

DANMARKS NATIONALBANK

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THE GREENLANDIC ECONOMY

Pressure on the economy and growing need for reforms



Booming economy and labour shortage

Production capacity is close to being fully utilised, and there is a considerable shortage of skilled labour. The pressure is most evident in Nuuk, where the risk of overheating is also greatest.



Moderate inflationary pressures

Price increases remain modest due to the country's special energy infrastructure. Fixed oil price agreements dampen inflation this year and in 2023, but, in the longer term, it is not possible to shield Greenland from rising global prices.



Growing need for reforms

Fiscal policy is clearly unsustainable in the longer term, and public expenditure cannot be financed under the current taxation rules. There is a growing need for reform of, e.g., the tax system and the education system.

Economic boom and modest inflationary pressures

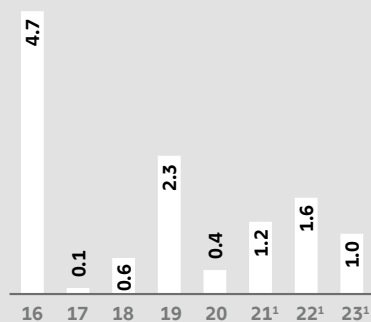
The Greenlandic economy is booming with close to full utilisation of its production capacity and a growing need for foreign labour and resources. Economic activity is currently buoyed primarily by large construction investments in airports and other infrastructure. In addition, tourism has seen a strong rebound after a couple lost tourist seasons in 2020 and 2021. Against this background, Greenland's Economic Council expects the economic recovery, which started in 2016 with good times for the fishing industry, to continue in the coming years, see chart 1.

The growth is evident in the labour market, where the number of registered unemployed persons dropped to below 1,000 in September 2022. This is the lowest level ever, but the figure conceals large regional differences. The labour market pressures are greatest in the capital Nuuk and in large towns in the north. In South Greenland and Tasiilaq on the east coast, unemployment remains high, reflecting significantly weaker economic development.

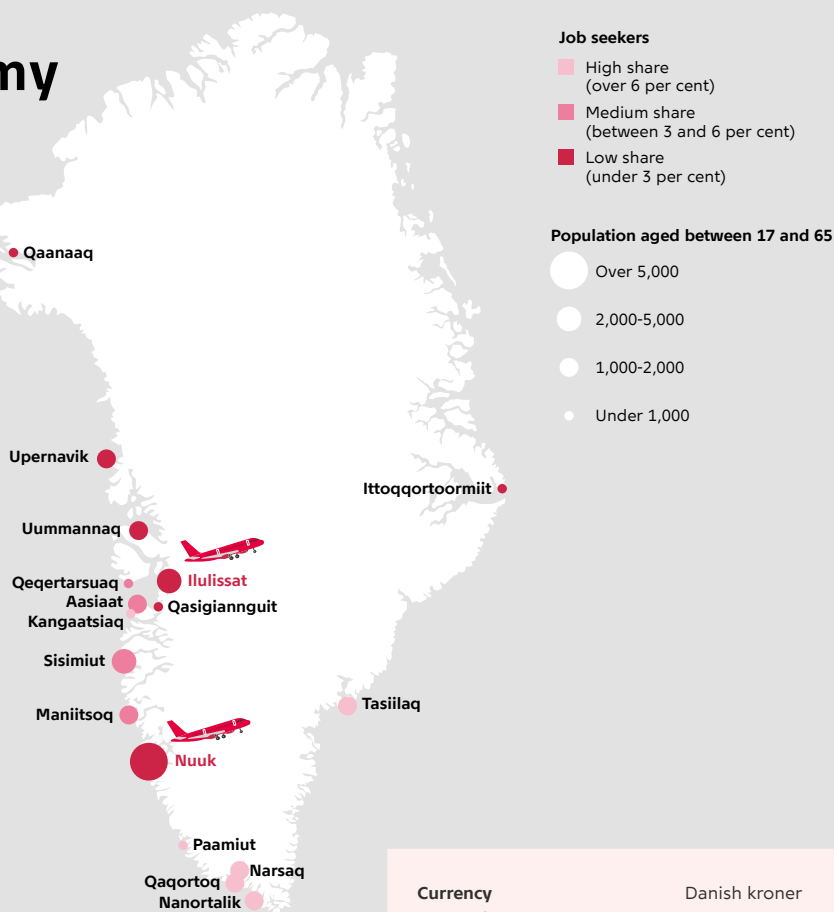
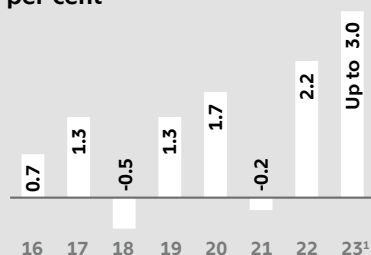
Chart 1

Facts on the Greenlandic economy

Growth in GDP, per cent



Increase in consumer prices, per cent



Currency	Danish kroner
Population (figure, beginning 2022)	56,562
– of which in Nuuk (capital)	19,261
Population aged 17-64	38,207
Employed ² (2020)	26,808
Unemployed ² (2020)	1,431
GDP (kr. billion 2020)	20.1
– per inhabitant ³ (kr. 1,000)	358.8

Source: Statistics Greenland and Statistics Denmark.

¹ Estimate from Greenland's Economic Council, September 2022.

² Average of monthly figures.

³ In comparison, GDP per inhabitant in Denmark was kr. 398,600 in 2020.

With over 19,000 inhabitants, Nuuk stands out as by far the largest town in Greenland, and, in terms of population, there is a big step down to the 5,500 inhabitants of Sisimiut and the 4,700 inhabitants of Ilulissat. Nuuk is the only town with net migration in recent years, and a housing shortage is effectively preventing the further concentration of the Greenland population in the capital.

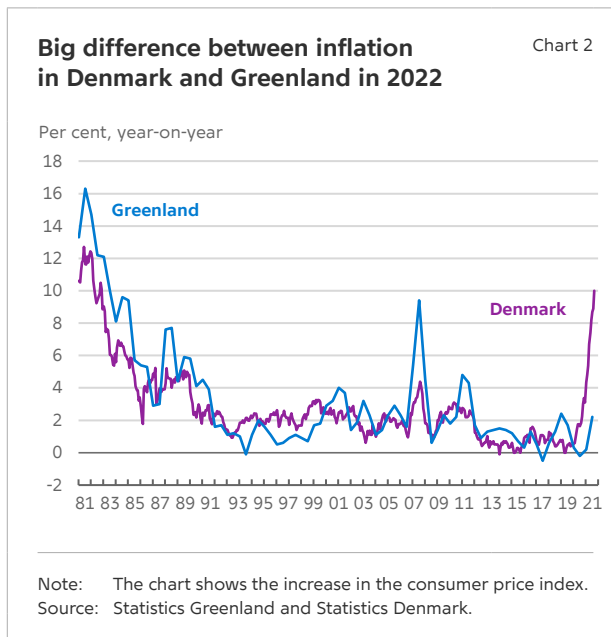
Modest inflationary pressures this year

In July 2022, consumer prices in Greenland were 2.2 per cent up on the previous year. The modest level of inflationary pressures compared to other countries is closely linked to the country's energy supply. Electricity and heating are supplied by regional hydroelectric power plants or small local diesel-powered electricity and power plants. Moreover, the government-owned company Polaroil is under an obligation to supply oil and diesel products to Greenland under a service contract, and price guarantee agreements were entered into for the 2021-2023 period long before the outbreak of the war in Ukraine. The concluded agreements on fixed prices of oil products have so far shielded the country from price increases on energy products and contributed to keeping inflationary pressures modest this year.

Another reason for the modest inflation rate is that, for a number of years, there has been a decrease in the costs of home use, comprising rent, electricity, water and heating. One of the reasons for the decrease is that keeping rents and electricity, heat and water rates low has been a higher political priority than raising funds for the necessary renovation and maintenance of the country's many publicly owned homes.

However, clear price increases are seen in some areas, for example for imported food products, freight and petroleum products for the fishing industry outside the service contract.

In the long term, it will not be possible to shield Greenland from international price developments, and higher energy prices will raise consumer prices, especially when the fixed price agreements expire in 2023. Seen over an extended period, there has been a clear correlation between Danish and Greenland inflation due to the countries' common currency and the high level of trade between Denmark and Greenland, see chart 2.



Good years in fishing industry have strengthened the economy

Fishing is the predominant industry, and goods exports consist primarily of fish products that have undergone varying degrees of processing. The most important export species are prawns, Greenland halibut and cod. Exports of prawns alone account for half Greenland's export of goods.

Catches of prawn, which is an important species, have developed favourably for a number of years and also increased in 2021. Prawn fishing has been MSC-certified as sustainable, and the quotas comply with scientific advice on sustainable fishing. The same applies to the seagoing Greenland halibut fishery. In turn, the regulation of other parts of the fisheries is problematic, especially the coastal Greenland halibut and cod fisheries, where the fishing pressure far exceeds biological advice and is therefore not sustainable.

In 2019, the government of Greenland set up a fisheries commission, which, in 2021, recommended a number of specific initiatives aimed at ensuring more sustainable fishing and higher economic returns for society from this important resource. Follow-up on the commission's recommendations is an important condition for long-term strengthening of the industry.

Fish and shellfish prices have risen in 2022 against the backdrop of general international price increases

for food products. In the 2nd quarter of 2022, Greenland export prices for prawns were 10 per cent up on the previous year, the price of Greenland halibut was 19 per cent higher, while the price of cod rose 34 per cent.

The export prices of fish and shellfish are of considerable importance to prosperity in Greenland. The rising prices of fish products are a prerequisite for achieving improvements in the ratio between export prices and import prices in foreign trade (terms of trade) and thus limiting the loss of wealth resulting from more expensive imports.

Since 2014, prices of fish products have increased significantly more than import prices, see chart 3. This has strengthened the terms of foreign trade considerably, making it possible to finance a growing volume of imports through fish and shellfish exports.

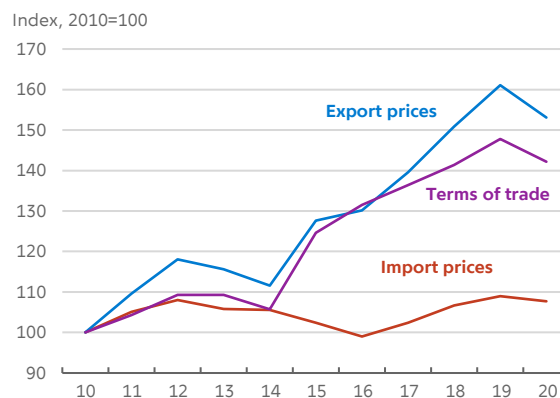
The rising export prices have thus strengthened Greenland's consumption and investment opportunities. The terms of trade-adjusted (real) gross domestic product (GDP) gives an impression of this wealth gain: On average, GDP grew by about 1 per cent a year from 2010 to 2020, while terms of trade-adjusted GDP grew by 2.4 per cent a year over the same period, according to an analysis from Greenland's Economic Council. The good years in the fishing industry have rubbed off widely on consumption in society, on investments in the fishing industry and on the government of Greenland's revenue from the so-called economic rent tax on fish and shellfish.

Major infrastructure investments

The investments have accounted for around 30-35 per cent of GDP since 2019, and the building and construction sector has contributed in particular to the high level. Two large airports at a total cost of kr. 3.9 billion are under construction in Nuuk and Ilulissat, respectively. The Danish State contributes to the funding of these projects. The construction of the new airport in Nuuk started in 2019, and the construction works are expected to be completed this year, after which new terminal buildings etc. will be built. The airport is scheduled to be finished at the end of 2024. The airport in Ilulissat will be finished a little later than in Nuuk, probably in 2025. In addition, a small airport will be constructed in the town of Qaqortoq in South Greenland at a cost of approx. kr. 1 billion. This airport is scheduled to be commissioned in 2025.

Since 2014, high fish and shellfish prices have significantly strengthened the terms of trade and increased wealth

Chart 3



Note: 2020 is the latest year for which national accounts data are available. Fish and shellfish prices fell globally in 2020-2021 due to coronavirus lockdowns etc., but have bounced back in 2022.

Source: Statistics Greenland.

In the energy supply area, it was decided in 2021 to establish hydroelectric power plants at a total cost of between kr. 3.8 billion and kr. 4.6 billion to supply energy to Nuuk, Aasiaat and Qasigiannuguit. It has also been agreed that the Danish State possibly can contribute funding to these projects. In addition, two modern waste incineration plants are being established in Sisimiut and Nuuk; they are scheduled to be completed next year and in 2024, respectively. These are urgent investments to ensure environmentally sound waste management in Greenland.

Raw materials exploration and extraction activities are modest. There are currently two mines in operation that extract rubies and anorthosite. Together, these two mines employ less than 100 people. Exploitation permits have been issued for a number of other mineral projects, which, however, have not been initiated due to a lack of private funding.

Government deficits despite economic boom

The coronavirus crisis resulted in government deficits in 2020 and 2021 due, among other things, to increased expenditure for relief packages, emergency flights and the healthcare sector. The draft law for the Budget Bill for 2023 entails government deficits in both 2023 and 2024, even though the economic boom and record-low unemployment should result

in solid government surpluses. This paradox is partly explained by the high level of construction activities, with some of the expenses being funded through the Greenland Treasury. The deficits are linked to the expenditure growth seen in the previous years. Employment in public administration has increased in line with the economic recovery, while private employment has remained broadly unchanged during the recovery, see chart 4. The continued increase in numbers of public-sector employees puts pressure on public finances and limits the possibilities of developing the private sector going forward.

Major challenges ahead

Although the Greenlandic economy is doing well, the Greenlandic politicians need to address a number of major challenges if growth is to continue.

The current pressure on the labour market only adds to these challenges. Most planned infrastructure projects are very large compared to the size of the economy. With a pronounced shortage of skilled labour, there is a risk that the projects may overheat and destabilise the economy if they are not coordinated and aligned with the cyclical situation. The skilled labour shortage poses a serious risk to continued economic growth.

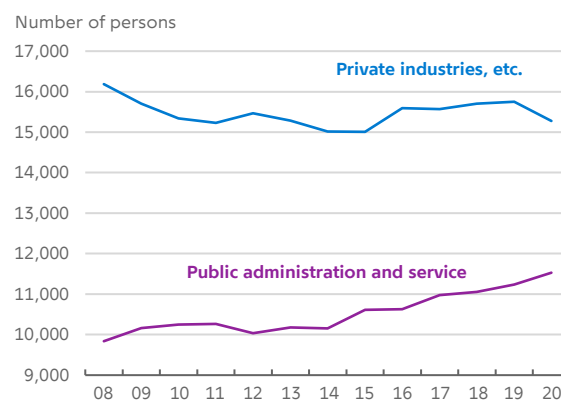
Fiscal policy is clearly unsustainable

A large proportion of the population is currently of working age. This will change significantly over the next decades, with there being far more elderly and old persons and fewer young persons, see chart 5.

Government expenditure on pensions, healthcare and caring for the elderly will therefore increase in the future, and this expenditure pressure is not being funded under the current rules. Government revenue cannot keep up with expenditure pressures, and fiscal policy is therefore clearly unsustainable in the longer term. The development in the block grant from the Danish State is the principal cause of the trend of declining revenue as a percentage of GDP in the coming decades, see chart 6. The block grant is adjusted according to Danish wage and price developments, but as the average growth rate is higher in Greenland than in Denmark, the block grant will slowly be reduced as a percentage of GDP. In the mid-1990s, for example, the block grant constituted

Increase in public-sector employees during recovery, while private-sector employment is more or less unchanged

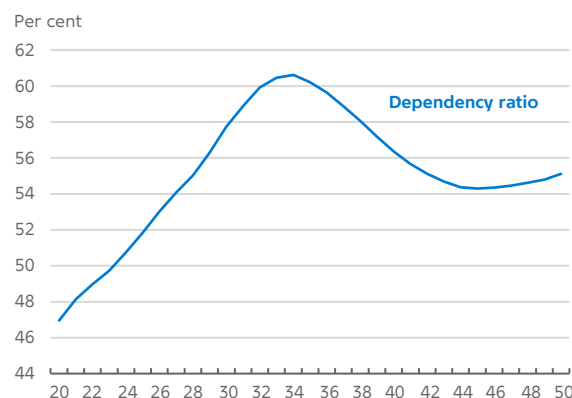
Chart 4



Note: Employment in *Private industries etc.* is total employment less employment in public services and administration.
Source: Statistics Greenland.

There will be fewer persons of working age to support more elderly and old persons in coming decades

Chart 5



Note: The dependency ratio is a measure of the number of people aged under 17 years and over 65 years compared with the number of persons aged between 17 and 65 years.
Source: Statistics Greenland.

35 per cent of GDP in Greenland, and that percentage had fallen to around 20 per cent in 2020 and is expected to decline further.

The sustainability problem necessitates political priorities that can both reduce expenditure growth and generate more tax revenue through higher employment rates and new industries in the raw materials sector, tourism etc.

The reform agenda is therefore long, and the government in Greenland, Nalakkersuisut, has announced a major programme of reform initiatives in 2023 aimed at addressing the sustainability problem and a reform of the tax system, among other measures.

Modernisation of tax system

There are a number of problems with the tax system and the interactions of taxation and social benefits. For example, effective taxation is close to 100 per cent for some population groups.

The tax base is relatively narrow, with a strong emphasis on the taxation of earned income, taxes on imported goods and the economic rent tax on fish and shellfish.

Income taxation is characterised by an imbalance between high taxation of earned income and very lenient taxation of income from capital. Homes are not subject to regular taxation via, for example, a value tax or a tax on the right to use of land. Land is common property in Greenland, but the right of use can be transferred to a private user. The lack of housing taxation increases inequality in society, as homes are typically owned by families with higher than average incomes.

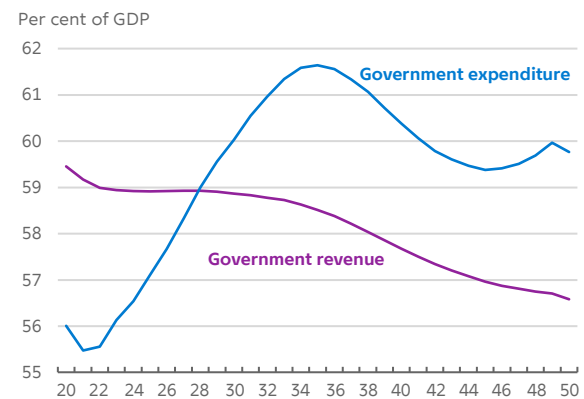
Taxes are levied on a number of goods, in particular imports. However, taxes on imported oil and diesel products are remarkably low, which helps make the consumption of fossil fuels inexpensive. About 82 per cent of Greenland's total energy consumption is still covered by fossil fuels despite increasing use of hydroelectric power and waste heating, see chart 7. Compared to other countries, the taxation of fossil fuels and thus greenhouse gases are lenient in Greenland.

Growing debt and risk exposure

In 2021, the government of Greenland, local government and government-owned public limited compa-

Government expenditure outpaces revenue, and fiscal policy is clearly unsustainable in the longer term

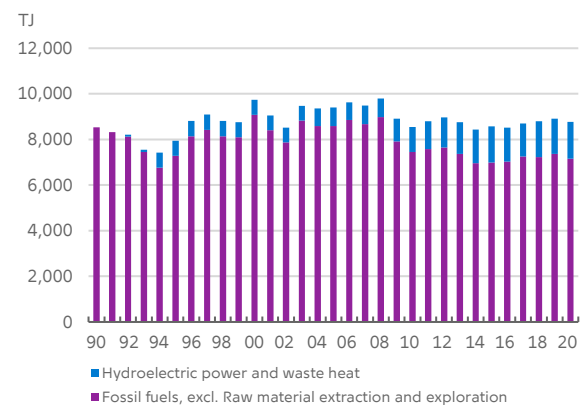
Chart 6



Note: Revenue and expenditure are excl. of interest. The difference corresponds to the primary government budget balance. Revenue includes the Danish block grant.
Source: Statistics Greenland and Greenland's Economic Council, September 2022.

Despite the increasing importance of hydroelectric power, 82 per cent of Greenland's energy consumption is still met by fossil fuel imports

Chart 7



Note: Actual energy consumption excluding fossil energy consumption for raw material extraction and exploration, where energy consumption increased extraordinarily to 1,759 terajoules (TJ) in 2010 and 2,267 TJ in 2011 in connection with oil exploration. Energy consumption for raw material extraction and exploration was 88 TJ in 2019.
Source: Statistics Greenland.

nies had interest-bearing debt totalling 5.6 per cent, equal to 27 per cent of GDP. If the cash resources of, for example, the government of Greenland are included, net interest-bearing debt accounts for 17 per cent of GDP.

The debt will grow by an additional kr. 3 billion towards 2024 as a result of the large investments in infrastructure by the government-owned companies, including the construction of the new airports in Nuuk and Ilulissat. This will increase the government of Greenland's risk exposure significantly in just a few years. Government-owned companies perform a number of activities that are critical to society and therefore indispensable. They cannot be shut down in case of financial distress and must be kept running.

The real investment need is even greater than suggested by the debt development. For a number of years, a backlog has accumulated in the maintenance of homes, ports, plants and facilities, energy supply etc. The maintenance backlog is of the same magnitude as the new investments in infrastructure, running into billions. This is a special problem for the many publicly owned homes, plants and facilities, where the need for maintenance may be overlooked in the ongoing prioritisation of investments. Dealing with the backlog will probably require significant rent increases, the introduction of user charges for plants and facilities etc.

Slow increase in level of education

In the coming years, raising the level of education is key to increasing the supply of labour as well as employment. Unemployment is virtually zero for those who have completed a qualifying education or training programme.

The level of education is increasing, but progress is slow in relation to the political ambitions in this area. There are still too many young people who do not complete a vocational education programme after primary and lower secondary school, and there is a need for an overhaul of education policy, from primary and lower secondary schooling to higher education programmes. The primary and lower secondary school system is characterised by fluctuating quality, and too many young people leave school without the qualifications needed to continue with vocational or upper secondary education. The Economic Council has pointed out a number of problems, including a lack, in effect, of equal opportunities in the education system, and especially pronounced geographical differences between schools in rural and urban areas.

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