

The labor market in Norway, 2000–2018

Negative consequences of falling oil prices were offset by real wage flexibility, reduced immigration, and labor reallocation

Keywords: wages, unemployment, Norway, gender equality, tripartism

ELEVATOR PITCH

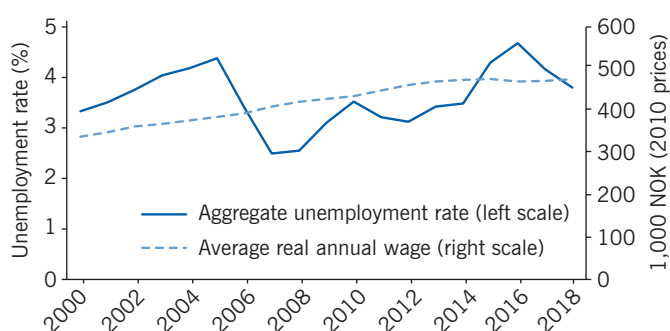
Norway has a rather high labor force participation rate and a very low unemployment rate. Part of the reason for this fortunate situation is the so-called “tripartism”: a broad agreement among unions, employers, and government to maintain a high level of coordination in wage bargaining. This has led to downward real wage flexibility, which has lessened the effects of negative shocks to the economy. Reduced net immigration, especially from neighboring countries, also mitigated the negative effects of the oil price drop in 2014. A potential drawback of tripartism is the difficulty of reducing employee absences and disability.

KEY FINDINGS

Pros

- ⊕ Both men and women enjoy high employment.
- ⊕ Real wage flexibility has helped combat unemployment, especially after the drop in oil prices in 2014.
- ⊕ Unemployment is quite low, also among young individuals.
- ⊕ There is a downward-sloping trend of part-time work among women.
- ⊕ Wages are compressed, and wage inequality is rather small and relatively stable.

Aggregate unemployment rate and average real annual wage



Source: Unemployment rate (aged 15–64): <https://data.oecd.org/unemp/unemployment-rate.htm>; annual earnings, real values, average for all employees: <https://www.ssb.no>

IZA
World of Labor

Cons

- ⊖ Worker absences due to sickness as well as disability rates are high, putting pressure on the welfare state.
- ⊖ The overall employment rate is trending downwards possibly related to an aging population.
- ⊖ The labor market is highly gender segregated with respect to sector and occupation.
- ⊖ The school drop-out rate has started to increase among young men.

AUTHOR'S MAIN MESSAGE

Overall, the Norwegian labor market is performing very well. The severe drop in oil prices in 2014 led to fewer jobs in the oil sector. However, the downward flexibility of real wages and increased demand in other export-oriented industries dampened any potential negative employment effects. The employment rate among women is very high, but there are challenges due to a gender-segregated job market and a persistent raw gender wage gap of 15%. Norway's substantial welfare system helps parents remain in the labor market, but an aging workforce and high worker absenteeism due to illness and disability are concerning.

MOTIVATION

One important factor behind the well-functioning Norwegian labor market, with low unemployment and rather high employment rates for both men and women, is the so-called “tripartism.” This involves cooperation amongst unions, employers, and government to generate competitiveness through modest wage increases, thereby ensuring high employment. However, this tripartism might come at a cost of high worker absence and disability rates, which are not directly related to health conditions. This raises concerns about the sustainability of the welfare state and of the successful macroeconomic aspects of labor market policy.

DISCUSSION OF PROS AND CONS

Employment and unemployment

By international comparison, the employment rate is very high in Norway, both for men and women (Figure 1). The overall employment rate of 75% is exceeded by, for instance, Germany (76%), Sweden (77%), and Switzerland (80%). Moreover, women now account for 47% of the workforce, which is very high internationally. Employment rates of both men and women have decreased since 2000 and especially over the last decade; in 2018, they were 77% for men and 73% for women.

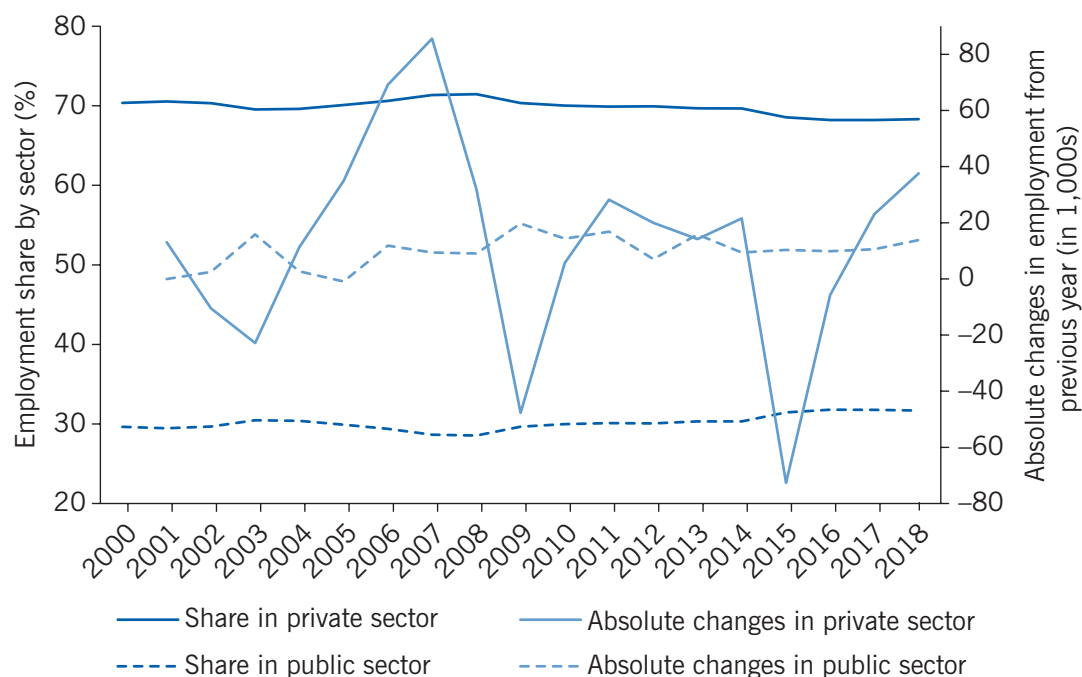


The rather high employment rates are mirrored by low unemployment rates, which were 4% for men and 3.5% for women in 2018. The youth unemployment rate (among 15–24 year olds) is also close to the OECD average (11.1% and 10.1% in Norway in the final quarter of 2018, women and men respectively, 10.7% and 11.4% in the OECD as a whole). The fluctuations in unemployment have been larger for men than for women.

This is related to a highly gender-segregated labor market, where men dominate those sectors that face stronger international competition, such as the petroleum industry and manufacturing. Sectors where women typically work are education, health, and public services. These latter sectors are usually less subject to fluctuations. The slump in oil prices in 2014, followed by a drop in investment in the petroleum industry, has thus led to a slight increase in the unemployment rate during the last several years, especially among men.

One potential way to combat increasing unemployment is to create more workplaces in the public sector. When looking at the share of public sector employment relative to the total number of employed, this ratio has grown somewhat since 2000 (Figure 2). However, there does not seem to have been any particular activity in recent years in response to the oil price drop. This can be seen as an example of the Baumol effect, where increasing employment in the service sector and declining employment in the manufacturing sector are observed. Using 2013 as a benchmark, as the drop in the oil prices took place in 2014, the absolute increase in public employment between 2013 and 2016 was 30,000, while the decrease in private employment was 56,000. Having said this, the relative employment increase between 2013 and 2018 is 7% in the public sector and 0.2% in the private sector. Nevertheless, the increase in public sector employment seems to follow a long-term trend and is relatively unaffected by business cycle fluctuations. Private sector employment, on the other hand, has been much more volatile, following business cycle fluctuations quite closely.

Figure 2. Public sector employment and changes in employment by sector

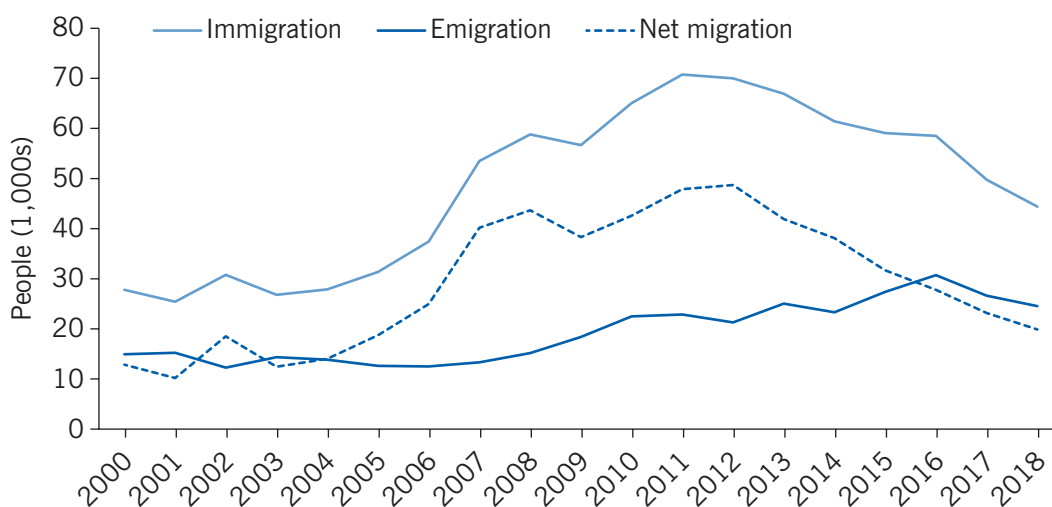


Source: Statistics Norway. Online at: <https://www.ssb.no/statbank/table/07979/tableViewLayout1/?loadedQueryId=10022081&timeType=top&timeValue=10>

I Z A
World of Labor

Another factor behind the rather modest effect of the drop in oil prices is reduced net migration from nearby countries (Figure 3), especially Sweden and Poland, which served to dampen the pressure in the Norwegian labor market. This is partly driven by the depreciation of the Norwegian krone and the improved labor market in Sweden.

Figure 3. Immigration, emigration, and net migration, foreign citizenships



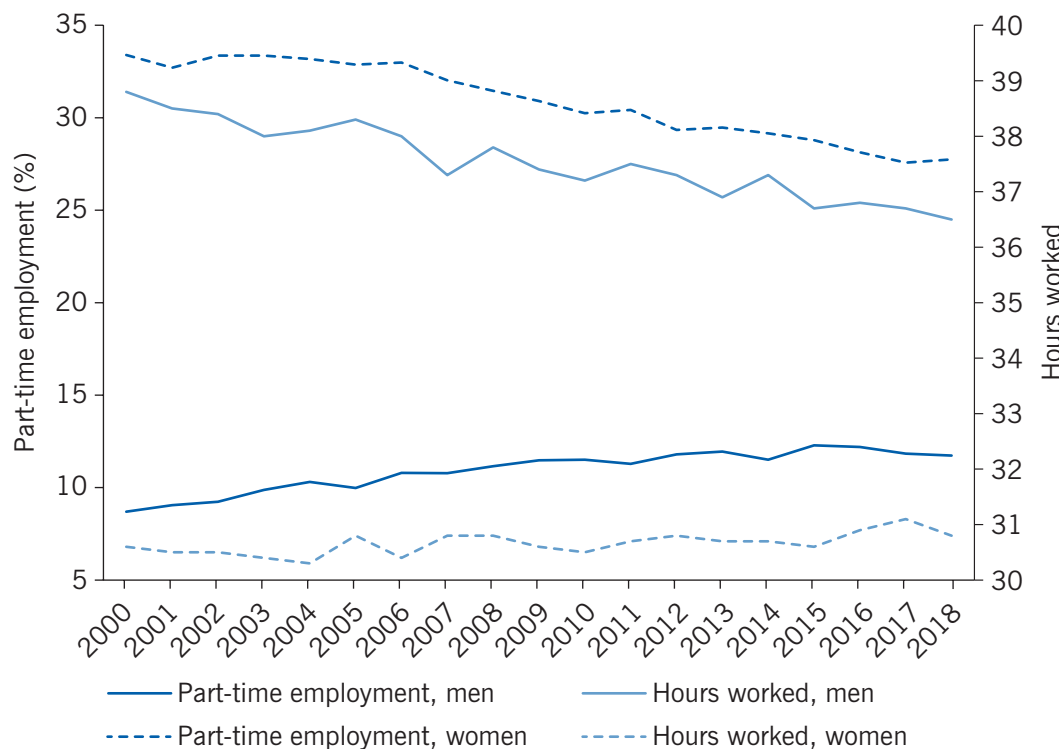
Source: Statistics Norway. Online at: <https://www.ssb.no/en/statbank/table/05394/>

IZA
World of Labor

Hours worked

In 2018, the average number of hours worked per year was 1,416, below the OECD average of 1,734 hours, and far below the US average of 1,786 hours. Full-time work in Norway is 37.5 hours per week. When examining registered hours worked, it becomes apparent that men are working full-time weekly hours, while women on average are working shorter hours, 31 hours per week (Figure 4). Approximately 12% of men work part-time, in contrast

Figure 4. Hours worked and part-time employment



Source: Part-time work, OECD. Online at: <https://data.oecd.org/emp/part-time-employment-rate.htm#indicator-chart>; hours worked (2000–2007): <http://ssb.no/a/samfunnsspeilet/utg/200705/08/tab-2007-12-12-01.html>; (2007): http://www.ssb.no/a/publikasjoner/pdf/sa_98/kap7.pdf; (2008–2018): <https://www.ssb.no/en/statbank/table/07855/>

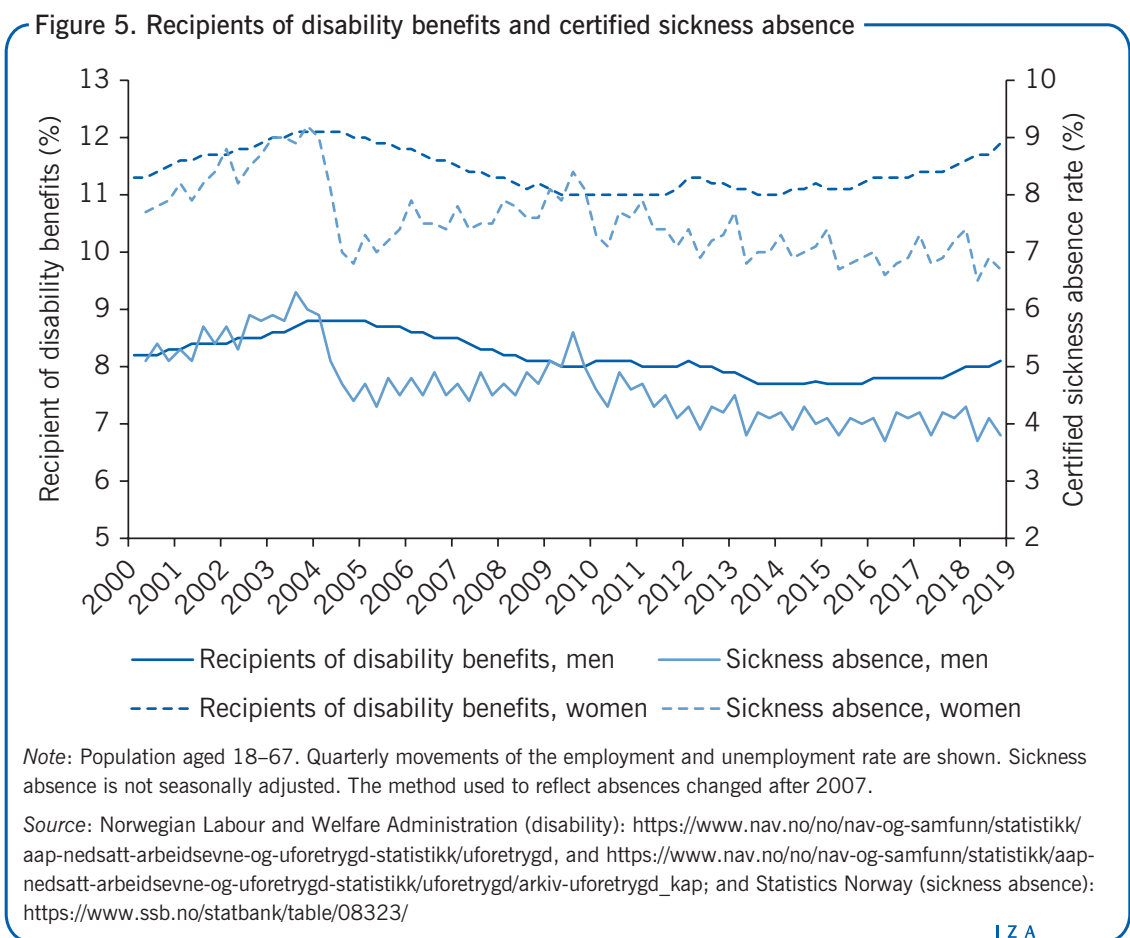
IZA
World of Labor

to 28% of women. This difference is related to child rearing, as women still take the main responsibility for childcare. The share of women working part-time in Norway is significantly higher than the EU average, though it has been decreasing since the turn of the century.

Absence due to disability and sickness

As seen in Figure 1, unemployment rates are relatively low in Norway. However, it has been suggested that the high proportion of the working-age population receiving disability benefits in Norway represents disguised unemployment [1]. It has been found that approximately 28% of all new disability recipient cases are related to restructuring and job destruction. Thus, a large percentage of disability insurance claims can be directly attributed to job displacement and to other adverse shocks to employment opportunities. Because disability in Norway is treated as an absorbing state—once on disability benefits, workers typically do not move back into employment—benefits are essentially permanent until the official retirement age of 67. This represents a serious concern about the labor market. Additionally, researchers have found a significant positive intergenerational correlation in the receipt of disability pensions, such that offspring of disability recipients have a higher probability of ending up as disability recipients compared to otherwise identical individuals (see, for instance, [2]). This implies that another concern is the potential spillover effect onto future generations in the workforce.

Figure 5 (left axis) shows disability recipiency rates for both men and women from 2000 to 2018. As seen in the figure, a fairly constant 11–12% of the female population aged 18–67



received disability benefits during this period, but with an upward trend in the latter years. For men, the corresponding numbers are between 8% and 9%. Among 60 to 64-year-olds, one-third of women and nearly one-quarter of men are on disability benefits. This offers a clear indication that disability benefits are an important route to early retirement. OECD numbers show that the disability benefit recipient rate in Norway, together with the other Scandinavian countries, is considerably higher than the average across all OECD countries. Even though eligibility for disability benefits is primarily based on an individual's health status, other factors are also taken into consideration, such as age, education, ability, and labor market prospects. The large number of disability benefit recipients reduces the potential workforce and threatens the sustainability of the welfare state.

Not only is the number of recipients of disability benefits alarmingly high, but the proportion of employee absences due to sickness is also very high in Norway, and much higher for women than for men. The generosity of the welfare state is likely to be part of the explanation for the high incidence of sickness absence as well as the disability numbers. The average replacement rate when someone is on disability benefits is 50–60% before taxes. Due to the progressive income tax and allowances, the replacement rate after tax is considerably higher. The replacement rate for sickness absence is 100% from the first day of sickness, and a worker is eligible for sickness absence benefits for up to 12 months. Beyond 12 months, workers are eligible for rehabilitation or disability benefits if their work capacity is reduced by at least 50%.

Wage and earnings

The raw gender income gap has been quite stable over the period 2000–2018, as Figure 6 demonstrates. Women earn on average 15–16% less than men. Norway's failure to close this gap contrasts with the EU-27 average, where the unadjusted gender pay gap decreased by 1.5 percentage points over the same period. The gender income gap is partly driven by a substantial gender difference in the distribution of wealth.

While there has not been significant progress with respect to the gender income gap in Norway, wages have played an important role in the country's overall economic success. Tripartism and its resulting real wage flexibility are important factors in explaining the relatively high employment rate and low unemployment rate over the previous decades, and particularly so after the oil price drop in 2014 (Figure 6). The real wage increase was very modest in 2015, and even negative in 2016. The tripartism is aided by the high degree of unionization (approximately 55%) in Norway, and an even higher union coverage—the share of workers covered by collective agreements—(almost 80%). The role of the government in this collaboration is to support coordination through institutional arrangements, but also to give signals about related issues, such as pension reforms, labor market regulations, efforts in battling unemployment, absenteeism, undeclared work, and poor working conditions. The collective agreements have also resulted in substantial wage compression.

Wage compression in Norway is more significant in the public than in the private sector (Figure 7), which is to be expected. It is also evident that wage compression has been rather stable over time, especially in the public sector. Turning to the private sector, the 90/10 ratio increased from 2.4 in 2000 to 3.1 in 2018 showing that the inequality between high and low wage earners has grown over time. This suggests that the traditional solidarity in



the labor market may be under pressure. A closer look suggests that the rise in inequality was particularly noticeable during the five most recent years. Globalization and skill-biased technological change are often offered as explanations for growing inequality in developed countries [3]. Nevertheless, across OECD countries, Norway ranks low in terms of income inequality as measured by the 90/10 ratio. Only Sweden, Italy, and Belgium have a lower ratio [4].

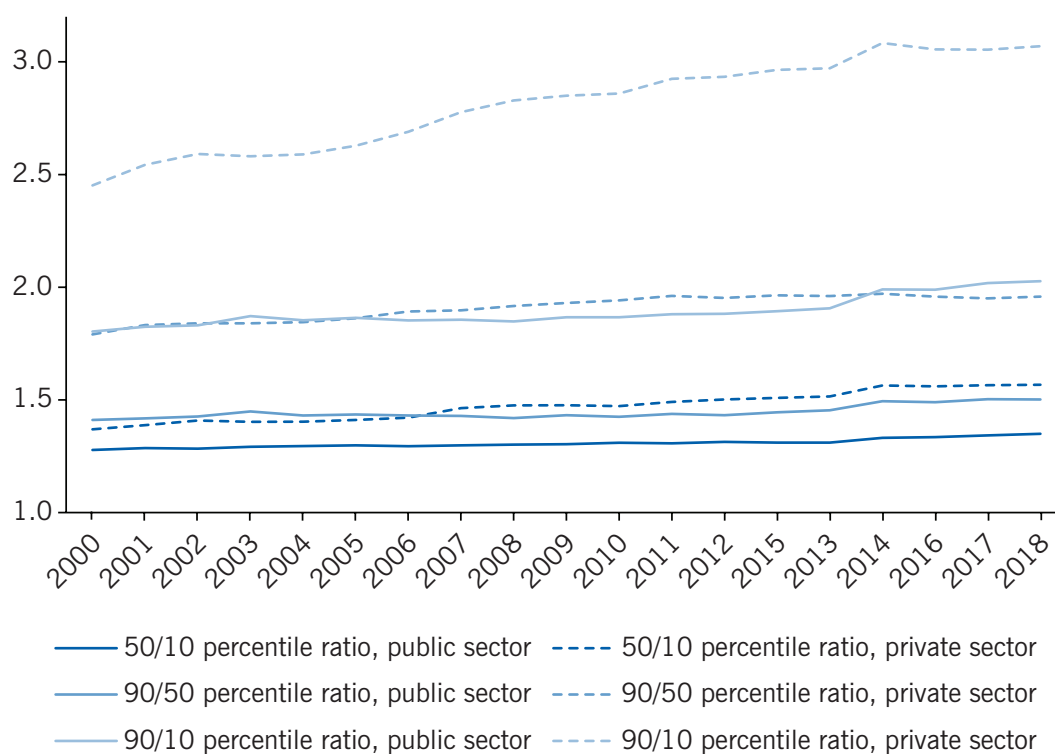
Gender balance

The employment rate for women has been high by international comparison for several decades. One important factor behind the general trend is increasing entry into higher education by women. In 2000, women overtook men in the proportion with higher education (more than 13 years), and since then men have fallen further behind (Figure 8).

Another potential explanation for the high female employment rate is the availability of subsidized childcare. As shown in Figure 9, for older pre-school children (aged 3–5 years), childcare coverage is above 95% (all children in Norway start elementary school in the calendar year they turn six). Among the youngest children, aged 1–2 years, the coverage rate is 80%. These rates are high from an international perspective.

The other pillar of Norwegian family policy is paid maternity leave, including job-protected leave, to facilitate the combination of family care and work. Since 1993, parents have

Figure 7. Wage distribution—Interdecile ratios for public and private sectors



Note: 90/10 percentile ratio = wages at the 90th percentile divided by wages at the 10th percentile; other ratios analog.

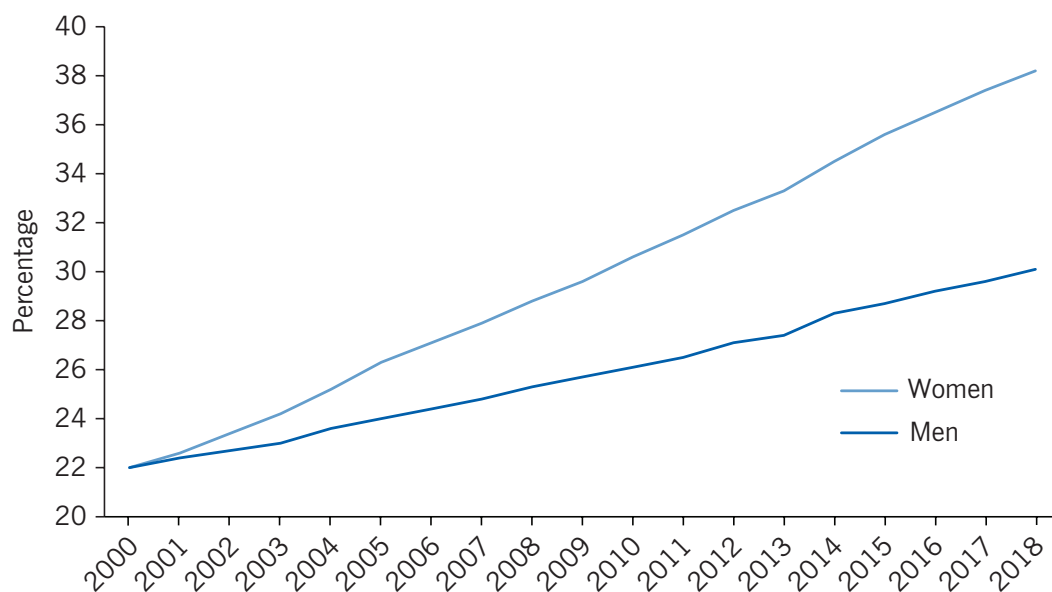
Source: Author's own compilation based on data from Statistics Norway (2000–2008). Online at: <https://www.ssb.no/statistikkbanken/SelectVarVal/Define.asp?MainTable=LonnSektor&KortNavnWeb=lonnansatt&PLanguage=0&checked=true> <https://www.ssb.no/statistikkbanken/SelectVarVal/Define.asp?subjectcode=al&ProductId=al&MainTable=LonnAnskjDesSekt&SubTable=1&PLanguage=0&nvl=True&Qid=0&gruppe1=Hele&gruppe2=Hele&gruppe3=Hele&gruppe4=Hele&VS1=Kjonn3&VS2=Desiler3&VS3=SektorLonn&VS4=&mt=0&KortNavnWeb=lonnansatt&CMSSubjectArea=&StatVariant=&checked=true>; <https://www.ssb.no/statistikkbanken/SelectVarVal/Define.asp?MainTable=Lonnansatt08&KortNavnWeb=lonnansatt&PLanguage=0&checked=true>

IZA
World of Labor

been entitled to at least 42 weeks of parental leave, including four weeks of paternity leave. The number of compensated weeks has been steadily increasing over time, and since 2014 parents have received a total of 49 weeks (split between both parents). In 2013, the paternity quota was 14 out of 49 weeks, which the family lost if the father did not take the paid leave. The father's quota was reduced in 2014 but was increased in 2018 (to 15 weeks) and further in 2019 (to 19 weeks). There is an ongoing debate about whether the gender wage gap is partly explained by the length of maternity leave, and that the father's leave quota should be increased again as a result. This could affect female–male differences in the labor market, since almost all eligible fathers do take the minimum paternity leave allowed, and only very few take more.

Employment rates and education levels are high for Norwegian women compared to those in other countries, but women still enter very different occupations and industries than men, which creates a gender-segregated labor market. Most women in Norway work in the public sector (approximately two-thirds)—for example, education, care, and health. The majority of men work in the private sector (approximately two-thirds), with many

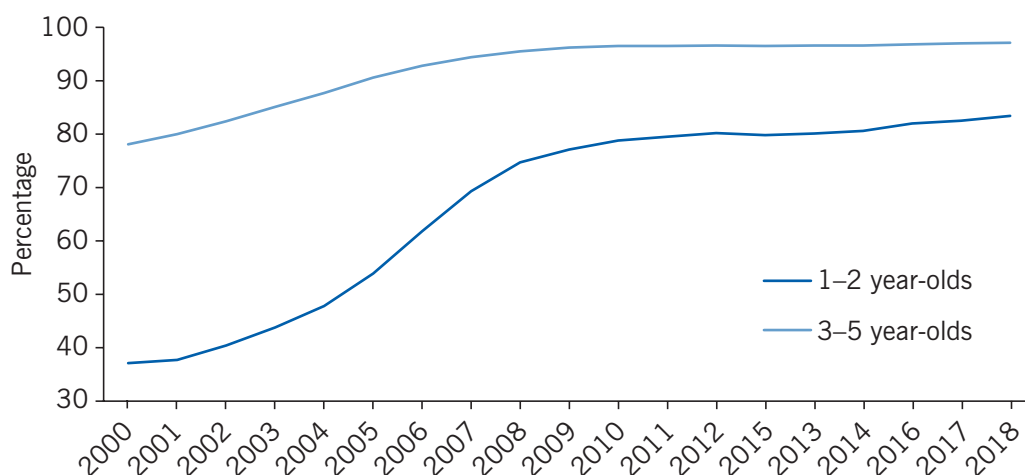
Figure 8. Educational level—Share with tertiary education



Source: Statistics Norway. Online at: <https://www.ssb.no/en/statbank/table/09429/>

IZA
World of Labor

Figure 9. Childcare coverage



Note: Comparable numbers do not exist for 2000.

Source: Statistics Norway. Online at: <https://www.ssb.no/en/statbank/table/04903/>

IZA
World of Labor

working in manufacturing and construction. Typically, male-dominated occupations are vocational training occupations, engineering, transport, and agriculture. By contrast, female-dominated occupations include kindergarten and primary school teaching, nursing, and eldercare.

A final reason for the labor market differences between men and women stems from the transition from school to work. The school drop-out rate for young men is higher than

for young women. The completion rates of upper-secondary education—the proportion of students entering an upper-secondary education program who graduate within two years after the duration of the program—were 79% for girls and 71% for boys in 2015, the latest for which data are available, and very similar to the OECD average [5]. The gender gap in completion rates is mirrored in Figure 8, showing educational attainment. With fewer low-skilled jobs available in Norway in recent years, men in particular are having a hard time getting established in the labor market. It is thus unsurprising that the increase in disability benefits among young adults is concentrated among men.

LIMITATIONS AND GAPS

Some observers argue that the true Norwegian unemployment rate is higher than what the current official numbers indicate, and that individuals on temporary training and rehabilitation programs should be counted in official unemployment statistics. The same is true with respect to individuals not eligible for unemployment benefits, typically students with no recent work experience. One alternative would be to have alternative measures of unemployment or underutilization, similar to those published by the US Bureau of Labor Statistics and other statistical agencies.

The generosity of the welfare state has contributed to the high participation rate of women and made it possible to combine family time and work time. It is still an open question, though, whether this generosity might come with a cost. Research has pointed out that women with children are less likely to be promoted than those without children, and that mothers tend to enter at lower-level jobs than non-mothers [6]. Despite this finding, a large part of the family gap (the difference between mothers and non-mothers) remains unexplained.

SUMMARY AND POLICY ADVICE

The Norwegian economy has responded quite well to the drop in oil prices and associated slump in oil-related investments. Part of this is due to downward real wage flexibility and increased demand for labor in other industries. This latter increase has been stimulated by a depreciation of the Norwegian kroner. Moreover, politicians have ignored the temptation to increase public sector employment. This is a reasonable position given the need for structural changes in the Norwegian labor market—moving away from the petroleum industry and toward a greater focus on other industries.

A significant concern looking ahead though is related to the size of the workforce. Despite rather high migration rates, a fertility rate of only 1.56 in 2018, and an aging population coupled with high absenteeism and disability rates have reduced the workforce and increased pressure on public budgets. This threatens the sustainability of the welfare state. However, none of the political parties appears to be willing to cut benefits in response to this situation, and even if they were, such cuts might put the beneficial tripartite system under pressure.

Acknowledgments

The author thanks an anonymous referee and the IZA World of Labor editors for many helpful suggestions on earlier drafts. The author also thanks Felix Kapfhammer for excellent research assistance on an earlier version, and Astrid Kunze for valuable comments and suggestions. Version 2 of the article updates the content and figures to 2018.

Competing interests

The IZA World of Labor project is committed to the IZA Code of Conduct. The author declares to have observed the principles outlined in the code.

© Øivind A. Nilsen

REFERENCES

Further Reading

- OECD. *Economic Surveys: Norway*. Paris: OECD, n.d.
- OECD. *Employment Outlook (various years)*. Paris: OECD, n.d.
- Royal Ministry of Finance. *The National Budget 2020—A Summary*. Oslo: Royal Ministry of Finance, 2020.
- Statistics Norway. *This is Norway 2019*. Oslo: Statistics Norway, 2019.

Key references

- [1] Bratsberg, B., E. Fevang, and K. Røed. “Job loss and disability insurance.” *Labour Economics* 24 (2013): 137–150.
- [2] Bratberg, E., Ø. A. Nilsen, and K. Vaage. “Assessing the intergenerational correlation in disability pension reciprocity.” *Oxford Economic Papers* 67:2 (2015): 205–226.
- [3] Acemoglu, D., and D. Autor. “Skills, tasks and technologies: Implications for employment and earnings.” In: Ashenfelter, O., and D. Card (eds). *Handbook of Labor Economics Vol. 4, Part B*. Amsterdam: Elsevier, 2011.
- [4] OECD. *OECD Economic Surveys Norway 2019*. Paris: OECD Publishing, 2019.
- [5] OECD. “Education at a glance.” *OECD Indicators*. Paris: OECD Publishing, 2017.
- [6] Kunze, A. “The family gap in career progression.” In: Polachek, S., and K. Tatsiramos (eds). *Research in Labor Economics Vol. 41*. Bingley: Emerald Publishing, 2015.

Online extras

The **full reference list** for this article is available from:

<https://wol.iza.org/articles/the-labor-market-in-norway>

View the **evidence map** for this article:

<https://wol.iza.org/articles/the-labor-market-in-norway/map>