CURRENT TRENDS IN THE GREENLANDIC ECONOMY

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INTRODUCTION AND SUMMARY

Economic growth in Greenland was positive in 2015, following three years of contraction. Nevertheless, there was considerable emigration so that the population declined further in spite of a large excess of births.

Greenland benefited from rising prices for fish and shellfish in 2015. Fisheries is the predominant Greenlandic export industry and prawn by far the most important species. Catch volumes declined, but price developments meant that earnings were good in large parts of the fisheries sector, and revenue from direct taxes increased. Combined with lower-than-planned expenditure this meant that a government deficit envisaged in the Finance Act made way for a small surplus. The liquidity of the government is good, and gross debt is modest, constituting less than 5 per cent of the gross domestic product, GDP.

Activities in connection with extraction of and exploration for raw materials have diminished considerably. Two small projects will start extracting minerals in 2016 and 2017.

Investment in building and construction increased in 2015 and further growth is expected in 2016. At the same time, statistics indicate that private consumption is rising strongly. Together with larger quotas for especially prawns, this will result in higher economic growth in 2016 than for many years. But no solution has been found to the major structural problems in Greenland, i.e. the very narrow business sector.

NATIONAL ACCOUNTS AND BALANCE OF TRADE

2015 saw renewed economic growth after three years of decline, cf. Table 1. This is mainly attributable to stronger investment in building and construction, as the predominant export industry, fisheries, decreased in volume terms. However, high prices for fish and shellfish meant that earnings in the sector rose despite the falling volumes. This rise in earnings contributed to buoying up private consumption. In 2016, economic growth will presumably be stronger than previously expected, as prawn quotas have been increased in accordance with biological advice, and building and construction investment is expected to rise further. In addition, there will be new mining operations linked to two small, but important projects. But exploration activity for oil and minerals is modest compared with previously.

The trade deficit was calculated at kr. 1.3 billion for 2015, the same as in 2014. Imports of oil and fuel fell by kr. 500 million, while there were small increases in most other imports of goods. Exports of goods consist almost entirely of fish and shell-fish. The fall in export values in 2015 is presumably attributable to the price material not having been fully updated, cf. the section on fisheries.

The latest figures for overall inflation, stated as the annual rate of growth in the index of consumer prices, are from January 2016, when inflation was 1.2 per cent. In the same period, Danish prices rose by 0.6 per cent.

Demand and supply, annual rea	growth, per cent							Table 1	
	Share of	Growth rate, per cent							
	GDP in 2014	2010	2011	2012	2013	2014	2015	2016	
Private consumption	46.7	1.7	2.7	-1.8	-0.3	-1.7	1.1	1.0	
Public consumption	54.5	-1.4	-1.1	-0.5	2.2	0.6	0.5	0.5	
Total gross investment	17.2	75.2	27.4	-40.6	-22.8	-44.0	41.7	22.2	
excl. exploration investments	14.1	4.2	15.3	-10.8	-8.2	-38.1	54.2	24.6	
Exports of goods and services	33.4	12.5	-1.7	-3.9	-1.5	0.9	-1.5	7.4	
Total final consumption	151.7	16.5	7.9	-14.9	-5.0	-8.5	5.1	5.4	
Imports of goods and services	51.7	37.6	14.2	-29.3	-10.2	-19.2	9.7	9.9	
Gross domestic product, GDP	100.0	2.5	2.2	-0.5	-1.3	-1.6	2.6	2.9	

Note: 2010-12 final data from Statistics Greenland; 2013-14 preliminary data; 2015-16 mechanical update of the Economic Council's forecasts in its 2015 report on the Greenlandic economy.

Facts about Greenland	Box 1
Population (number of people, beginning of 2016)	55,847
Of which in Nuuk (capital)	17,316
Population aged 18-66 years	38,315
Employment¹ (2014)	25,167
Unemployment ² (2014)	2,754
Gross domestic product, GDP (kr. billion, 2014)	13.7
Per capita (kr. 1,000)	243.4
Disposable gross national income, GNI (kr. billion, 2014)	17.7
Per capita ³ (kr. 1,000)	313.7

 $\label{thm:controls} \mbox{Source: Statistics Greenland, Statistics Denmark and own calculations.}$

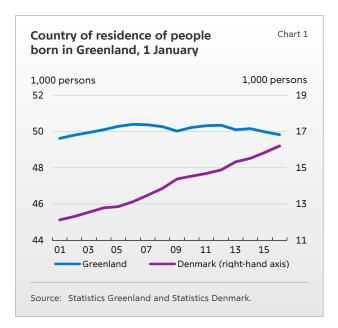
- $_{\mbox{\scriptsize 1.}}$ Number of people in primary employment, average of monthly data.
- 2. Approximated ILO definition, average of monthly data.
- 3. By comparison, disposable GNI per capita in Denmark was approximately kr. 350,000 in 2014. Disposable GNI was approximately 1.7 per cent higher than GDP.

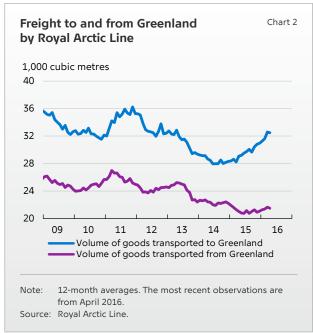
POPULATION

The economic downturn in the period 2012-14 is presumably the main reason why the population of Greenland has been declining in recent years. At the beginning of 2016, the population was just under 56,000. That means that it fell by approximately 200 during 2015. In the last three years, annual net emigration has been approximately 600, which is much higher than the excess of

births, i.e. the number of live births less the number of people who die. By comparison, annual net emigration was approximately 200 in the boom years 2009-11.

Net emigration mainly comprises people born in Greenland who move to Denmark. Since 2000, the number of people born in Greenland and living in Denmark has risen by 4,000 to around 16,000, while the number of people born and living in Greenland has been more or less stable





at 50,000, cf. Chart 1. So almost one quarter of the people born in Greenland live in Denmark. For those born in the period 1969-75, it is no less than one third. Emigrants can be found within all age groups, so it is not merely a question of many young people moving to Denmark to get an education and staying there for some years. Among those aged 21-30, the share of people born in Greenland who live in Denmark is now smaller than it was at the beginning of the century. This is probably because education and training opportunities in Greenland have improved.

The shrinking population meant that the government of Greenland in May 2016 launched an investigation into the reasons why so many people leave the country so that it could take initiatives to stem the tide.

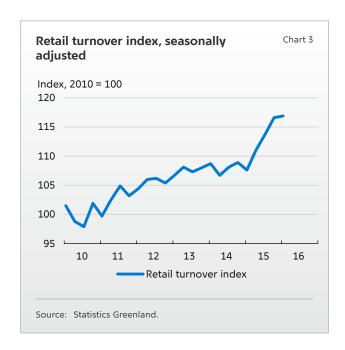
MOST RECENT CYCLICAL TENDENCIES

There are clear indications that domestic demand in Greenland increased in 2015. For example, freight volumes transported to Greenland by the Royal Arctic Line, RAL, grew considerably, cf. Chart 2. It should be noted that most of the goods for meeting domestic demand, with oil as the main exception, are imported and transported by RAL, which also handles virtually all exports of fish and shellfish, with mackerel as a significant exception.

RAL freight volumes from Greenland have not shown the same rising tendency. However, the first months of 2016 seem to be an exception. This may be attributable to better weather than in the first months of 2015, but possibly also the higher prawn quotas.

The retail turnover index, which shows turnover in the three largest retail chains in Greenland, points unequivocally to a rise in private consumption during 2015, cf. Chart 3.

No current statistics of the development in unemployment figures are available, but monthly



compilations are made of the number of people registered as job seekers. This is a count of the people who have contacted the local authorities with unemployment problems at least once within that month. The figures for the first four months of 2016 show that the number of job seekers was somewhat lower than in the corresponding months of 2015. However, these figures have proved to be difficult to interpret as they are affected by e.g. local government administrative practices.

PUBLIC FINANCES

According to the Finance Act for 2015, the current and investment, CI, budget was expected to show a deficit of kr. 64 million. The deficit including lending – the CIL deficit – had been budgeted at kr. 27 million. However, the realised

figures were considerably better, cf. Table 2. The accounts for 2015 show a CI surplus of kr. 137 million and a CIL surplus of kr. 188 million, i.e. improvements of approximately kr. 200 million on the budget. These improvements can be more or less equally distributed on lower expenses than budgeted for and higher proceeds, especially from direct taxes as a result of favourable income developments.

The main items of the government accounts are shown in Table 2.

Since 2010, the expected balance of the CI budget has been the key budget element when adopting the Finance Bill for the next year. The target is to have a CI surplus in normal years. With 2014 as an exception, this has also been the case, but deficits are budgeted for in both 2016 and 2017.

The assessment of the impact of public finances on activity must also take into account

Kr. million	2009R ¹	2010R ¹	2011R ¹	2012R ¹	2013R ¹	2014R ¹	2015R ¹	2016
1 Operational expenses	2,870	2,984	2,685	2,735	2,720	2,660	2,656	2,74
2. Statutory expenses	850	852	870	879	984	1,008	1,010	1,06
3. Subsidies	2,330	1,634	1,897	2,009	2,150	2,220	2,154	2,20
1. Capital expenditure	808	719	1,095	969	597	896	589	68
5. Total expenses	6,859	6,189	6,547	6,591	6,452	6,784	6,409	6,69
5. Agreed income ³	3,799	3,828	3,864	3,922	3,976	3,967	4,039	4,0
7. Direct taxes	828	1,019	1,135	1,143	1,051	1,027	1,112	1,0
3. Indirect taxes	776	772	800	860	824	936	907	9
O. Other revenue	509	567	593	601	672	700	538	5
10. Total income	5,913	6,187	6,392	6,526	6,523	6,630	6,596	6,5
11. Actual CIL balance: (10)-(5)	-946	-2	-156	-65	71	-154	188	-1
12. CI balance	-511	203	54	150	78	-222	137	-
.3. Increase in unused funds in Construction and Renovation Fund	87	214	148	-82	-198	470	-80	-1
14. CIL balance adjusted (11)+(13)	-859	212	-8	-147	-127	316	108	-2

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 and Finance Act 2016.

- 1. Accounts data.
- 2. Finance Act 2016.
- 3. Agreed income mainly comprises the block grant from the Danish government (kr. 3,679 million in 2015), partnership and fisheries agreements with the EU (kr. 238 million in 2015) and sale of fishing rights (kr. 105 million in 2015).

the Construction and Renovation Fund. When 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. In 2015, the Fund's capital decreased by kr. 80 million, and hence activity financed by the Fund was not kr. 589 million, but kr. 80 million higher. In 2014, activity totalled approximately kr. 400 million.

The improved government finances mean that the government's liquidity improved in 2015, to almost kr. 1.3 billion. The Greenlandic government did not raise any loans in 2015, so its gross debt is still below 5 per cent of GDP.

A special characteristic of the Greenlandic economy is that the most important source of income, the block grant from the Danish government, is not affected by the economic development in Greenland, but is adjusted annually over the Danish Finance Act to reflect the increase in the general price and wage index. Income from partnership and fisheries agreements with the EU is not cyclical either. This provides a good point of departure for the budget process, but also involves difficulties in that financing of higher public spending requires a more-than-proportional increase in revenue from taxes and duties.

In the slightly longer term, Greenland is faced with a challenge as the baby boomers from the 1960s and 1970s approach or reach retirement age. The Economic Council has calculated a fiscal indicator which shows that there is a need to continue to tighten fiscal policy by an amount almost equivalent to the government's proceeds from direct taxes if government debt as a ratio of GDP is not to rise until 2040. If tightening is to take place on the income side, this will require a broader business sector than at present, e.g. based on extraction of raw materials and tourism. On the expenditure side, it is worth noting that public consumption is very high in Greenland. In fact, public consumption per capita is 50 per cent higher than in Denmark, but there is nothing to indicate that the level of public service is correspondingly higher. This situation is primarily attributable to lack of economies of scale because the population is so scattered. In certain areas there may also be a greater preference for collective solutions than in Denmark.

EDUCATION AND INFRASTRUCTURE

In some respects, a high level of spending has clearly not resulted in a corresponding quality. In the spring of 2015, the Danish Evaluation Institute published a critical report on the primary and lower secondary school system in Greenland. It is simply assessed to be functioning poorly. In 2016, the report was followed by an even more critical evaluation of teacher training programmes, which "currently face a number of serious quality challenges and do not satisfactorily meet the need for qualified teachers in the primary and lower secondary schools" (Danish Evaluation Institute, Læreruddannelse. Evaluering af Grønlands læreruddannelse på Ilinniarfissuag, 2016 (Teacher training. Evaluation of Greenland's teacher training programme at Ilinniarfissuag, 2016 - in Danish only)). This is disheartening as better functioning schools are an important key to economic development. Responsibility for schools was transferred to Greenland some years ago.

The problems related to the general lack of economies of scale may have intensified in recent years. On the one hand, the population has become more concentrated as people have migrated to Nuuk, Sisimiut and Ilulissat and away from most other towns and settlements, but on the other hand, the number of populated locations remains unchanged, which means that there are now far more very small settlements than previously. Today, some 30 settlements have a population of less than 100, meaning that the number has doubled since the millennium rollover. If those remaining in a very small settlement are to have the same level of service as the rest of society, costs per capita will inevitably be high.

An element of the coalition agreement from December 2014 between the parties Siumut, the Democrats and Atassut is to ensure development in all of Greenland. In continuation of this agreement, the coalition has concluded an agreement on the future airport structure. The runways in Nuuk and Ilulissat will be extended so that planes from e.g. Copenhagen can land directly in these two towns instead of the airport at Kangerlussuaq. Furthermore, there are plans to build airports at Qaqortoq in the south and Tasiilaq in the east of Greenland.

The aim is to facilitate access to the country and to make it less expensive for tourists and business

travellers so that the tourism sector can be developed. The background is some years with falling tourism. These airport investments will total more than kr. 2.5 billion. Profitability calculations have been performed for subelements of these very large investments, but not for the overall plan.

In 2011, a transport commission set up by the previous government concluded that it would be profitable to extend the runway in Nuuk if the airport at Kangerlussuag were closed; otherwise it would not be profitable. Unless there is a very large increase in passenger numbers to Greenland, it could be feared that the forthcoming expansion without any closures will either put direct pressure on future public finances by way of expenses for maintaining both the new and the existing capital stock or that it will, despite the intentions, be necessary to charge so high airport taxes that business development is in fact impeded although actual flight prices will fall for the majority of passengers travelling to either Nuuk or Ilulissat. So an assessment is needed of the overall airport finances for the proposed expansion, taking into account all costs and the sensitivity to changes in passenger numbers.

Since no decision has been made to close any existing airports, the profitability of the airport project must be deemed to be doubtful. The largest airports were constructed by the US armed forces 75 years ago for military purposes during World War II. Hence, their locations are not optimum in relation to populated areas and tourism.

prawn, Greenland halibut and cod were 6 per cent lower than in 2014 and 14 per cent lower than in 2012, cf. Chart 4. This masks prawn catches that were almost 40 per cent lower, while catches of Greenland halibut have risen a little and cod catches have almost tripled.

Prawn fishing is regulated by quotas and on the whole the politically determined quotas reflect biological advice. Catches are MSC certified as sustainable, which may have contributed to recent years' favourable price developments. Quotas fell sharply for a number of years and reached 73,000 tonnes in 2015, down from 124,000 tonnes in 2011. But in 2016 they have been increased to 85,000 tonnes, which is a little lower than recommended by biologists. The reason why the quotas are not raised to the recommended level is that the administrative plan tries to ensure smaller fluctuations in quotas than in recommendations.

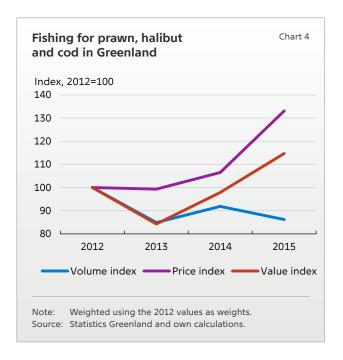
The background to the increased stocks of prawn is not fully known. The falling quotas in previous years were mainly attributed to climate changes as the prawns were caught in increasingly northern waters, but the climate cannot explain why stocks are increasing again. A positive interpretation could be that regulation of fisheries in the form of individual, tradable quota shares serves its purpose.

In other words, prawn catches are set to rise by around 20 per cent in 2016. If prices remain high, earnings in this branch of fisheries will rise corre-

FISHERIES

Earnings in the fisheries sector were generally very good in 2015 thanks to favourable price developments. Some of the large companies within the industry, including the government-owned Royal Greenland, have posted three-digit million profits, and like many small-boat fishers, trawler crews have enjoyed high incomes. Prices were on average 33 per cent higher in 2015 than in 2012, which was not a bad year pricewise. Prices for the financially most important species, prawn, were more than 40 per cent higher than in 2012, while increases for cod and Greenland halibut were around 20 per cent in the same period.

In volume terms, the picture is less clear. Weighted by 2012 values, aggregate catches of



spondingly. And the outlook may be even better. In the 4th quarter of 2015, prawn prices were 16 per cent higher than the average for 2015.

Fishing for Greenland halibut has increased slightly in recent years, but was unchanged from 2014 to 2015. Catches in sheltered waters in fjords and close to the coast fell slightly, but were offset by larger catches in open seas. Biologists are expressing concern as to whether the volume of fishing in sheltered waters is appropriate as the fish are getting still smaller. This is not promising in terms of future stocks, and in recent years a larger effort has also been required in order to catch the same volumes.

Stocks of cod are increasing in the waters off western Greenland, but in order to allow spawning stocks to build up in Greenlandic waters, biologists recommend a cautious approach to cod fishing. The Greenlandic government has fixed the quota at 25,000 tonnes for 2016.

All things considered, the prospects for traditional fisheries around Greenland are currently good. Volumes are increasing and prices are high. But no matter how well fisheries are regulated, nature will bring fluctuations in and limit the sizes of catches, and prices, which have risen strongly, may plummet.

Climate change means that mackerel, and possibly also other schooling fish, can be found in large numbers in Greenlandic waters for part of the summer. In 2014, almost 80,000 tonnes of mackerel were caught, but in 2015 this volume had fallen to approximately 30,000 tonnes. In 2016, the quota remains 85,000 tonnes, and it is assessed that it was pure chance that mackerel stocks did not stay in Greenlandic waters for as long as expected last year. The quota is determined unilaterally by Greenland with a view to being acknowledged as a coastal state and hence being granted a share of the overall North Atlantic mackerel quota. That would make it possible to plan fisheries in a more appropriate way. Since 2014, the overall quota has been shared between the EU, Norway and the Faroe Islands.

EXTRACTION OF RAW MATERIALS

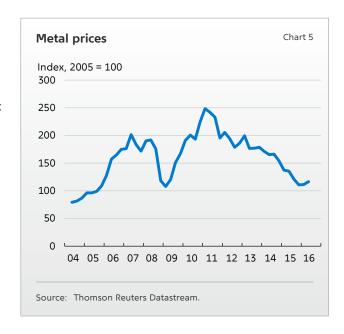
Following some years without any mining operations, a company called True North Gems Greenland is expected to commence extraction during 2016, having made the necessary investments. The project will provide employment for about 80 people in the operating phase.

A project on the same scale linked to extraction of anorthosite is currently in the construction phase, after the authorities in 2015 granted an extraction licence to Hudson Greenland. The project is expected to start operations in 2017.

A somewhat larger project at the Citronen Fjord in the northernmost part of Greenland for extraction of zinc and lead applied for an extraction licence in 2015. If the project is realised, it will provide 300-500 jobs during the operating phase.

As regards other minerals, there has also been considerable exploration activity for some years, and in continuation of these activities the Greenlandic authorities have granted extraction licenses for, inter alia, a large iron project in the Nuuk Fjord. But falling world market prices for iron and other metals, cf. Chart 5, have led to a change of ownership of the project. There is no prospect of the project being launched in the foreseeable future.

Extraction of raw materials offers the most realistic opportunity to expand the Greenlandic business sector. But Greenland has 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. This makes it difficult to develop internationally competitive traditional industries. Oppor-



tunities to find employment in the raw materials sector may contribute strongly to raising the level of education.

In the spring of 2016, the Danish and Green-landic governments agreed on the terms and conditions for extracting and exporting raw materials for both civil and military uses, notably uranium. Uranium is an unavoidable by-product of one of the projects aimed primarily at extracting rare earth elements. The company behind the project is expected to apply for an extraction licence in 2016. The Greenlandic authorities will decide whether a licence can be granted, but due to the nature of the product it is the responsibility of the Danish government to ensure that international agreements on extraction and trade are observed.

Back in 2010 and 2011 there was considerable exploration activity for oil and other types of hydrocarbon in the waters off western Greenland. The related costs amounted to approximately kr. 5 billion, which is included as part of the investment in oil and mineral exploration in the national accounts. Traces of hydrocarbon were found, but the amounts were insufficient for commercial exploitation. Since then, no exploratory drilling has taken place in Greenlandic waters, and given the current world market prices for oil, extraction in this area is not attractive for the companies. Consequently, exploratory activities have been put on the back burner.

The Greenlandic listed company Nuna Minerals, which explores for minerals in Greenland, suspended payments in May 2015. One year later, the fate of the company has not yet been decided.