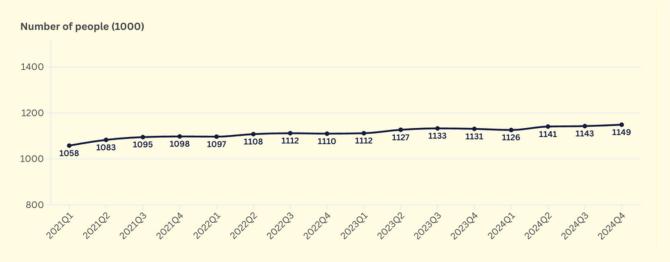


Figure 4
Number of people in the labour force* in Oslo

Source: Statistics Norway Table 13497

^{*}The labour force represents the total available workforce in the region as a stock measure, indicating the capacity of the labour market. This includes all those that are either employed or seeking employment.

The labour force

The workforce in Oslo has been steadily increasing since 2021 and continued to grow into 2024 (Figure 4). In the fourth quarter of 2024, there was a net change of 0.5 percent compared to the third quarter, which is in line with the long run quarterly growth rate of 0.55 percent.

Nominal median earnings

While the region experienced a steady increase in median earnings from 2016 through to 2024 (Figure 5), wage pressures have dissipated as competition for labour has moderated through the year Q1 2024 to Q4 2024, resulting in only a negligible change over the calendar year.

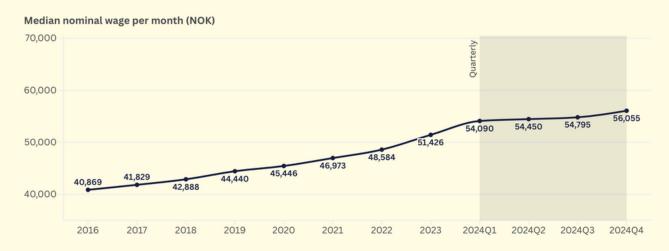


Figure 5
Median monthly nominal earnings in Oslo, 2016 - 2024

Source: Statistics Norway Table 11652

Business

"In 2024, the percentage increase of newly established businesses was slightly lower than in the previous five years but remains above the 15-year average ..."

Business

Business confidence

The measure, taken from Norges Bank surveys expectations from businesses in the region, and normalises the responses on a [-3,3] scale where 0.0 represents the economy being at trend performance (Figure 6). The observations indicate that business confidence in Oslo is stable, fluctuating with minor changes around the "normal" level. Over the year there has been a slight improvement in sentiment, from slightly pessimistic (-0.3) to slightly optimistic (0.1).

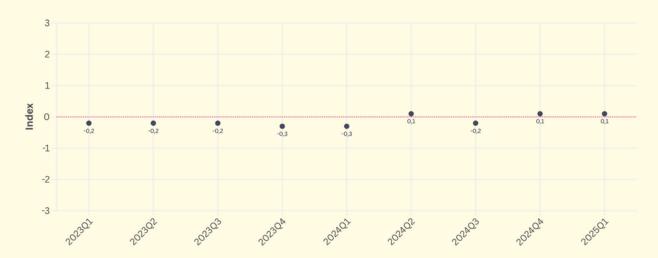


Figure 6
Business confidence, 2023Q1 - 2024Q4

Source: Norges Bank's regional Economic Indicator for the Eastern region

Business dynamics

In 2024, the percentage increase of newly established businesses was slightly lower than in the previous five years but remains above the 15-year average (Figure 7). Between the first and second quarters of 2024, the indicator stabilised, before resuming growth in the third quarter in 2024. While the number of newly established businesses in 2024 is somewhat lower compared to the period between 2020 and 2023, the fourth quarter saw a slight increase in the number of new businesses compared to the third quarter. However, the fourth quarter also experienced a slight rise in the number of bankruptcies (Figure 8).

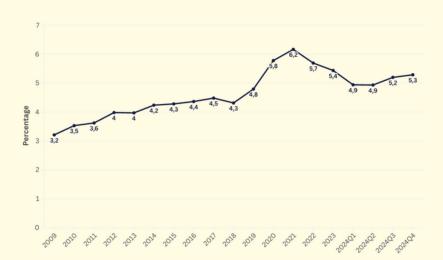


Figure 7 Newly established businesses as a percentage of the total number of registered businesses

Source: Indicator developed by Oslo Economics, based on the number of newly established businesses to the total number of registered businesses. Data on new businesses is from Statistics Norway, table: 08076. Data on the total number of businesses in the region is from Statistics Norway, table: 14151.

Figure 8 Number of newly established businesses and bankruptcies, 2009 - 2024

Source: The number of new businesses is sourced from Statistics Norway, Table 08076, while the number of bankruptcies is derived from Statistics Norway, Table 10790.



Rounds of Venture Capital Financing

Venture capital financing rounds in the Oslo region showed stable growth until 2018, after which they became more volatile, peaking in 2022 (Figure 9). Since then, there has been a gradual decline throughout 2023 and into each quarter of 2024. The size of the VC rounds has shown the same trend, with a growth until 2018 and a peak in 2021. Since then, the total amount of venture capital invested in Oslo have been steadily decreasing together with the number of rounds. Preliminary figures shows that the among of venture capital invested has reached an all-time low in the first quarter of 2025.

When comparing the number of venture capital rounds in Oslo to other Nordic capital regions, data from recent quarters (2021–2023) shows that Oslo and Stockholm have conducted the highest number of VC rounds (Figure 10). However, in the fourth quarter of 2024, Helsinki surpassed Oslo, recording more VC rounds than the Norwegian capital. While Oslo has conducted more rounds than Copenhagen and Helsinki over the past two years, the amount of venture capital funds raised has consistently been lower than in Stockholm, and fluctuating between higher and lower than Copenhagen and Helsinki (Figure 11).

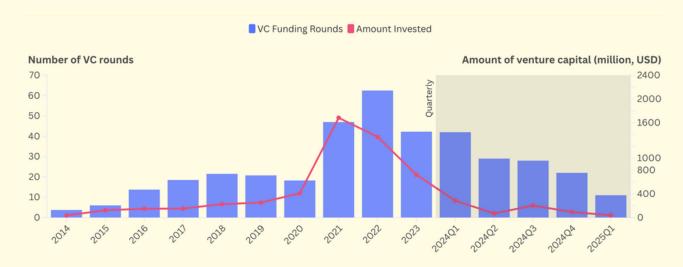


Figure 9
Rounds and size of venture capital financing, 2014 - 2024

Source: Dealroom.co

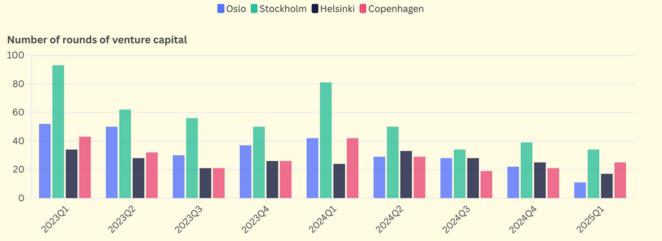


Figure 10
Number of VC rounds in startups and scaleups in the Nordic capital regions

Source: Dealroom.co



Figure 11
Size of VC rounds in startups and scaleups in the Nordic capital regions

Source: Dealroom.co

Attractiveness

"Oslo has experienced consistent positive net migration throughout the entire period of available data (2014 – 2024), primarily driven by international immigration"

Attractiveness

Net migration

Oslo has experienced consistent positive net migration throughout the entire period of available data (Q1 2014 – Q4 2024), primarily driven by international immigration (Figure 12). The effects of the Covid-19 pandemic are evident in 2020 and 2021, resulting in modest—yet still positive—average quarterly growth in aggregate net migration. However, in 2021, domestic emigration exceeded domestic immigration, leading to a net outflow from Oslo to the rest of the country.

The year 2022 marked the greatest positive population influx to the region, likely driven by both a post-pandemic rebound and a sharp increase in international migration following the outbreak of the war in Ukraine. In 2023 and 2024, international immigration gradually declined from its 2022 peak, while domestic immigration from other parts of Norway remained at a higher level than during the preceding decade.

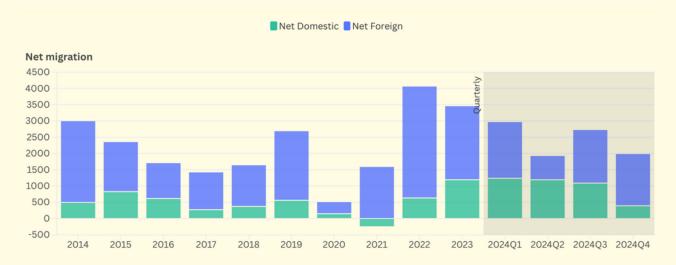


Figure 12
Net migration by domestic and international migration, 2014 - 2024

Source: Indicator developed by Oslo Economics. Net migration is the sum of domestic in- and out-migration, as well as immigration and emigration. Data fra Statistics Norway, table: 01222.

Tourism

The number of overnight stays in the region has gradually increased each quarter based on available data (Figure 13). However, a shortcoming of the statistic is that data was only collected from 2020 onwards, so a trend analysis prior to the reopening following the Covid-19 pandemic restrictions is not possible. Examining the data from 2022 till the end of 2024 at a quarterly frequency we observe that demand is broadly stable, with quarters 1 and 4 being periods of low demand and quarters 2 and 3 having high demand. Overall, there was a 6 percent increase in demand in each quarter in 2024 relative to the same quarter in 2023.

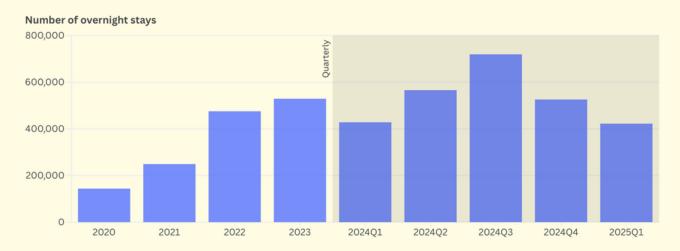


Figure 13 Tourism, 2020 - 2024

Source: Number of overnight stays, Statistics Norway Table 14162

House price-to-income ratio

The house price-to-income ratio is defined as the median house price divided by average gross annual income. In the Oslo region, the indicator shows that purchasing a median priced home requires 6-8 years' worth of gross salaries. However, this has decreased from a peak in 2022. Examining the drivers of the price changes, we observe that from 2016 to 2022, there was a strong growth in housing prices which outpaced the growth in earnings. Since 2022, housing prices have stabilised somewhat while the nominal average wage earnings have risen, leading to the gradual decline in the ratio (Figure 14).

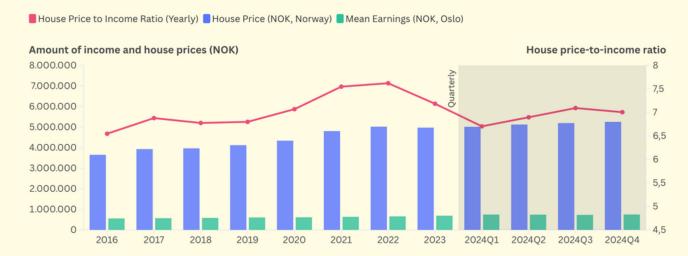


Figure 14
Development in house prices, incomes, and ratio, 2020 - 2024

Source: Indicator developed by Oslo Economics and defined as the median housing price divided by the average annual income. The median housing price is taken from Oslo Municipality as a point estimate, with quarterly development from Statistics Norway, table: 07221. The average annual income is 12 times the monthly income from Statistics Norway, table: 11652.

Disposable income after consumption

When examining disposable income after purchasing a standard household consumption basket, we observe a gradual increase in purchasing power from 2016 to 2024, with a strong period of growth in disposable incomes in 2023 (Figure 15). However, between Q1 2024 and Q3 2024, the rate of inflation has outpaced the growth in nominal earnings, resulting in a decline in disposable income and economic welfare. In the last quarter, we again observe a modest return to the positive trend, though the measure has still not recovered to a peak value observed in 2024Q1.

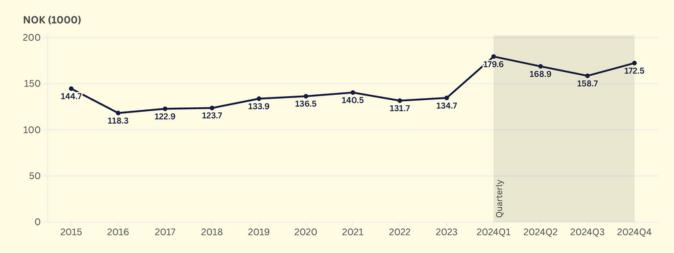


Figure 15
Disposable income after consumption, 2015 - 2024

Source: Indicator developed by Oslo Economics. The price level of the basket of goods is calculated based on weights and prices reported by Eurostat. The development in price level is then calculated through Eurostat's HICP index. Disposable income is annual income after the basket of goods income has been deducted. Code for HICP weight from Eurostat: prc_hicp_inw. Code for HICP price observation from Eurostat: prc_dap15. Code for HICP Index from Eurostat: prc_hicp_midx. Income data obtained from Statistics Norway, table: 11652.

Appendix A: Method

In constructing composite indicators across the three thematic categories — Labour, Macro, and Attractiveness —we utilise a selection of quarterly indicators drawn from a range of official data sources. The goal is to summarise complex and multidimensional developments into interpretable scores that facilitate comparison over time and across domains.

Data Preparation and Indicator Selection

Each category includes multiple indicators relevant to its domain. For example, the Labour category includes the labour force size, labour market tightness, and earnings. Special care is taken to handle indicators reported on different scales, in different units, or with varying directional interpretations (e.g. high bankruptcies are negative, while high migration is positive).

- Labour:
 - Labour Force Size
 - Labour Market Tightness
 - Median Wages
- Business:
 - Business Confidence
 - Bankruptcies
 - New Firms as a percentage of total existing
 - Venture Capital Rounds
- Attractiveness:
 - Net Migration
 - Accommodation Nights (Oslo)
 - House Price to Income Ratio
 - Expendable Income

Normalisation for Comparability

To allow meaningful aggregation of indicators with different units (e.g. NOK, ratios, counts), all indicators are min-max normalised to a common scale between 0 and 1. This ensures equal weighting and comparability within each category. For indicators where higher values indicate worse outcomes — such as bankruptcies and house price to income ratios — the values are inverted before normalisation.

An exception to this procedure is the measure of business confidence, which is already expressed on a bounded scale from -3 to +3. To integrate this indicator into the same [0, 1] scale as others, we apply a fixed transformation: Score = (Xt+3)/6. This approach preserves the interpretation of the indicator while aligning it with the normalisation framework, ensuring it contributes comparably to the composite business score without being subject to extreme values or skewed distributions.

For Accommodation Nights (a seasonal tourism indicator), the normalisation is performed not on the raw quarterly values, but on their year-over-year (YoY) change. This corrects for recurring seasonal fluctuations and ensures that the score reflects underlying economic development rather than predictable seasonal patterns.

Category Score Calculation

Each category score is calculated as the simple average of the normalised scores of its component indicators in a given quarter. This approach assumes equal importance for each indicator within a category and yields a single composite value per category per quarter.

Indexing for Interpretability

After the scores are normalised and aggregated, they are indexed to 2023Q1 = 100 to aid communication and interpretation. This does not affect the underlying comparability of the scores but provides a more intuitive frame of reference for stakeholders, enabling statements such as "the indicator has risen 15% since 2023Q1."

It is important to note that normalisation and indexing serve distinct purposes. Normalisation allows for meaningful aggregation across heterogeneously scaled variables; indexing enhances communicability without altering the internal logic of the composite score. Using both in sequence is therefore methodologically sound and practically useful.

PUBLISHER OSLO BUSINESS REGION

PUBLISHED APRIL, 2025

