Current Trends in the Greenlandic Economy

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Activity in Greenland is declining after a few years of high growth compared with most European countries. The international economic crisis that hit the world economy in 2008 affected Greenland only to a modest extent. According to the preliminary national accounts, which cover the period up to and including 2011, the gross domestic product, GDP, was 8 per cent higher in 2011 than in 2007 in volume terms. This is in contrast to developments in many European countries, including Denmark. The main reasons are strong growth in investment combined with stable fisheries.

However, in 2012 the tide turned due to a decline in fisheries and lower oil exploration activity. In its most recent report[1], which was published in the autumn of 2012, the Chairmanship of the Economic Council in Greenland assessed that GDP would decline by 3 per cent in 2012, followed by zero growth in 2013. There are many indications that this assessment is too optimistic. Fisheries are set to decline further in 2013, and the same seems to be the case for oil and mineral exploration activity. Presumably building and construction activity is also slowing down. With lower volumes in fishery, falling raw material exploration activity and smaller investment budgets, a further decline in overall activity can be expected in 2013.

On the other hand, income has been boosted by further rises in world market prices in the predominant export industry, fisheries, in 2012, and therefore this industry is generally in a good financial position despite falling catches. Finally, the block grant from Denmark and income from agreements with the EU are stable sources of income.

The national accounts

The national accounts show that there has been very strong growth in investment, which reached almost 70 per cent of the gross domestic product, GDP, in 2011, cf. Table 1.

Investment growth is to a large extent attributable to investments in oil and mineral exploration. The strong growth in 2010 and 2011 was pri-

[1] http://naalakkersuisut.gl/~/media/Nanoq/Files/Attached%20Files/Finans/DK/Oekonomisk%20raad/konomisk%20Rds%20rapport%202012.pdf (in Danish)

DEMAND AND SUPPLY, REAL GROWTH Table 1

Per cent	(Share of GDP 2011)	2005	2006	2007	2008	2009	2010	2011
Private consumption	(47.6)	5.2	0.7	0.8	-0.9	0.9	1.8	-0.7
Public consumption	(52.6)	0.5	3.4	8.3	2.2	-1.3	-0.3	0.3
Total gross investment	(68.3)	41.7	-0.6	30.8	46.0	-28.2	85.2	27.0
Excl. investment in raw materials exploration	(24.2)	37.6	1.6	17.7	37.2	-27.5	17.3	-5.3
Exports of goods and services	(32.0)	2.9	-0.5	-3.3	8.1	-8.8	2.1	11.4
Final consumption equal to total addition	(200.5)	7.1	1.1	6.5	10.1	-8.4	16.3	9.6
Imports of goods and services	(100.5)	12.6	-5.4	11.9	22.7	-15.8	33.4	17.2
Gross domestic product	(100.0)	3.7	5.4	3.4	2.1	-2.7	4.9	3.2

Source: Statistics Greenland.

marily related to oil exploration activity in the sea off the west coast of Greenland. Most of these investments were made by foreign companies using foreign labour on foreign drilling and supply vessels and are offset by large imports of services in the national accounts. But contributions from local firms also increased Greenland's GDP, and the activities provided tax revenue for Greenland. In addition, there has been considerable mineral exploration activity in recent years.

More traditional investments have fluctuated somewhat around a high level. There has been considerable construction of housing, student residences and places of education, and hydropower capacity has been expanded. In the course of 2013, hydropower will become the primary source of energy in the largest Greenlandic towns. The strong growth in traditional investments in 2008 and the subsequent fall reflect, *inter alia*, large telecommunications infrastructure investments in the form of submarine cables linking Greenland with both Canada and Iceland.

FACTS ABOUT GREENLAND

Population (number of people, beginning of 2013)	56,370
Of which in Nuuk (capital)	16,456
Population aged 18-66 years	38,383
Employment[1] (2011)	28,599
Unemployment[2] (2011)	2,518
Gross domestic product (kr. billion, 2011)	13.1
Per capita (kr. 1,000)	230.4
Disposable gross national income (kr. billion, 2011)	16.9
Per capita[3] (kr. 1,000)	298.6

Source: Statistics Greenland and own calculations.

[1] Number of people in primary employment, average of monthly data.

[2] Approximated ILO definition, average of monthly data.

[3] By comparison, disposable GNI per capita in Denmark was approximately kr. 322,300 in 2011. Disposable GNI was approximately 0.2 per cent higher than GDP.

In recent years, growth in consumption – not least in the private sector, but since 2008 also the public sector – has been subdued. The sum of public and private consumption matches Greenland's GDP, which is possible because of transfer income from abroad in the form of block grants from the Danish government and agreements with the EU. This means that Greenland's disposable gross national income is 29 per cent larger than its GDP.

Imports of goods and services have risen sharply, largely on account of oil and mineral exploration activities, while exports of goods and services have been stagnant, albeit with a rising tendency in 2010 and 2011. As a result, the deficit on the balance of goods and services has been increasing steadily, from approximately kr. 2 billion p.a. in 2003 and 2004 to almost kr. 9 billion in 2011. To the extent that the deficit reflects imports in connection with oil and mineral exploration activities, it will not be matched by an increase in Greenland's foreign debt. Such imports are financed by the companies in question, and their claim on Greenland consists in the right to extract raw materials on the applicable terms and conditions. The risk is borne by the companies.

Balance-of-payments statistics for Greenland are not yet available, but there can be no doubt that economic growth in the period 2005-11 was loan-financed to a large extent, cf. the section on loans and bank deposits.

Balance of trade

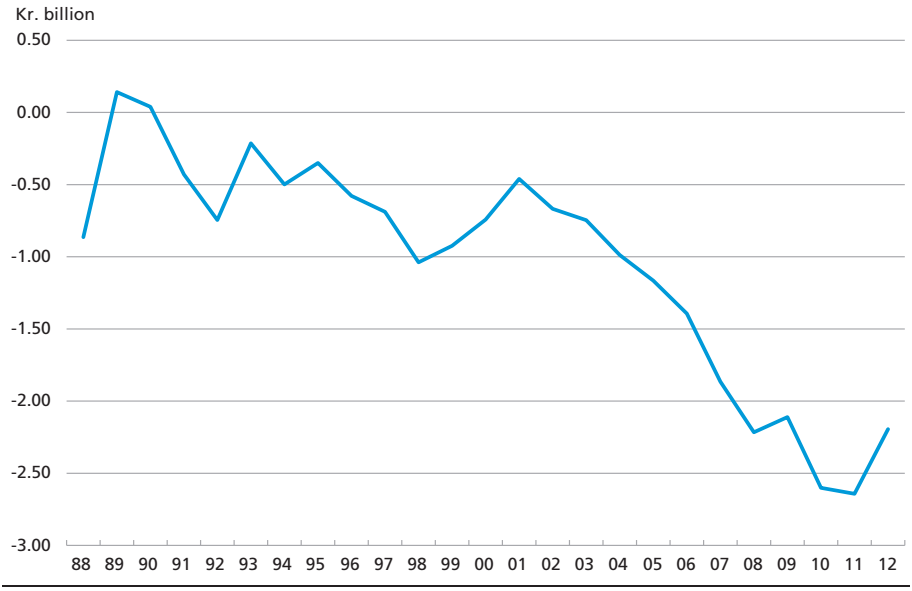
In 2012, Greenland's balance of trade showed a deficit of kr. 2.2 billion, down from kr. 2.6 billion in the preceding two years, cf. Chart 1. Exports of goods totalled kr. 2.8 billion, an increase of kr. 0.2 billion, while imports of goods fell by kr. 0.2 billion to kr. 5.0 billion.

Despite a strong increase in export values since the trough in 2009, cf. Chart 2 (left), it is obvious in a long-term perspective that there is a considerable structural problem in that exports are virtually stagnant with large fluctuations from year to year. Fisheries account for approximately 90 per cent of Greenland's exports of goods.

Export growth is predominantly attributable to favourable price developments for fish and shellfish, cf. Chart 3, which illustrates export prices for the three main exports: frozen whole prawns, frozen peeled prawns and frozen whole Greenland halibut. Since mid-2010, prices have risen by around 50 per cent, while volumes have been decreasing.

Presumably the opportunities to expand this sector are limited. Prawn catches in Greenland naturally fluctuate somewhat, and in accordance with biological advice quotas are at the lowest level for many years, cf. the section on fisheries. It is regarded as uncertain whether climate change will bring other species by way of compensation.

TRADE BALANCE Chart 1

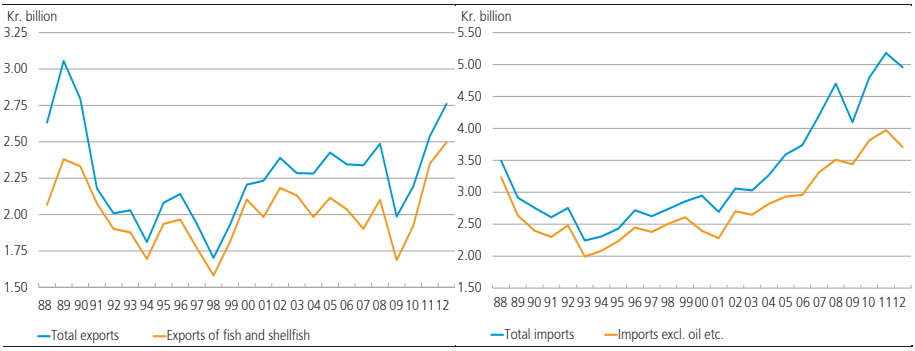


Note: Preliminary data for 2009-12.
Source: Statistics Greenland.

Hence, the lack of development of new export industries is a major problem. Undoubtedly, the greatest opportunities in the near term are offered within mineral extraction, cf. the section on this topic.

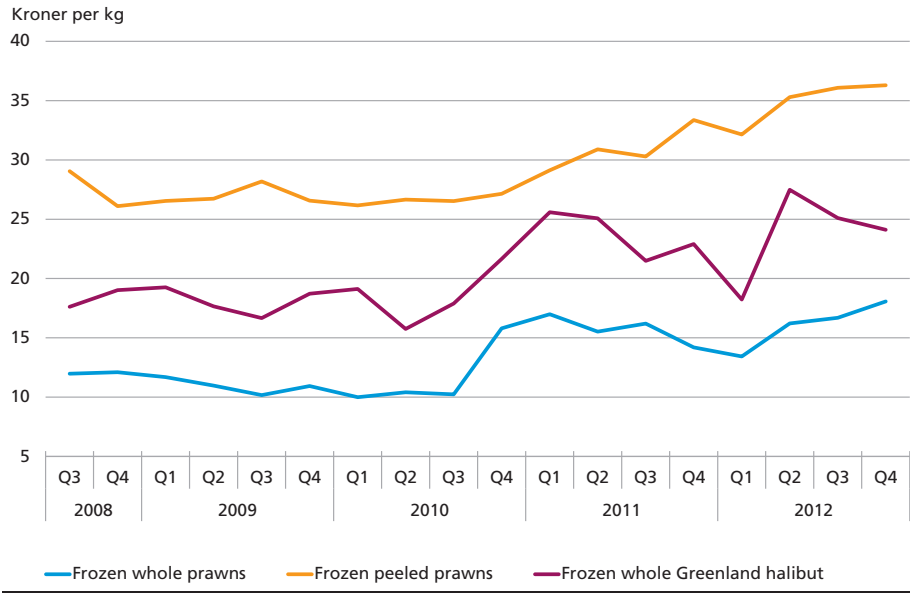
For a number of years, imports of goods rose at a rate that reflected the general trend in activity and prices, cf. Chart 2 (right). Most of the goods used for investment and for private consumption are imported. Imports fell in 2012, the reason being that neither ships nor aircraft were imported, while other imports remained more or less unchanged.

EXPORTS (LEFT) AND IMPORTS (RIGHT) Chart 2



Note: Preliminary data for 2009-12.
Source: Statistics Greenland.

EXPORT PRICES FOR FISH AND SHELLFISH Chart 3



Source: Own calculations based on data from Statistics Greenland.

Private consumption

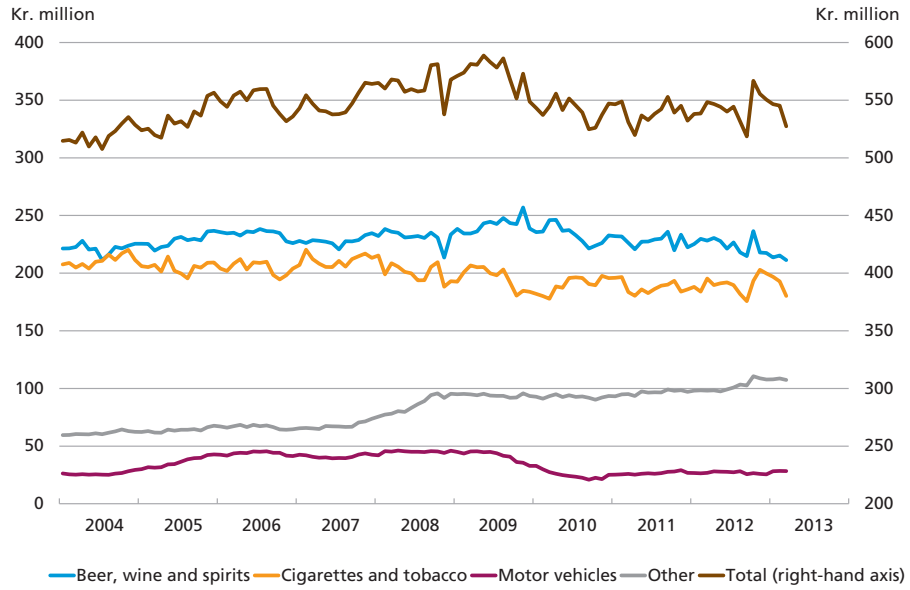
The most important economic indicator of developments in large areas of private consumption is the Greenlandic government's monthly statement of revenue from excise duties.

With one exception – packaging – these duties have been unchanged since the autumn of 2007, so changes in revenue since then reflect changes in private consumption of the relevant categories of goods. As Chart 4 shows, revenue has declined since 2009. This is mainly attributable to lower sales of alcohol and tobacco as well as cars. The fall in revenue from alcohol and tobacco continued in 2012, while revenue from other areas of consumption was more or less unchanged. In this context it should be noted that sales of tax-free tobacco and alcohol before arrival in Greenland were suspended from January 2011 to November 2012, so the development in consumption has been a little weaker than the revenue from taxes indicates.

Loans and bank deposits

Private individuals, firms and the public sector mainly bank with the two locally represented banks, Grønlandsbanken and BankNordik, but it is not unusual to have a bank account in Denmark. The Danish mortgage banks have also increased their activities in Greenland in recent years. So in order to illustrate developments in the Greenlandic population's deposits and loans it is necessary to include Danish banks and mortgage banks.

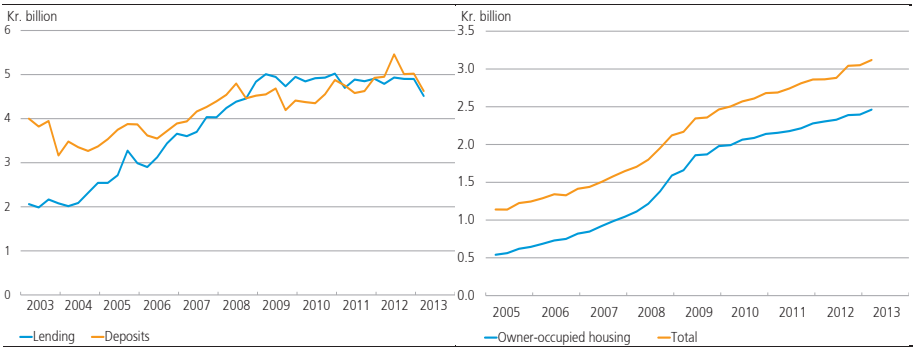
IMPORT DUTIES — Chart 4



Note: 12-month sums. The most recent observations are from March 2013.
Source: Greenlandic government.

Chart 5 (left) shows that residents in Greenland have gone from having a customer funding surplus of approximately kr. 1 billion in 2004 with banks in the Danish currency area – Denmark, the Faroe Islands and Greenland – to having more or less balanced loans and deposits. During the same period, mortgage banks have increased their outstanding loan volume in Greenland from around kr. 1.2 billion to more than kr. 3 billion, cf. Chart 5 (right). This is attributable to a greater prevalence of

BANKS' LENDING TO AND DEPOSITS FROM GREENLAND (LEFT) AND MORTGAGE BANKS' LENDING TO GREENLAND BROKEN DOWN BY PROPERTY CATEGORIES (RIGHT) — Chart 5



Note: The most recent observations are from the 1st quarter of 2013.
Source: Danish Financial Supervisory Authority and Danmarks Nationalbank.

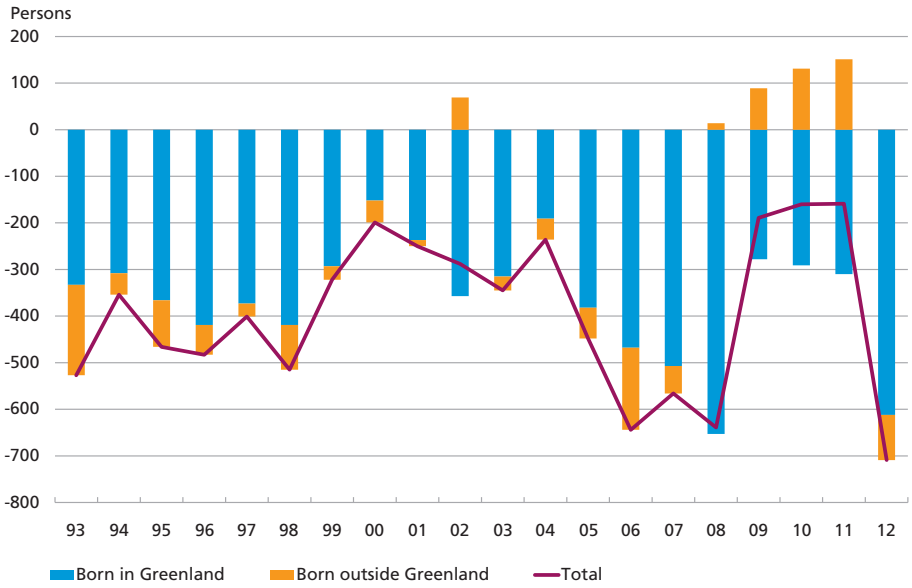
owner-occupied housing, as well as a declining tendency for rental housing to be funded directly by the government and local authorities. All mortgage loans are fixed-rate loans with amortisation, and the collateral must be negotiable on market terms. Hence, mortgage loans are primarily granted in Nuuk and a few other towns. So net lending to Greenland from these sources has risen by approximately kr. 3 billion in seven years. In addition, the Greenlandic government in 2010 and 2012 raised loans totalling kr. 600 million from the Nordic Investment Bank, NIB, for partial financing of two hydroelectric power plants. These loans are not included in the statistics.

The statistics thus support the view that economic growth has been loan-financed in recent years, particularly in relation to construction. The strong growth in lending means that interest-bearing gross debt has also increased notably. Total gross lending now amounts to around 65 per cent of GDP, which is still far lower than in Denmark, where the corresponding figure is around 200 per cent.

Immigration and emigration

Following some years of net immigration of people born outside Greenland, the trend reversed and net emigration was seen in 2012, cf. Chart 6. At the same time, net emigration of people born in Greenland rose, and total net emigration exceeded the excess of births, i.e. the

NET IMMIGRATION Chart 6



Source: Statistics Greenland.

difference between the number of births and deaths. As a result, the population decreased. There is a close link between the Danish and Greenlandic labour markets, so the reversal of the immigration trend is another indicator of lack of economic growth in Greenland in 2012.

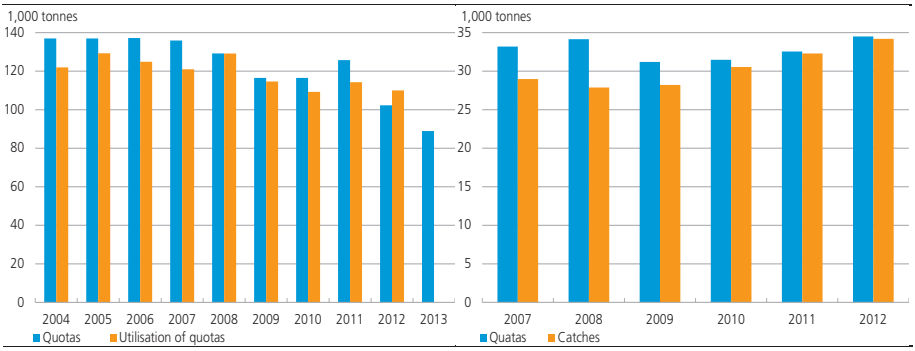
Fisheries

From an economic point of view, prawn fishing is the most important branch of fisheries in Greenland. Quotas fluctuated at around 120,000 tonnes for some years, but were reduced in both 2012 and 2013, to 90,000 tonnes this year, cf. chart 7 (left). As world market prices have been rising since the summer of 2010, this branch of fisheries is doing well, and the largest companies have posted substantial profits despite the decline in volumes. Quotas have been fixed in accordance with biological advice, and in 2012 prawn fishing was certified as sustainable, which may help to boost prices. So the need for smaller quotas is scarcely a result of overfishing. It is more likely to reflect climate change, entailing that prawns are caught still further north. At the same time, increasing numbers of cod, which eat prawns, are seen in the southern parts of the western Greenlandic waters. Until this year, biological advice has been against direct cod fishing, but that has now changed. The biological advice for 2013 is a quota of 8,000 tonnes in coastal waters and no direct fishing at sea, but the Greenlandic government has granted a quota of 5,000 tonnes for the latter – subject to conditions.

As a result of climate change, experimental fishing for mackerel, herring and other schooling fish will take place in eastern Greenlandic waters in 2013.

GREENLANDIC VESSELS' QUOTAS AND UTILISATION OF QUOTAS FOR PRAWNS (LEFT) AND QUOTAS AND CATCHES OF GREENLAND HALIBUT (RIGHT)

Chart 7



Note: Due to the flexible quota system, catches may legally exceed the quotas in some years.
Source: Greenlandic Ministry of Fisheries, Hunting and Agriculture.

Quotas for Greenland halibut, the financially second most important species, have been stable for a number of years, and catches are approaching the quotas, cf. Chart 7 (right). Presumably catches cannot be increased notably if they are to be biologically sustainable.

Extraction of raw materials

Greenland has a strong need to develop other industries than fisheries. However, there are a number of impediments, including a substantial level of costs that is on the high side of the Danish level, a geographically very scattered population with a resultant lack of economies of scale, high transport costs and, not least, a low level of education. Extraction of raw materials is the most realistic supplement to fisheries.

Considerable exploratory activities have taken place in recent years. Costs for oil exploration in the sea off western Greenland totalled approximately kr. 5 billion in 2010 and 2011. Most of these activities are carried out using foreign labour and foreign capital stock. But activity has also increased in the transport sector and other service sectors in the towns where the impact has been strongest. Traces of hydrocarbon have been found, but not in quantities that would provide a basis for extraction. In 2012, there were no offshore exploration activities, but the companies continued to examine seismic data for the seabed subsoil west of Greenland. Presumably that will also be the case this year. Interest in hydrocarbon exploration around Greenland remains considerable, but at present it is uncertain whether, and if so when, this will result in activity. Extraction of hydrocarbon from tar sands and from the subsoil via fracking has reduced the USA's dependence on imported hydrocarbon and also reduced corporate interest in hydrocarbon from areas where exploration and extraction costs are very high, as would be the case for environmentally responsible extraction in Greenlandic waters.

As regards minerals, there has also been considerable exploratory activity in recent years, and one company has now applied for permission to extract iron near the Nuuk Fiord. Other companies have indicated that they will soon be submitting applications for extraction in the areas where they have exploration licences. The applications will include extraction of "rare earth elements" in southern Greenland.

There has been some discussion of the Large-Scale Act passed by the Greenlandic parliament, Inatsisartut, in 2012. The Act concerns the establishment phase for mines and other large-scale projects where the establishment costs exceed kr. 5 billion. The Act permits remuneration of imported labour at Greenlandic minimum wages less board and lodging, etc. during this phase. It should be noted that investments of this

magnitude will always require import of foreign labour as the labour required in the establishment phase for the largest projects exceeds 10 per cent of the current Greenlandic labour force.

Following the election in March 2013 the new government has announced that it will adjust the Large-Scale Act and change the tax rules for extraction of raw materials so that extraction taxes, royalties, will play a larger role and the basis for ordinary corporate taxation will be correspondingly lower. The aim is to bring forward taxation without increasing the total tax payable on profit-making projects.

In economic terms, these issues increase the risk that mineral exploration activities will decline until the terms and conditions for extraction are known.

Combined with lower world market prices for a number of raw materials, this means that exploration activity for both mineral raw materials and hydrocarbon is expected to be low in 2013, which will contribute to a fall in overall economic activity in Greenland.

At present, the only active mine in the country is a gold mine in southern Greenland with some 80 employees; this mine had to suspend payments in the spring of 2013. So despite the often very high expectations in relation to raw materials for a number of years, extraction activity remains modest. Nevertheless, extraction of raw materials is still by far the most important potential export industry as a supplement to fisheries. But it is subject to great uncertainty.

The surest path to economic development in Greenland is to raise the level of education. Job opportunities in connection with extraction of raw materials can make an important contribution, but without a higher level of education this will not lead to a permanent, sustainable improvement of the economy. Nor can the public sector's long-term funding problems be solved without clear rules for how to use the revenue from raw materials. Back in 2008 legislation was passed to establish a raw materials fund, into which the government's raw materials revenue will be paid. However, the Economic Council finds that the framework for use of this revenue is too broad and imprecise, with a resultant risk that future revenue may be used to fund current expenditures, thereby leading to overheating of the economy. Imprudent use of the raw materials revenue may also create problems for future generations when the sources dry up – especially if the raw materials have not been used as a lever to raise the level of education substantially.

To ensure that large-scale raw materials extraction will bring positive developments in both the short and long term, it is important to detail the principles for use of the revenue, although this revenue is currently birds in the bush.

Public finances

In the period 2007-09, the Greenlandic government had a deficit on its current, investment and lending budget, CIL. The budget balanced in 2010, but the accounts for 2011 and the Finance Acts for 2012 and 2013 show new deficits, cf. Table 2. The government accounts for 2012 have not been published, but developments in government liquidity indicate a smaller CIL deficit than budgeted for.

The deficits are in part attributable to lending to the energy supply company Nukissiorfiit for construction of hydroelectric power plants. These investments will not only reduce the consumption of oil, they are also deemed to be profitable on market terms, but they have increased lending expenses by kr. 2-300 million p.a. since 2007. The Finance Act for 2012 operates with a current and investment budget, CI, that just balances, following moderate surpluses in the preceding two years.

MAIN ITEMS OF THE GOVERNMENT ACCOUNTS — Table 2

Kr. million	2006 R[1]	2007 R[1]	2008 R[1]	2009 R[1]	2010 R[1]	2011 R[1]	2012 PL[2]	2013 PL[2]
1. Operational expenses	2,462	2,604	2,787	2,973	3,078	2,777	2,901	2,746
2. Statutory expenses ...	750	788	837	850	852	870	885	1,005
3. Subsidies	1,532	1,530	1,591	2,229	1,534	1,809	1,881	2,034
4. Investment expenses	700	1,003	930	807	719	1,095	946	779
5. Total expenses	5,444	5,925	6,144	6,860	6,184	6,551	6,613	6,564
6. Agreed income[3]	3,485	3,555	3,661	3,799	3,828	3,876	3,936	3,962
7. Direct taxes	780	850	876	828	1,019	1,135	1,004	991
8. Indirect taxes	703	740	792	776	772	800	851	853
9. Other revenue	517	514	496	506	567	579	600	646
10. Total income	5,484	5,659	5,825	5,910	6,185	6,390	6,391	6,451
11. Actual CIL balance: (10)-(5)	40	-267	-318	-950	2	-161	-221	-114
12. CI balance	65	-28	-94	-514	207	49	0	1
13. Net lending to Nukissiorfiit	25	239	223	132	223	278	263	153
14. Increase in unused funds in Construction and Renovation Fund	8	146	88	87	-214	148	-82	-100
15. CIL balance adjusted (11)+(13)+(14)	73	118	-7	-773	52	265	-40	-51

Note: In 2011, block grants to local authorities were increased by kr. 302.6 million as care for the disabled was transferred to local authorities. Hence, this amount is transferred from the Greenlandic government's operational expenses to expenses for subsidies.

Source: Government Accounts, Finance Acts 2012 and 2013.

[1] Realised data.

[2] Preliminary data.

[3] Agreed income mainly comprises the block grant from the Danish government (kr. 3,633 million in 2013) and partnership and fisheries agreements with the EU (kr. 338 million in 2013).

When assessing the impact of public finances on activity, it is also necessary to look at the Construction and Renovation Fund. When a capital expenditure is approved, it is charged to the investment budget, and the amount is transferred to the Fund. When the project is actually carried out and paid for, often in subsequent years, it is financed via disbursements from the Fund. So an increase in the Fund's capital indicates that investment activity has been lower than projected in the CIL balance. In 2011, investment activity was kr. 148 million lower than the capital expenditure of kr. 1,095 million. Public-sector investment activity is set to decline in 2013 and the coming years.

Income is dominated by the category agreed income, of which the block grant from the Danish government constituted just over 90 per cent in 2011. The size of the block grant is specified in the Act on Greenland Self-Government and is indexed by the annual increase in the general price and wage index over the Danish Finance Act. If the Greenlandic government's expenses increase in real terms, a budget-balance requirement means that other sources of income must increase by a higher percentage than expenses if inflation is at the same level in Greenland as in Denmark. Since the same currency is used, this is usually the case. In January 2013, consumer prices were 1.7 per cent higher than in the preceding year.

Pressure on expenses as the population ages in the coming decades combined with the fact that a dominant source of income is frozen in real terms will constitute a major challenge for Greenland, and in its report the Economic Council assesses fiscal policy to be unsustainable in the long term. A fiscal indicator has been calculated which shows that tightening by around kr. 1 billion is required to prevent the government debt from rising up to 2040. This calls for a considerable effort since public operating expenses, including at local level, total around kr. 6 billion.

Greenland has a favourable point of departure in that the government has net financial assets. At end-2012, gross debt was kr. 600 million, corresponding to just under 5 per cent of GDP, while liquid assets in the form of bank deposits and bonds totalled approximately kr. 1 billion. However, liquid assets have shrunk considerably in recent years. At end-2007, the government held liquid assets of more than kr. 2 billion. The government holds a number of other assets which have not been included in this calculation, including housing loans. Many of these loans are without interest and amortisation for a number of years and hence difficult to value. The budgets operate with the government raising further loans of kr. 800 million until 2015.

In 2012, a Debt and Investment Strategy was presented, requiring public investments to be profitable and contribute to fiscal sustainability. One of the reasons is that a large number of infrastructure projects are looming on the horizon. The Transport Commission, which was set up after the transition to self-government in the summer of 2009, submitted a report in the winter of 2011. The calculated capital requirements for new or improved airports and extended port facilities amount to at least kr. 2-3 billion. Further investment wishes may be added to the list if private-sector companies want to invest in extraction of raw materials. So it will be necessary to prioritise the proposals according to their importance to the economy.