



OECD Economics Department Working Papers No. 1286

Policy Challenges
for Agriculture and Rural
Areas in Norway

Philip Hemmings

<https://dx.doi.org/10.1787/5jm0xf0r676c-en>

Unclassified

ECO/WKP(2016)10

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

04-Apr-2016

English - Or. English

ECONOMICS DEPARTMENT

POLICY CHALLENGES FOR AGRICULTURE AND RURAL AREAS IN NORWAY

By Philip Hemmings

ECONOMICS DEPARTMENT WORKING PAPERS No. 1286

OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).

Authorised for publication by Robert Ford, Deputy Director, Country Studies Branch, Economics Department.

All Economics Department Working Papers are available at www.oecd.org/eco/workingpapers

JT03393194

Complete document available on OLIS in its original format

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

ECO/WKP(2016)10
Unclassified

English - Or. English

OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).

Working Papers describe preliminary results or research in progress by the author(s) and are published to stimulate discussion on a broad range of issues on which the OECD works.

Comments on Working Papers are welcomed, and may be sent to the Economics Department, OECD, 2 rue André-Pascal, 75775 Paris Cedex 16, France, or by e-mail to eco.contact@oecd.org.

All Economics Department Working Papers are available at www.oecd.org/eco/workingpapers.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

© OECD (2016)

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for commercial use and translation rights should be submitted to rights@oecd.org

ABSTRACT/RÉSUMÉ**Policy Challenges for Agriculture and Rural Areas in Norway**

Norwegian policy gives high priority to supporting rural communities, with support for agriculture receiving particular attention. It is broadly successful in terms of maintaining rural communities, and urban-rural gaps in a range of well-being indicators are comparatively narrow. However, the cost-efficiency and sustainability of the policy mechanisms are questionable. Agriculture and rural policy in Norway needs to focus more strongly on economic sustainability alongside social sustainability. Agricultural support remains overly concentrated on maintaining the status quo and has seen little reform compared with policies elsewhere in the OECD. In contrast, the fishing industry has reformed much further towards economic sustainability, aquaculture has seen considerable success and there is potential for more rural tourism. Supporting rural communities also requires attention to the quality of public services in rural areas, and this report draws particular attention to inefficiencies arising from small-scale municipalities, and supports efforts to encourage mergers towards larger units, paving the way for greater operational leeway for municipal government.

This working paper relates to the 2016 OECD Economic Survey of Norway (www.oecd.org/eco/surveys/economic-survey-norway.htm).

JEL Classification: Q10, Q18, Q22, R11, R50, Z30

Keywords: Agriculture, agricultural support, aquaculture, fishing, local government, municipalities, regional policy, tourism

Agriculture et zones rurales en Norvège : enjeux pour l'action publique

Les pouvoirs publics norvégiens s'emploient de manière prioritaire à soutenir les communautés rurales, le soutien à l'agriculture bénéficiant d'une attention particulière. Cette politique porte largement ses fruits en ce qui concerne le maintien des communautés rurales, et pour tout un éventail d'indicateurs du bien-être, les écarts entre les zones urbaines et les zones rurales sont relativement modestes. Toutefois, on peut s'interroger sur le rapport coût-efficacité et sur la viabilité d'une telle stratégie. Les politiques agricoles et rurales de la Norvège devraient mettre davantage l'accent sur la viabilité économique parallèlement à la viabilité sociale. Le soutien à l'agriculture reste excessivement concentré sur le maintien du statu quo et les réformes ont été peu nombreuses par comparaison avec les politiques menées dans d'autres pays de l'OCDE. En revanche, l'industrie halieutique a été bien davantage réformée dans le sens de la viabilité économique, l'aquaculture a enregistré des réussites considérables et il existe un potentiel de développement du tourisme rural. Le soutien apporté aux communautés rurales doit également prendre en compte la qualité des services publics dans les zones rurales ; la présente Étude souligne en particulier les inefficiences liées aux municipalités de petite taille et soutient les efforts déployés pour encourager les fusions visant à constituer des collectivités plus larges, ce qui permettrait de ménager aux autorités municipales de plus grandes marges de manœuvre opérationnelles.

Ce Document de travail se rapporte à l'Étude économique de l'OCDE de la Norvège 2015 (www.oecd.org/fr/eco/etudes/etude-economique-norvege.htm).

Classification JEL: Q10, Q18, Q22, R11, R50, Z30

Mots-clés: Agriculture, soutien à l'agriculture, aquaculture, pêche, gouvernement local, municipalités, politique régionale, tourisme

TABLE OF CONTENTS

POLICY CHALLENGES FOR AGRICULTURE AND RURAL AREAS IN NORWAY	6
Policy efficiency is the central question	6
Reforming agricultural support.....	10
Farmers are supported by direct subsidy, price support and tax breaks ...	10
...concessions and special rules in legislation	14
...and the market power of agricultural co-operatives	15
Overall, producer support in agriculture is very substantial and distorting.....	16
The current government has ambitious plans for reform	19
There remains considerable scope for further action	20
Prospects and challenges in selected non-agricultural sectors: fishing, aquaculture and tourism	22
Fishing industry: a largely successfully re-structuring continues	22
Aquaculture: success has brought challenges	25
Rural tourism: there remains considerable potential	26
Regional policy and rural development	28
The pros and cons of Norway's regionally differentiated employers' social contributions.....	28
Avenues for improving local-government efficiency	29
Restructuring municipalities: a scheme promoting municipal mergers is underway	32
Even if there are extensive mergers, some co-ordination and efficiency challenges would remain	33
Changes to sub-national-government financing are planned	35
Real-estate property tax could play a bigger role in sub-national government financing	35
Summing up the challenges	37
BIBLIOGRAPHY	40

Tables

1. Agricultural support in Norway: budgetary support, including tax relief	12
2. Agricultural Support: non-budgetary forms of support	15
3. The scale and composition of Norway's agricultural support according to the OECD's support-estimate system	18
4. Commissions and white papers underway relating to the agricultural sector.....	19
5. Key features of policy regarding the fishing industry	24
6. The division of responsibilities across levels of government	31
7. Municipal and county financing systems	32
8. Coverage and value of property tax across municipalities	36
9. Policy issues relating to rural economies.....	38

Figures

1.	Key features of the rural economy	8
2.	Well-being differences between urban and rural areas	9
3.	Ratio of disposable income to wage and salaries by region.....	9
4.	Trends in agriculture	11
5.	Regional annual payments for a 30-cow dairy farm	13
6.	Norway's heavy tariffs on agricultural products partly contribute to high food prices	14
7.	Norway's agricultural support	17
8.	Trends in fishing	23
9.	Trends in aquaculture.....	26
10.	Trends in tourism	26
11.	High price is a major barrier of competitiveness in Norway's tourism industry.....	27
12.	Size distribution of municipalities	29
13.	The composition of municipal and county expenditures and revenues	30

Boxes

1.	The OECD's approach to estimating support for the agricultural sector	16
2.	New Zealand's and Australia's experiences in substantial reform of support for agriculture	21
3.	Food security: does maximising domestic food production make sense?	22
4.	Past restructuring of Norway's municipalities	33
5.	The Coordination Reform in health care.....	34
6.	Housing valuation for Norway's wealth tax: a potential tool for municipality property taxation	36

Recommendations

Recommendations on the rural economy.....	39
---	----

POLICY CHALLENGES FOR AGRICULTURE AND RURAL AREAS IN NORWAY

By Philip Hemmings¹

Ensuring high and sustainable levels of well-being in rural areas is increasingly challenging. It is important that policymakers clearly understand how far to go in supporting agricultural production and other “traditional” rural activities, how best to encourage economic diversification into other areas, and how best to ensure good quality public services in rural communities. These issues resonate strongly in Norway as a high priority long been put on supporting the country’s rural communities, notably through agriculture support, with a view to countering depopulation and economic decline. Although much of the population lives in urban and suburban areas, there is considerable interest in rural areas as many households have links with through family connections and through second homes used for weekend breaks and holidays. Thus, the small shares of output and employment now attributable to the agricultural, forestry and fishing sector (around 2% of GDP and a little more in terms of employment, Figure 1 Panels A and B) somewhat belie the significance of the rural sector as a whole. Norway’s comfortable fiscal position, thanks to oil wealth, gives it more choice on how to go about supporting agriculture and the rural sector than is the case in many countries. However, the revenues brought by oil wealth can also mean slow progress in politically difficult reforms, and Norwegian agricultural policy is a prime example.

Policy efficiency is the central question

Norway is geographically large in relation to its population and has diverse habitats, many of which are rugged with harsh climates that present significant challenges for everyday life and economic activity, even with modern technology and conveniences. Only about 3% of Norway’s land area is taken up by arable farming, much of it in low-lying areas close to the main urban centres, while dairy farming is an important agricultural activity throughout the country. Many small coastal communities are traditionally reliant on fishing. Norway’s northernmost regions are especially unique, with considerable tracts of land within the arctic circle and a sizeable nomadic *Saami* population.

The declining economic role of farming and fishing in rural communities has to a varying extent been offset by new activities. Some coastal locations have been boosted by incoming business relating to exploration and development of oil and gas fields or aquaculture development. While such boons provide a welcome fillip to local economies, some are of limited duration and scope, for instance when the only substantial demand for local labour and services occurs during the installation-construction phase of a project. Some rural communities are successfully tapping into opportunities in tourism or other areas of natural advantage, such as spin-off activities related to local hydroelectric power.

¹ Philip Hemmings is the senior economist on the Australia/Norway desk in the OECD’s Economics Department. This paper is extracted from Chapter 2 of the 2016 *OECD Economic Survey of Norway*, published in January 2016 under the authority of the Economic and Development Review Committee (EDRC). The author would like to thank Piritta Sorsa, Robert Ford, Álvaro Pereira, Vassiliki Koutsogeorgopoulou, colleagues from other relevant OECD departments and Norwegian government officials for valuable comments on earlier drafts. Taejin Park provided the statistical research and Anthony Bolton provided administrative assistance.

In broad terms the strong policy priority put on supporting rural communities in Norway appears to have had some beneficial effect. Outcomes in terms of maintaining rural communities appear reasonably good. According to OECD data, about 45% of people live in “predominantly rural” regions, compared to an OECD average of around 25% (Figure 1, Panel C), a rough indicator of some degree of success in countering rural depopulation. Comparatively small regional differences in average disposable income compared with other countries (Figure 1, Panel D) suggest, furthermore, that gaps between rural and urban living standards may be comparatively narrow in Norway. Furthermore, disparities are not large in a range of other well-being indicators. For instance, both urban and rural areas score at, or above, the OECD average in education, life expectancy and internet access, and gaps between the urban and rural scores are all fairly small (Figure 2).

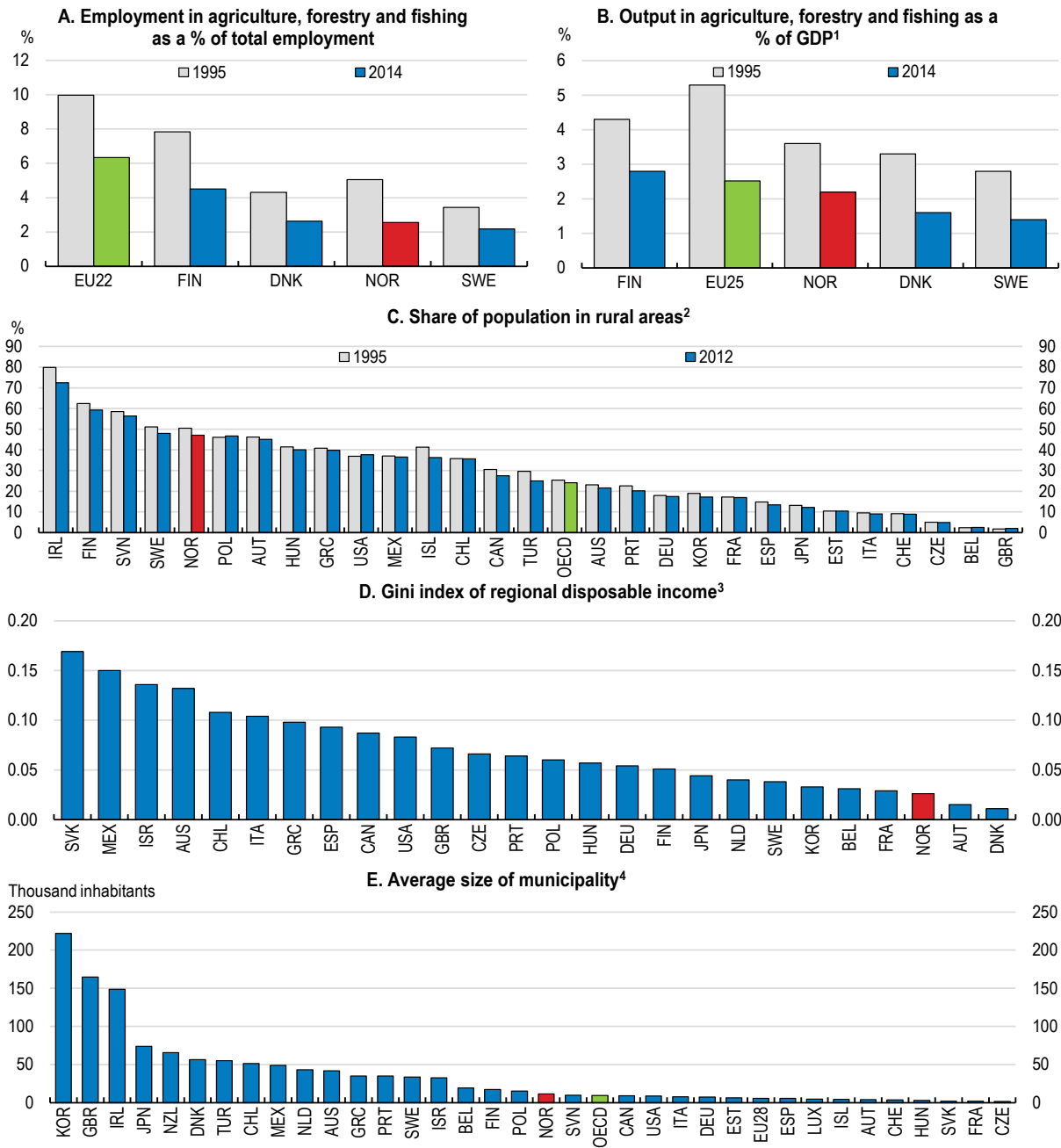
One central question is whether these outcomes are being achieved efficiently and sustainably. A broad illustration of the magnitude of transfers between the regions is seen in the ratio of household disposable income to the wage bill across Norway’s counties (Figure 3). In Oslo the ratio is about 1, while in the predominantly rural area of Hedmark it is nearly 1.3, i.e. overall, the county’s disposable income is 30% greater than its income from earnings. In part these differences between regions reflect agricultural-sector support feeding into household disposable incomes (directly and indirectly). Agriculture accounts for about two-thirds of state budgetary aid, most of in the form of tax expenditure and support for farming (Productivity Commission, 2015). State aid also finds its way to rural areas through other channels, for instance via a system of regionally differentiated rates of employer social-security contributions. Of course a host of other factors influence the ratio of disposable income to wage income, such as regional differences in welfare pay outs reflecting differences in age structure and family composition.

Subsequent sections will reveal that shortfalls in the efficiency of policies related to rural areas reflect a heavy focus on preserving the status quo. This entails substantial support for activities and approaches to production as many businesses are far from economic viability. Shifting away from this approach towards one concentrated on encouraging economically sustainable activities for the longer term is important, not only for rural communities but also for the wider public. Unwinding permanent support not only saves on public spending but means reduced supply-chain distortions that impose hidden costs on households by distorting prices and the allocation of resources in the economy.

Efficiency in terms of public services is an important issue, especially given the small scale of Norwegian local government. In international comparison, the average size of Norwegian municipalities is middle ranking (Figure 1, Panel E). Yet the range is extremely wide. For instance Oslo, with a population of around 600 000, is a single municipality. In contrast, there are nearly 130 municipalities with populations of less than 2 500. The small municipalities have practically the same roles and responsibilities as the large ones, which creates challenges in administration and public-service delivery.

The remainder of this paper first discusses agricultural support policies. It then takes a look at developments and prospects in fishing, aquaculture and tourism, and then takes a brief look at regional policy mechanisms. A final section considers how sub-national government can be made more effective and efficient.

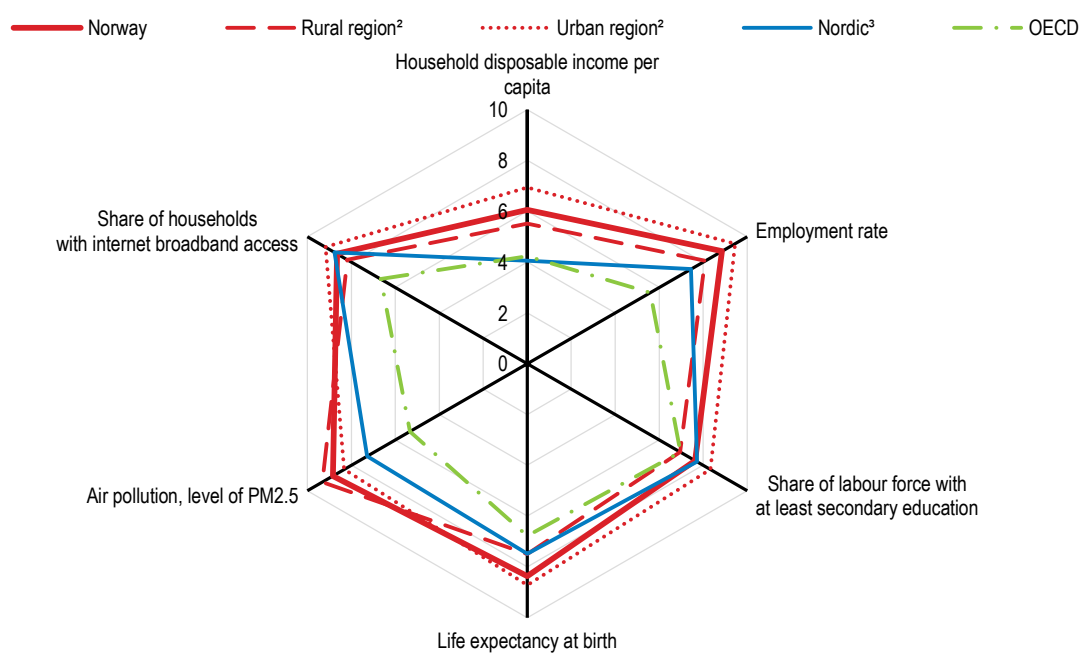
Figure 1. Key features of the rural economy



1. GDP data for Norway refer to mainland only.
2. A rural ("predominantly rural") region is defined as one in which at least 50% of the population live in rural communities, the latter being classified, inter alia, on the basis of population density, see OECD Regions at a Glance, 2013, p 154. First available year: 1996 for Australia and Canada. Last available year: 2010 for Mexico and 2011 for Australia.
3. The Gini index assesses inequality by measuring how far the distribution of income among households deviates from a perfectly equal distribution. A Gini index of zero represents perfect equality and 1, maximum inequality. Calculation based on average regional household disposable income per capita. Regions are classified at Territorial Level 2 (TL2), which divides the OECD economy into 362 large regions. 2011-2014 data.
4. Korea, Portugal and the United Kingdom have a sub-municipal level. 2014-2015 data.

Source: Eurostat (2015), Annual National Accounts (database); OECD (2015), "Regional demography", OECD Regional Statistics (database); Author's calculations based on OECD (2015), "Regional economy", OECD Regional Statistics (database); OECD (2015), "Sub-national governments in OECD countries: Key data" (brochure), OECD, Paris, www.oecd.org/regional/regional-policy.

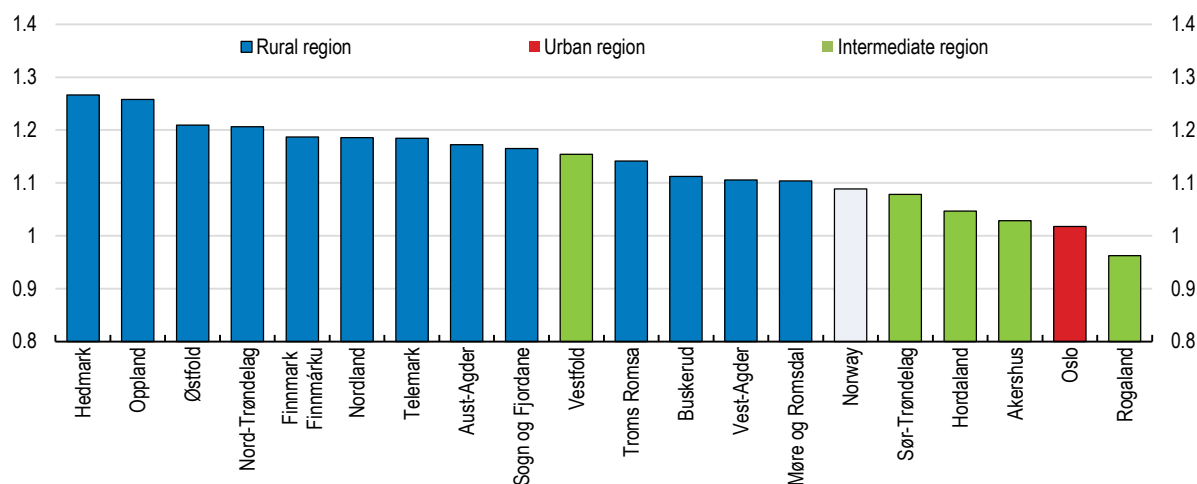
Figure 2. Well-being differences between urban and rural areas¹



1. Indicators are normalised by re-scaling to be from 0 (worst) to 10 (best) among OECD countries. 2013 data.
2. Rural (or urban) region is defined as one in which at least 50% of the population (or less than 15% of population) live in rural communities, the latter being classified, inter alia, on the basis of population density, see OECD Regions at a Glance, 2013, p 154.
3. Nordic is a simple average of Denmark, Finland and Sweden.

Source: OECD (2015), "Regional well-being", OECD Regional Statistics (database).

Figure 3. Ratio of disposable income to wages and salaries by region



Note: "Rural" (or "urban") region is defined as one in which at least 50% of the population (or less than 15% of population) live in rural communities, the latter being classified, inter alia, on the basis of population density, see OECD Regions at a Glance, 2013, p 154. 2013 data.

Source: Statistics Norway, Regional Accounts Statistics.

Reforming agricultural support

Echoing the words of Norway's Productivity Commission, the country's agricultural policy does not pay enough attention to balancing the costs and distortions of support (*inter alia*, direct subsidy, market-price support, and tax concessions) against the claimed benefits of support (generally in the form of public goods such as food security cultural landscapes, biodiversity and sustaining rural economies) (Productivity Commission, 2015, Chapter 1). The support system remains geared, essentially, around preserving the status quo which means protecting and supporting largely uneconomic production. Those in favour of retaining the current support system often advance rather unconvincing arguments that continuous and indefinite subsidy is necessary for reasons of "self-sufficiency" or as a contribution to global food supply.

Policy also needs to more fully recognise that, as in other economies, change is underway in the agricultural sector, despite the efforts from some quarters to prevent it. As elsewhere, technological progress has substantially reduced labour requirements in agriculture (Figure 4, Panels A and B). Technological progress has also been associated with increasing use of imported inputs to production, such as animal feed and capital equipment. The import content of the inputs to agricultural production is estimated to be a little over 40%, and a lot higher for some categories of input (Figure 4, Panel C). This has implications for debate on "food security" (discussed further below) and for the net benefits to the domestic economy of agricultural-sector subsidies. Furthermore, on many Norwegian farms, income from food production represents only part of the revenue stream and this diversification continues. This is illustrated in Figure 4, Panel D which, for instance, shows that only in around 5% of farming households does income from farming itself account for more than 90% of revenue, in a large majority of farming households, farming income accounts for less than 50% of revenue. Furthermore, the share of farm households with agriculture as the predominant income source has been diminishing over time. Income from forestry activity is one of the most common forms of non-farming income. In addition, an increasing number of spouses are working outside the farm.

Farmers are supported by direct subsidy, price support and tax breaks...

Much support for Norway's rural areas comes via direct and indirect assistance for farmers. Direct support comprises around 100 individual mechanisms, the principal types of support being: output-based support, transport subsidies, acreage-based payments and headage payments (see Table 1). The core support mechanisms are augmented by a host of other programmes that, for example, help cover labour costs or compensate farmers in the event of natural disasters and losses due to predators. Support for investment expenses comes mainly through schemes run by a special fund (the Agricultural Development Fund). Agri-environmental incentives and programmes are run by the country's 18 regions (guided by the National Environmental Programme). Also, farmers can be eligible for schemes operating under rural development programmes. Finally, farmers also benefit from a special tax relief.

Figure 4. Trends in agriculture



1. Cereals: wheat and coarse grains. Meats: beef and veal (carcass weight equivalent, c.w.e.), pigmeat (c.w.e.), poultry meat (ready to cook), and sheepmeat (c.w.e.).

2. Employments in crop and animal production, hunting and related service activities. 2014 and 2015 data are estimated.

3. 2014 data.

Source: FAO/OECD (2015), "OECD-FAO Agricultural Outlook (Edition 2015)", OECD Agriculture Statistics (database); The Norwegian budget committee for agriculture (2014), "Resultatkontroll for gjennomføring av landbrukspolitikken", Table 7.15; Eurostat (2015), Annual National Accounts database; Norwegian Institute of Bioeconomy Research.

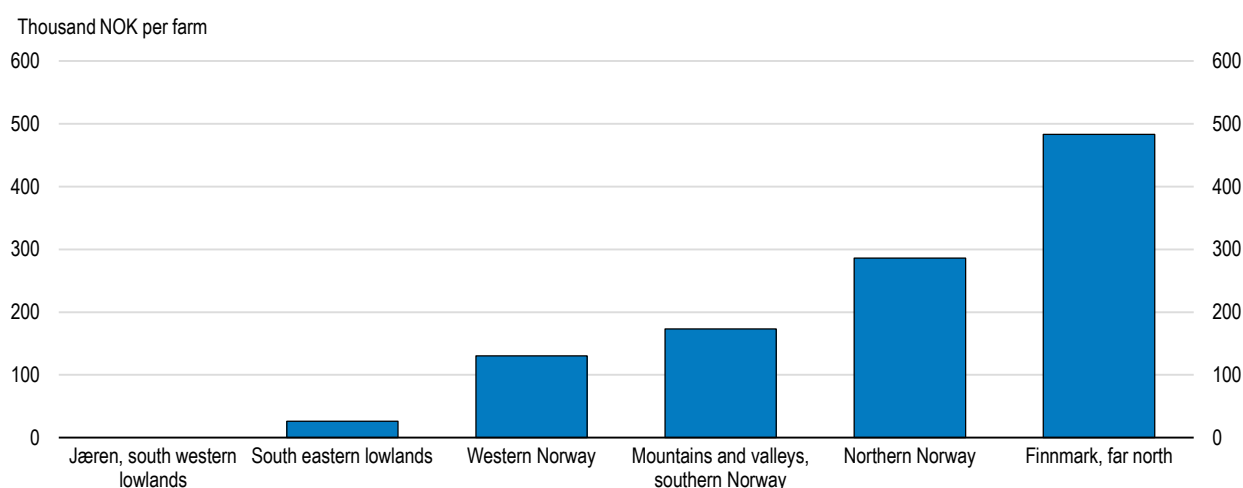
Table 1. **Agricultural support in Norway: budgetary support, including tax relief**

Type of support	Selected detail
Output-based payments for certain meats, poultry, wool, fruit and vegetables, cereals, eggs and certain processed products	Payments to farmers (in some cases processors) based on the volume of output. Most payments have a regional dimension <i>Example:</i> the payment for meat comprises a nationwide (“base”) payment per tonne of meat, a regional deficiency payment and an extra regional payment for meat producers in northern Norway
Transport subsidies	Various schemes supporting transport of meats, eggs, grains and feed
Acreage-based payments	<i>Cultural Landscape Support.</i> A lump-sum payment per hectare paid on all agricultural land <i>Acreage Support Programme.</i> Payments based on land area under current use. Products (or activities) covered include: coarse fodder, grains, potato and mountain farming <i>Support for grazing animals.</i> Per animal payments differentiated by animal and region
Headage payments for livestock	<i>Headage payments</i> for bovine animals, pigs, goats, hens, horses, rabbits and sheep. Payment structures are degressive (<i>i.e.</i> payment per animal decreases with the number of animals)
Dairy-industry payment schemes	<i>Quota-limited price support.</i> Comprises a structural income support and a regional payment per litre of milk for a limited output A “ <i>structural payment</i> ” based on animal numbers <i>Mountain dairy farming scheme.</i> A fixed per-farm payment
Financial assistance with labour input	<i>Vacation and Replacement Scheme</i> and <i>Assistance in the case of illness.</i> Reimbursements for hiring replacement labour during vacation or to cover for employee illness
Other national payment schemes	Schemes include: organic farming support, natural disaster compensation, compensation programmes for losses due to predators and other losses, distribution subsidies to horticultural sector
Agricultural Development Fund	Provides a wide range of support, generally for investment-type activities. For instance the fund provides interest-cost assistance and supports investment in areas such as “traditional” farming, energy saving and landscape development
Regional environmental programme	Separate programmes are run by the 18 counties following a decentralisation of agri-environmental policy in 2005. Measures aim to provide additional support to guard the “cultural” landscape (biodiversity, cultural heritage, etc.) and to reduce pollution
Income-tax deduction	Positive income balances are not taxed up to a maximum tax saving of NOK 44 900 (<i>i.e.</i> around EUR 4 900 at an exchange rate of 9.2) per farmer

An annual negotiation between the government and representatives of the farmers sets key parameters, such as the target-prices, and a number of the budgets for direct financial support. The negotiation provides the farming lobby with a powerful platform to defend their interests, and is centred on the implications of support for net farm incomes. To this end, the negotiation makes extensive use of microsimulations of farm finances. The microsimulations model the finances of around 30 representative farms using inputs from actual farm accounts and are run by the Norwegian Institute of Bioeconomy Research. In the negotiation, proposals for parameter changes are programmed into the system and the impact on farm incomes is assessed. The negotiations held in 2014 (establishing the budget for 2015) failed to reach agreement and, in accordance with procedural rules, government proposals for budgets and parametric adjustments were instead voted on by parliament.

A substantial amount of regional support is built into the direct financial support for farmers, with payments often gradated according to region. In effect this represents a substantial component of Norway's regional policy (along with mechanisms such as regionally differentiated employer contributions, see below). For instance, Figure 5 shows the results of microsimulations of the total value of the regional payments provided by subsidy mechanisms in the case of 30-cow dairy farm. In the south-west of the county there are no regional payments, while in the far north of the country they amount to nearly NOK 450 000 per year (roughly equivalent to the average salary in Norway and around EUR 49 000 at an exchange rate of 9.2).

Figure 5. **Regional annual payments for a 30-cow dairy farm**



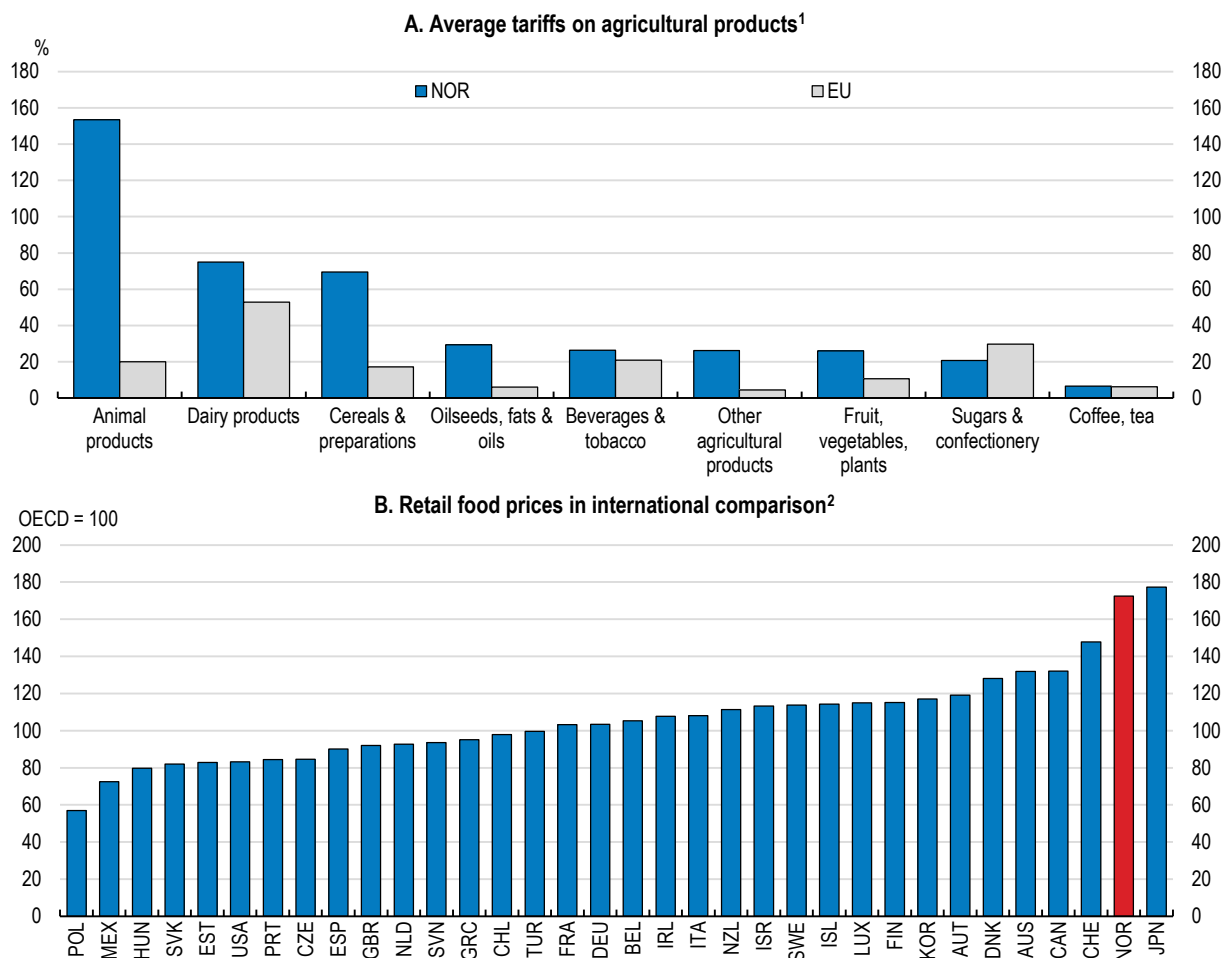
Note: The figures are a calculation of the total value of the various regional dimensions included in many of Norway's support payments to farmers based on microsimulations of a 30-cow dairy farm located in differed regions of the country, using rates of support as of 2015.

Source: Norwegian Ministry of Agriculture and Food.

In addition to direct financial support, there are custom's tariffs on many raw ingredients and processed food products, supporting farmers indirectly by raising the price of imports. For instance, there is a hefty import tariff on importing livestock, equivalent to around EUR 750 per animal and low-fat milk imports are subject to a 443% tariff (Table 2). "Most favoured nation" (MFN) tariff rates are comparatively high (Figure 6, Panel A). To be sure, tariffs may to some extent get absorbed by margin-narrowing in the supply chain. Also, for non-sensitive products, the applied tariffs are low or zero and in free-trade agreements Norway has bound up to 50 % of products duty free. Nevertheless, the extensive tariffs certainly push up the retail price of food. Retail food prices in Norway are some 80% greater than the OECD average, according to price data collected for the calculation of the OECD's purchasing power parities (Figure 6, Panel B), and there is little doubt that the tariffs are a major contributor (comparatively high supply-chain labour costs probably also play a role).

Among the various other forms of indirect financial support (Table 2), there is a complex set of tax concessions that provide fairly substantial implicit financial assistance to farmers. A special personal income-tax deduction for farmers is the largest single item of support, worth approximately NOK 1 billion per year, which averages out to about NOK 22 000 per farm (i.e. about EUR 2 500), given that there are around 45 000 producers. Other tax benefits include provisions allowing farmers to include depreciation of capital equipment as a tax deduction even if the equipment was bought with subsidies.

Figure 6 Norway's heavy tariffs on agricultural products partly contribute to high food prices



1. Average Most-Favoured Nation (MFN) tariffs, which are the standard rates charged on imports from all WTO members, excluding preferential rates, or lower rates charged within quotas. 2014 data.

2. 2014 data are calculated based on the 2011 PPP benchmark results and food consumer prices data for 2011-14.

Source: WTO (2014), "World Trade Profiles 2014"; Author's calculations based on OECD (2015), "PPP benchmark results 2011 (Edition 2013)", OECD National Accounts Statistics (database) and OECD (2015), "Prices: Consumer prices", Main Economic Indicators (database).

Agricultural producers in Norway are exempt from greenhouse-gas emission taxes and the cap-and-trade system. Practical challenges in measuring emissions relating to agricultural activity (the biggest issue is methane released by cows) mean that very little progress has been made in imposing economic instruments in the vast majority of countries. While pioneering efforts would certainly be welcome, Norway is certainly not out of step with policy in other countries on this front.

...concessions and special rules in legislation...

Elements of land-transfer and land-use legislation are purposefully designed to support the status quo in farming communities, by promoting agricultural activity and the preservation of family farms. Corporate ownership of farms is limited by legislation requiring owners to apply for a concession, there are inheritance laws giving descendants rights to claim property from third parties and legislation requiring that certain land is farmed and requiring owners to remain resident in their properties for a minimum

period (Table 2). Such explicit restrictions on land and farm ownership are not common. A similar situation exists in Japan where, for instance, farmland can only be purchased with a commitment to cultivate the land (OECD 2013a). On other legislative fronts, the agriculture and fishing sectors are exempt from Norway's main legislation on competition (the Competition Act).

Table 2 **Agricultural Support: non-budgetary forms of support**

Type of support	Selected detail
Production quotas	Farm-level production limits aimed at protecting small-scale, high-cost production
“Target price” system	As part of the annual negotiation between the farming unions and government, prices for which the agricultural cooperatives purchase products from the farmers are set. The system largely aims to give a price possibility for farmers, however it can “protect” processors (and consumers) as there are mechanisms to bring prices down if they rise above the negotiated price levels
Indirect price support via custom’s tariffs	<p>Hundreds of volume-based and value-based tariffs apply to livestock, raw ingredients and processed food products. Examples of statutory tariffs applying outside trade agreements for 2014¹:</p> <ul style="list-style-type: none"> • Livestock: e.g. NOK 7500 (i.e. around EUR 815 at an exchange rate of 9.2) per head of cattle (pure breeding animal) (Code 01.02.2100 in the <i>Harmonised System</i> maintained by the World Customs Organisation) • Meat and related: e.g. NOK 32.28 (i.e. around EUR 3.50) per kg of bovine meat (carcasses) (Code 02.01.1000) • Dairy produce: e.g. 443% tariff on milk (fat content less than 1%) (Code 04.01.1000) • Arable and related e.g. NOK 2.13 (i.e. around EUR 0.23 per kg on durum wheat (Code 10.01.1100)
Education and research	A range of activities are at least partially publicly funded, including agricultural research stations, university life sciences departments, veterinary school
Inspection and control services, institutional infrastructure	Includes, for instance support for organisations, operation of land allocation court
Marketing support	For instance there is a market promotion fund which is used to promote organic produce.
Land-use and land transfer legislation favouring the status quo.	<p><i>Concession Law</i>: requires owners of certain properties to obtain a “concession” from municipalities. The law, in effect, limits corporate ownership of farms. In addition it regulates/limits property prices</p> <p><i>Allodial Rights Act</i>: provides family members legal rights to claim ownership of a property; under certain circumstances even after it has been sold to a third party</p> <p><i>Obligation to Farm</i>: Land designated as home pasture (<i>innmarksbeite</i>) must be farmed, with municipal authorities having rights to order that the land is leased out in case of non-compliance</p> <p><i>Obligation to Reside</i>: Various types of property (including allodial properties over a certain size) require owners to live in the property for a minimum period</p>

Source: Norwegian Government. *Norwegian Customs Tariffs, 2014*. See Norwegian Agriculture Agency website for further details (<https://www.slf.dep.no/en/property/the-norwegian-concession-act>)

...and the market power of agricultural co-operatives

Agricultural co-operatives are an important part of the supply chain in some sectors, adding another dimension of support to farmers. Thirteen agricultural co-operatives operate under an umbrella organisation (the Agricultural Co-operatives of Norway, *Landbrukssamvirket*). The co-operatives include food processing operations, the largest of which is the dairy co-operative, *Tine*, which has a membership of around 15 000 farmers and employs around 5 500. *Tine* purchases and processes a large proportion of Norwegian milk production and has diversified into a range of other activities. The power of the co-operatives is formalised by the market regulation system, in particular through a law (*Omsetningsloven*)

that gives the three large milk, meat/eggs and grain cooperatives a special role in the market regulation. Related to this, there is the exemption of the agricultural sector from competition policy. Potentially, co-operatives can monopolise segments of the market, pushing up the final price to consumers, but this is countered by the mechanisms that bring prices down if they rise above agreed levels. Cooperatives may add to farming-lobby powers by providing a powerful voice in favour of limiting competition.

The role of the co-operatives illustrates a point highlighted by Norway's Productivity Commission (Productivity Commission, 2015), that agricultural policy not only impacts primary production, but also distorts efficiency and competition in the supply chain as a whole. While the costs of the agricultural policy related to the resource allocation in the primary sector are in general well known, distortions in the supply chain as a whole (including food industry and the retail sector) are rather less well documented, and less emphasized by policy makers.

Overall, producer support in agriculture is very substantial and distorting

Norway's combination of direct payments and indirect support adds up to one of the most generous subsidy systems for farmers in developed countries. According to the OECD's producer-support estimate (see Box 1), Norway ranks alongside Iceland, Japan, Korea and Switzerland, which are also renowned for having long provided substantial support to their farming sectors (Figure 7). Norway's percentage producer-support score is nearly 60% which implies that, on average, the value of support roughly more than matches the value of agricultural production valued at world market prices.

Box 1. The OECD's approach to estimating support for the agricultural sector

The OECD's approach to estimating support for the agricultural sector takes into account not only direct payments to farmers from support schemes, but also forms of indirect support, such as customs tariffs and general support (e.g. publically funded agricultural research) (see Table 3).

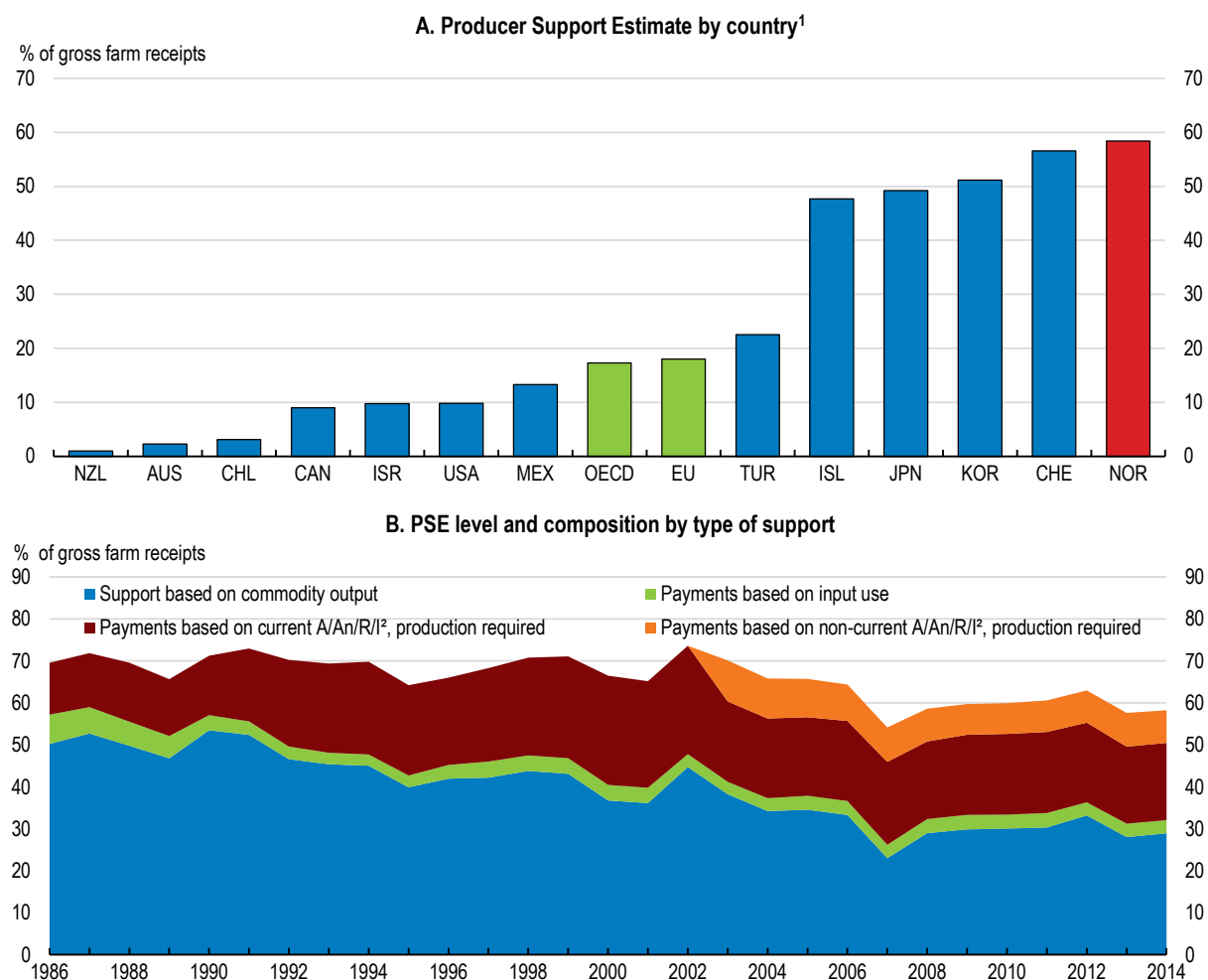
- Derivation of the value of direct payments and general support is relatively straightforward, the data are usually provided by the national authorities.
- Indirect support is generally reflected in estimates of "market price support" which are a sub-category of "Support Based on Commodity Outputs" (see Table 3). Market price support calculations are based on the gap between the produce price at the farm gate (based on estimates of the value and volume of production provided by national authorities) and an international reference price. For example, the reference prices for wheat and barley are market data for EU standard product prices in France's Rouen market. Use of these reference prices in the calculations means that year-to-year fluctuation in the money value of agricultural support can reflect changes in global market conditions, rather than policy actions. For instance a sharp rise in global commodity prices can result in a downward spike in the relative value of market price support, especially if customs tariffs are predominantly volume rather than value based.

Among the various indicators derived from the support estimates, the producer support estimates (PSE) is the most widely referenced. It measures the value of transfers from consumers and taxpayers to individual agricultural producers. The percentage PSE ("% PSE") is the ratio of transfers to as share of gross farm receipts (*including support*, which means, for instance that a 50% PSE means that support equals that of net farm receipts, valued at world market prices).

Other indicators of producer support notably include the ratio of farm-gate prices to equivalent border prices (the Producer Nominal Protection Coefficient), which reflects the degree of domestic-market protection, for instance through tariffs. Also, producer single-commodity transfer (SCT) estimates are calculated. Similar indicators for consumer support are also available. In Norway the latter are negative, reflecting the importance of implicit support by consumers of the farm sector via the tariffs.

Source: See OECD (2008) for further details

Figure 7 Norway's agricultural support



1. 2014 data.
2. Area (A), animal numbers (An), revenue (R), or income (I).

Source: OECD (2015), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database).

Average support per farm in Norway is substantial. Dividing the total value of producer support by an estimate of the number of farms (Table 3, Producer Support Estimate) suggests that, on average, each farm receives support worth around NOK 570 000 per year (about EUR 62 000 at an exchange rate of 9.2). Support based on commodity outputs, largely reflecting the customs tariffs, is worth about NOK 280 000 per farm (i.e. about EUR 31 000), while among direct forms of financial support, the largest item are payments based on current area or animal numbers, worth nearly NOK 180 000 (EUR 19 500) per farm.

Neither is the cost of support to the population at large trivial. Calculations shown in Table 3 suggest, on average, producer support is costing (directly or indirectly) each Norwegian household around NOK 10 400 a year (or around EUR 1 100). Support based on commodity outputs (largely due to the price of food being inflated by custom's tariffs) costs about NOK 5 100 per household each year (i.e. around EUR 550). As most of the remaining support is in the form of payments from government, the cost to households comes via fiscal channels.

Table 3. **The scale and composition of Norway's agricultural support according to the OECD's support-estimate system**

The monetary value of support, reference year 2014

Total value, NOK million per year	Per Agricultural holding		Per Norwegian household		Comment	
	NOK	EUR	NOK	EUR		
I. Total value of production (at farm gate prices) ¹	27 563	642 861	69 876	11 732	1 275	
II. Total value of consumption (at farm gate prices) ¹	29 430	686 402	74 609	12 526	1 362	<i>The similar figure compared with production reflects that net food imports roughly balance net food exports in Norway.</i>
III. Producer Support Estimate (PSE)	24 364	568 246	61 766	10 370	1 127	<i>Measures the total value of direct support to individual agricultural producers</i>
a) Support based on commodity outputs	12 067	281 450	30 592	5 136	558	<i>Largely reflects indirect price support from Custom's Tariffs</i>
b) Payments based on input use	1 309	30 519	3 317	557	61	<i>E.g. the Fuel Tax Subsidy</i>
c) Payments based on current area or animal numbers	7 684	179 220	19 480	3 271	356	<i>E.g. the Acreage Support Programme</i>
d) Payments based on non-current area or animal numbers	3 247	75 718	8 230	1 382	150	<i>E.g. the Cultural Landscape Payment</i>
IV. General Services Support Estimate (GSSE)	1 532	35 720	3 883	652	71	<i>Comprises general support for the agricultural sector; for instance, publically funded agricultural research</i>
V. Consumer Support Estimate (CSE)	-11 343	-264 549	-28 755	-4 828	-525	<i>Largely reflects indirect price support from Custom's Tariffs</i>
VI. Total Support Estimate (TSE)	26 470	617 351	67 103	11 266	1 225	<i>Measures total net support to the sector</i>
R. Transfers from consumers	12 143	283 214	30 784	5 168	562	<i>Largely reflects indirect price support from Custom's Tariffs</i>
S. Transfers from taxpayers	15 138	353 068	38 377	6 443	700	<i>Largely reflects direct payment mechanisms</i>
T. Budget revenues (-)	-812	-18 930	-2 058	-345	-38	

Note: per household calculations assume 2.35 million households based on Statistics Norway data, per agricultural holding calculation assumes 42 876 holdings based on Statistics Norway data. Conversion from NOK to EUR is based on an exchange rate of 9.2

1. Gaps between the value of production and value of consumption at farm gate prices in the OECD's producer support estimates arise because the volume of consumption (for most products) is higher than domestic production, reflecting positive net imports.

Source: Calculations based on OECD Producer Support Estimates (PSE) database, 2015

The substantial financial value of support for the agricultural sector largely reflects limited progress in reform. Two or three decades ago the scale and composition of Norway's agricultural support was not so different from that of most other European countries via the EU's common agriculture policy. Changes in the latter (albeit often slow and difficult) have led to a reduction in the level of support, while that in Norway has not altered significantly (Figure 6). In fact, changes to the Norwegian system have often been through external pressure, rather than domestically driven reform. For instance, implementation of the World Trade Organisation's Uruguay Round Agreement on Agriculture has forced alterations to the target price system as this did not fit in with the rules of the "amber box".

These high levels of support are likely to become increasingly untenable over time. External pressure for Norway to decrease its import tariffs on agricultural imports is unlikely to diminish. Indeed, a government white paper on globalisation and trade warns that future trade agreements may mean significant reductions in tariff protection (Ministry of Foreign Affairs, 2015). Domestically, increasing

need for a more productive non-oil economy over the coming decades due to secular decline in petroleum-related activities (and incomes), will likely see heavily subsidised sectors, such as that for agriculture, come under increasing scrutiny as belts tighten and the cost of such subsidies becomes more strongly felt. Agricultural policy needs to help prepare producers for change, guiding them towards more sustainable and competitive production.

The current government has ambitious plans for reform

Agricultural-policy reform is on the present government's agenda, which is encouraging. A government position paper outlined a plan whose tone is essentially one of cautious liberalisation (Government of Norway, 2013). It mentions reducing tariff barriers, lifting quotas and licensing restrictions on agricultural production and proposes changes to inheritance and land-use laws. In addition, the position paper emphasises a desire for clearer distinction between agricultural policy and regional policy, providing a greater focus of support on production rather than land use and says that the main objective of agricultural policy must be to promote cost-effective food production.

Reflecting these intentions, the government has launched several commission and white-paper processes (Table 4) for instance, a report on the system of market regulation was released in June 2015.

Table 4. **Commissions and white papers underway relating to the agricultural sector**

Topic of commission/white paper	Status
Market regulation system (for instance target prices and market regulation in agriculture)	Initial report released June 2015, public hearing until October 2015
Simplification of agricultural support	Report released in December 2015
Climate change	Report released in February 2016
Environmental schemes	Report released in March 2015
Milk quota system	Report released in March 2015

Some adjustments to support mechanisms along the lines outlined in the government's position paper have already been implemented, most aiming at encouraging larger-scale production. In particular, ceilings on total support per farm have been increased, with a view to encouraging larger units. In the short run this implies an increase in the total value of direct financial support for the longer term the hope is that the move will speed up structural change and reduce the average support intensity. Among the detailed adjustments:

- In dairy, the cow-milk quota has increased from 400/750 (single farm/cooperatives) tonnes per farm per year to 900 tonnes; a similar increase applies for goat milk. Furthermore, special (and favourable) regulations for cooperatives have been removed. Allowing larger farms will probably contribute to a reduction in total support, since support per produced unit (support intensity) declines with output and because there is a total milk quota that limits national output to about 1.5 million tonnes.
- For poultry, farm-level chicken and turkey quotas have been doubled (for chicken each farm unit can now sell up to 280 000 birds per year, for turkey the limit is now 60 000).
- Some support measures (mainly relating livestock) have been made less degressive, discouraging high cost farms run on a part-time basis.
- Some minor support mechanisms (out of the total of around 100 schemes) have been removed.

Further measures are in the pipeline. For instance, a government proposal is currently before parliament to annul the Concession Law (see Table 2) that authorises price regulation in the real-estate market for agricultural and forestry land and restricts corporate ownership. Also, the government intends to phase out export subsidies for agricultural produce by 2019 as part of a wider strategy on trade policy (Ministry of Foreign Affairs, 2015).

There remains considerable scope for further action

Some forms of agricultural support are more distorting than others. OECD policy analysis applies a broad rule that is support for commodity output and subsidies on variable inputs are the most distorting. These forms of support most directly affect recurrent marginal revenue and costs which basic economic theory of the firm implies are key to the determining the level of production. In contrast, support to investment and, for instance acreage support that is not tied to production is less distorting. Though in practice drawing a distinction between highly distorting and less distorting support is potentially less clear cut. For instance, it can be argued that investment support can generate long-lasting distortions and inefficiencies if it means producers committing to produce uneconomic foodstuffs in an inefficient way.

Given the scale and scope of agricultural support in Norway, it is changes in this area that must do much of the heavy lifting to achieve greater sustainability in rural economies. Reform should centre on achieving goals at less cost to taxpayers and consumers. Specifically, further policy actions should, roughly in this order:

- Start reducing import tariffs as soon as possible, preferably through a legislated multi-year programme of cuts so as to signal policy commitment and provide a planning horizon for producers.
- Reduce direct payments for output and inputs to increase exposure to market signals and remove measures blocking structural shift towards more productive units.
- Further strengthen links between policy-objective and pay out for cultural and environmental support mechanisms.
- Liberalise legislation on land-use and land transfer. Moves to lighten the regulation can only be applauded, as some aspects of these rules are a key impediment to progress in moving towards a more viable agriculture sector.

In addition to altering support mechanisms, an assessment of whether the current format of annual negotiation between government and farmer representatives is well suited to promoting reform and change is required. The negotiation process is not without merit, providing a means for regular evaluation and adjustment to the system and also ensuring that farming unions are signed off on changes to the system. Also, the recourse to parliamentary vote in the event of a breakdown in negotiations, as happened in 2014, implies progress is possible without the agreement of farming representatives via the negotiation process (though, of course, getting sufficient parliamentary support may itself be challenging). Still, the importance of the negotiations as a platform for the farming interests should not be underestimated. The fact that the negotiations focus almost exclusively on farm incomes is especially worrying, implying the interests of the wider public are perhaps getting short shrift.

Admittedly, such reform can be politically challenging and progress is likely to be step-by-step. Australia's reform experience provides a good example of substantial change achieved through reforms spread over time, and this is the more likely path of Norwegian reform (Box 2). Meanwhile, New Zealand's experience illustrates that a more abrupt reform can also work. Reform in Norway will require stakeholders to embrace, rather than resist, further change in farming activity and land-use. For some this will require rethinking the view that the production of food should be paramount, even when far from economic viability. These views are often based on ideas that farmers have a "right to farm" and on rather specific notions of how best to preserve cultural identity, manage landscapes and address food-security (see Box 3).

Box 2. New Zealand's and Australia's experiences in substantial reform of support for agriculture

Prior to reforms in 1984, New Zealand had an extensive system of agricultural support. This included price supports for sheep meat, beef, wool and dairy; input subsidies for fertiliser, transport and pesticides; taxation incentives; low interest loans and debt write-offs. Indeed, in 1983 New Zealand's Producer Subsidy Equivalent was 34% and support was equivalent to 4% of GDP (Vitalis, 2007). Beginning in 1984, as part of broader economic reforms, all government support for agriculture was withdrawn, much of it in a short space of time. Measures included the abolition of minimum-price schemes, deregulation of producer boards and the removal of capital and input subsidies. The reforms led to productivity increases from more efficient use of inputs, diversification in outputs and innovation in farms' business models. One of the more long term impacts of the reform in agricultural support policy was land use change, farmers made decisions which reflected movement in international markets, in particular, the sheep sector shrank (and became more efficient, though through less upscaling in operations than some had anticipated), while horticulture and dairy sectors expanded. Interestingly, negative social impacts on farming communities were not as great or as long-lasting as many had predicted (Vitalis, 2007). Also, reform proved to have several positive environmental effects, including conversion of marginal pasture to forest and more targeted and efficient use of fertilizers.

Reform in Australia was less intense. It began in the early 1970s, when governments sought to limit the amount of budgetary assistance, for instance replacing "guaranteed" prices with "stabilised" prices in the wheat and dried vine fruits industries and placing greater emphasis on providing adjustment assistance. Reflecting wider economic reforms, the 1980s and early 1990s saw measures aimed at making decision-making more responsive to market forces, and progressive reductions in rates of assistance across the sector. Among other things, the domestic wheat market was deregulated, state-based production and pricing controls for eggs were withdrawn, domestic administered prices and export controls for sugar were terminated. By 1995, all such assistance was removed for most principal agricultural commodities. Australia's dairy was fully deregulated in 2000 when states repealed controls over sourcing and pricing of milk. Tariffs were progressively phased down or out in other industries (dairy, dried vine fruits, sugar and wine). During the 1990s and 2000s, competitive conduct legislation was extended to agricultural marketing boards. The more gradual reform process in Australia makes the impact of reform less "visible" in the data than in the case of New Zealand, but in-depth assessment (for instance, Gray *et al*, 2014) points to similar impacts, such as greater innovation and diversification and some upscaling in the size of operations as impediments to autonomous structural adjustment were removed.

The Australia and New Zealand experiences, illustrate that substantial reform of agricultural support is certainly possible. New Zealand's "shock therapy" approach of abrupt withdrawal of support meant a rapid shift to a more efficient resource allocation. This implies greater net economic gain for society as a whole over time compared with incremental reform. Concerns among policymakers and the public that rapid reform can bring disruption and hardship to farmers and agricultural communities typically precludes such an approach, however the New Zealand experience suggests that such negative effects may be less than anticipated.

Note: Based on advice and inputs received from the Australian and New Zealand Delegations to the OECD

Box 3. Food security: does maximising domestic food production make sense?

Some claim that Norway's heavy subsidy of agricultural production is necessary because of concerns about food security. *Prima facie* it appears a valid point, maximising domestic food production means more food is available locally, and so supplies could be viewed as more secure. However, the argument does not stand up to closer scrutiny:

- Given today's geopolitics and global trade in food, the likelihood of a "siege scenario" where Norwegians have to "feed themselves" with little or no means of importing food is remote. Furthermore, it is questionable whether readiness for such an event is best served by maximizing food production on an ongoing basis. For a start, this approach does not ensure food supplies if inputs cannot also be sourced domestically (as illustrated above, the import content is fairly high in Norway). And, economically, it makes more sense to form contingency plans involving, for instance, emergency food stocks, ensuring current agricultural production systems remain efficient and productive, and strategies for ramping up food production rapidly if needs be.
- In addition, maximising local production is a questionable goal when considering the wider concept of food security – typically defined as a situation where sufficient food is a) available to meet the population's full range of nutritional needs b) accessible and c) well utilized and there is stability across these three dimensions over time. Actually, security according to these criteria is arguably better served with openness to trade and limited support for local production, especially when local climate and conditions permit the production of a comparatively narrow range of foodstuffs (Brooks and Matthews, 2015). For example, recent OECD work on Indonesia suggests that its current drive for self-sufficiency has increased the risks of food insecurity in the face of natural disasters or economic shocks (OECD, 2015a).

Prospects and challenges in selected non-agricultural sectors: fishing, aquaculture and tourism

Achieving sustainability in rural economies more efficiently and effectively not only requires change in agricultural support but also concerted and co-ordinated efforts to ensure sustainability in other rural activities and the encouragement of diversification. This section examines developments in fishing, aquaculture and tourism.

Fishing industry: a largely successfully re-structuring continues

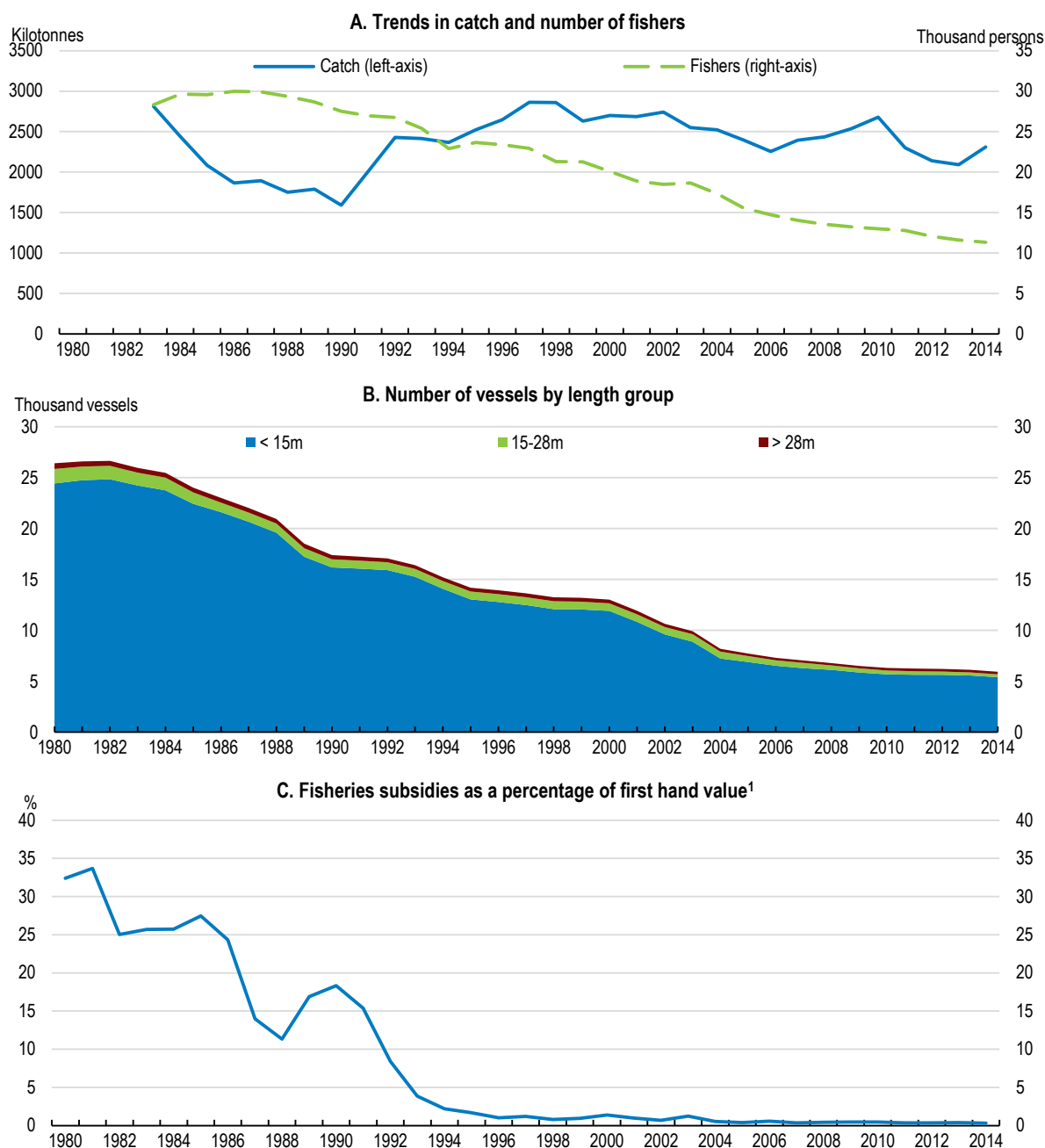
Traditional ("capture") fishing and related downstream activities, such as fish processing, are central to many of Norway's small and remote communities both economically and culturally.

The fishing industry has undergone dramatic change in recent decades. The total volume of fish landed (predominantly cod at present) has remained comparatively constant, fluctuating between 2.5 and 3 million tonnes per year. Meanwhile direct employment in the industry has fallen considerably. Today there are around 11 000 registered commercial fishermen, compared with around 20 000 in 2000 and many more than that in earlier decades (Figure 8). In addition, the fishing fleet has downsized and shifted towards larger vessels; there are about 5 500 boats currently licensed to fish. Nevertheless, despite the diminishing number of fishermen, the industry remains important to a large number of coastal communities, in part due to downstream activities, such as fish processing.

As is the case elsewhere, policy on fishing centres on preventing over exploitation of fish stocks. Without intervention the industry is vulnerable to the "tragedy of the commons"; depletion (sometimes beyond repair) of a common resource due to use by an industry that has little means or incentive to exercise the necessary constraint. Typically this arises because there are numerous resource users or that the depletion process is of no great consequence to commercial interests in the short run. Crises in fish stock levels have often been a catalyst for introducing mechanisms to limit fishing activity and capacity. For Norway, problems in herring stocks in the 1960s and 1970s and with Atlantic cod stocks in the 1980s were significant, for instance the latter being a key driver for a switch to today's vessel-based quota system (see Table 5).

The development of policy has had a much stronger focus on economic sustainability than is the case for agricultural support. True, the system protects smaller operators to a degree. For instance, the quotas are allocated according to a fixed distribution across different sizes of vessel. Also, income top-ups are available when, for instance, bad weather prevents fishing (Table 5). Yet the system certainly allows large-scale operations in a way not seen in agriculture. In fact, the industry no longer relies on subsidies to any great extent (see Figure 8).

Figure 8. Trends in fishing



1. The first hand value corresponds to the value of unrefined fish, either fresh or frozen.

Source: Norwegian Ministry of Trade, Industry and Fisheries.

Table 5. Key features of policy regarding the fishing industry

The quota system	
Individual Vessel Quotas (« IVQs »)	<ul style="list-style-type: none"> • The quotas are provided by the authorities (without charge) and legally tied to vessel (not the owner) • For most fish types, national total allowable catches are determined by negotiated international agreements (notably with the European Union and Russia) • The national quotas are then distributed across vessel groups and thence to each individual vessel
<ul style="list-style-type: none"> • Structural Quota System 	<ul style="list-style-type: none"> • Fishing quotas from one or more vessel can be transferred to another vessel; the vessels stripped of its quota must be scrapped. Side conditions, inter alia, only allow trading within vessel categories and cap the total quota on single vessel • The mechanism is primarily aimed at reducing fleet capacity but also creates a partial market for the transfer of quotas
<ul style="list-style-type: none"> • Monitoring and enforcement 	<ul style="list-style-type: none"> • Since 2009, a national advisory group has been operating in an effort to increase co-ordination between the various government agencies involved in combatting illegal, unregistered and unreported fishing activity (“IUU” fishing). It is believed that those engaged in such activities often links to organised crime, including drug-related activities
Notable support mechanisms	
Special income support for fishermen	<ul style="list-style-type: none"> • A minimum income scheme to top-up incomes during lulls in fishing activity, for instance due to bad weather or exceptional ice conditions. The size of the payment partly depends on value of past claims. Pay outs from the scheme vary considerably from year to year, but are fairly small in the order of several million kroner
<ul style="list-style-type: none"> • Processing-industry support 	<ul style="list-style-type: none"> • Payments are available for transporting fish from areas where processing facilities are in high demand to those of low demand with a view to supporting processing in vulnerable regions • Under certain conditions vessels must take catches to certain processors • Exemptions to the rule that vessels must be owned by active fishermen have been given to allow some processing units to operate vessels • There are programmes encouraging vessels to land fresh (as opposed to frozen) fish, which gives processors more product options
<ul style="list-style-type: none"> • Sealing-industry support 	<ul style="list-style-type: none"> • Incentive payments for sealers to catch the quota set under Norway’s seal-population management scheme. In 2014, the support totalled NOK 12 million. In 2015 the Parliament decided not to give financial support to the sealing industry

Source: Based on OECD *Review of Fisheries Policy* (2013b)

In terms of economic viability, the greatest difficulties lie in the downstream processing industry. Various mechanisms to support processing units, particularly those in remote areas, are in place aiming to provide employment in local communities. For instance, subsidies are available for transporting fish to processing units where demand is low and some vessels are obligated to process catches in specific processing units. The industry has nevertheless long been downsizing and in recent years the rapid growth in markets with very much lower processing costs than those in Norway, such as South East Asia has put even greater pressure for change (on-board vessel refrigeration means processing can take place more or less anywhere). For instance today, there are only 10 white-fish filleting plants located in Norway compared with about 100 in the 1970s.

Similar to the approach taken in the quota system, reform should focus on encouraging restructuring towards greater economic viability, for instance through greater vertical integration in the industry. This latter point was emphasised by a commission on seafood industry in 2014, along with call for fewer restrictions in the industry, such as those regarding vessel ownership. Currently, fishing vessels can generally only be owned by active fishermen. Recent reform proposals by the government to enhance competitiveness include measures that allow small vessels greater flexibility on where fish are landed and increase possibilities for on-board processing for large vessels.

Aquaculture: success has brought challenges

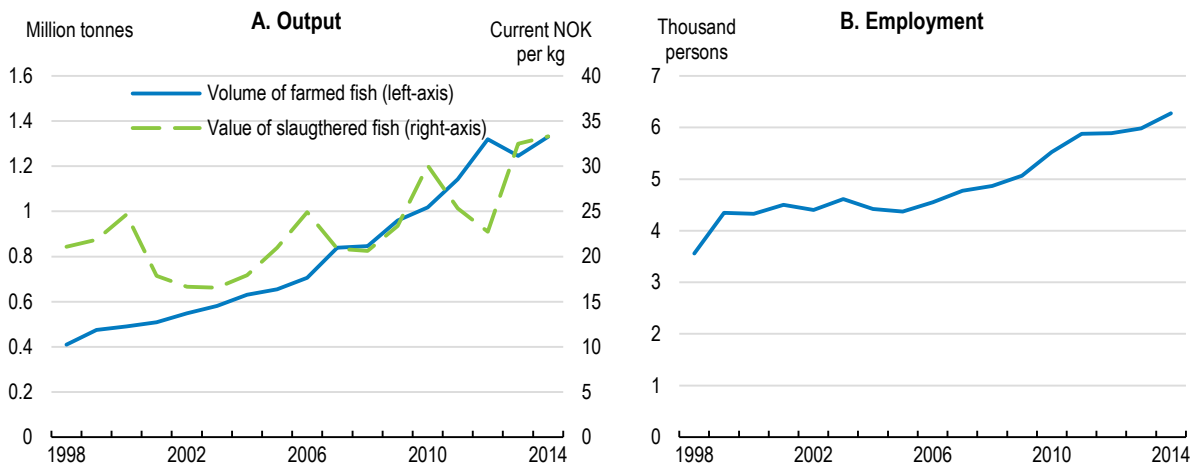
Aquaculture in Norway has been hugely successful. It is a high-tech, capital intensive industry, dominated by large international companies whose business interests extend to upstream and downstream activities. In this sense, therefore it is more akin to the oil sector than to capture fishing and, certainly, to the agriculture sector. Annual production has increased steadily from about 0.5 million tonnes in the early 1990s to over 1.3 million tonnes in recent years (Figure 9 and OECD, 2013b), and seafood exports are currently worth around NOK 60 billion per year (i.e. about 2% of GDP). Salmon production accounts for over 90% of the fish produced (in volume terms). The industry's expansion partly reflects growing global demand for salmon and abundant supply potential along Norway's extensive coastline. Aquaculture suits sheltered conditions and relatively stable water temperatures, and Norway's coastline ticks both these boxes with its numerous inlets and islands combined with the ameliorating effect on water temperatures from the Gulf Stream.

Policy measures also contributed to aquaculture's expansion, concentrating even more than fishing policy on encouraging commercially viable enterprise. When the industry was first established in the early 1970s, as in the other food sectors, regulations encouraged the preservation of small-scale production and local ownership (Aarset and Bernt, 2004). Falling prices in the 1980s (due partly to supply increases reflecting success in tackling disease) prompted change as producers struggled to survive. Most notably, regulation of first-hand trade, including price-setting, was abandoned by 1991 and was followed by a softening of rules on who could invest in the industry and cancellation of rules limiting the sale of fish farms. In 1990 the ten largest aquaculture firms accounted for 8% of Norwegian salmon and trout production, by 2001 this had risen to 46% (Aarset and Bernt, 2004). Pursuing commercially oriented reform in aquaculture has undoubtedly been helped by there being little cause for resistance to change; it is a relatively recent industry and never a substantial employer in the way that fishing and agriculture once were.

However, aquaculture's expansion has brought environmental risks that threaten the sustainability of the industry and other activities and this is now the central policy issue for the industry. The authorities' approach is guided by the *Strategy for environmentally sustainable Norwegian aquaculture policy* published in 2009, which focusses on reducing the downside risks from aquaculture, especially environmental risks. The strategy is couched in terms of five issues: *i*) genetic interaction and escapes; *ii*) pollution and discharges, *iii*) disease, notably parasites, *iv*) area utilisation and *v*) feed and feed resources. The most important problems relate to the escape of farmed salmon into the wild and, linked to this, the spreading of sea lice from aquaculture sites. The government has initiated work to develop and implement indicators, together with action limits, to manage these environmental challenges. The concept is based on a proposal from the Norwegian Institute of Marine Research and the Norwegian Veterinary Institute, with contribution from the Norwegian Institute for Nature Research. The government aims to stimulate further research and will evaluate and continuously update the indicators and action limits (OECD, 2015b).

As long as the environmental risks can be contained, then further expansion of aquaculture output can only be applauded. Yet expectations that further expansion of the sector can play a huge role in helping rural economies diversify should not be overplayed. The high-tech, capital intensive nature of the business means local employment demands are likely to remain fairly limited as will the boost to local incomes. As shown in Figure 9, despite the roughly three-fold increase in tonnage since the late 1990s, employment in the aquaculture sector has only increased by about 50%, from around 4 000 to 6 000.

Figure 9. Trends in aquaculture

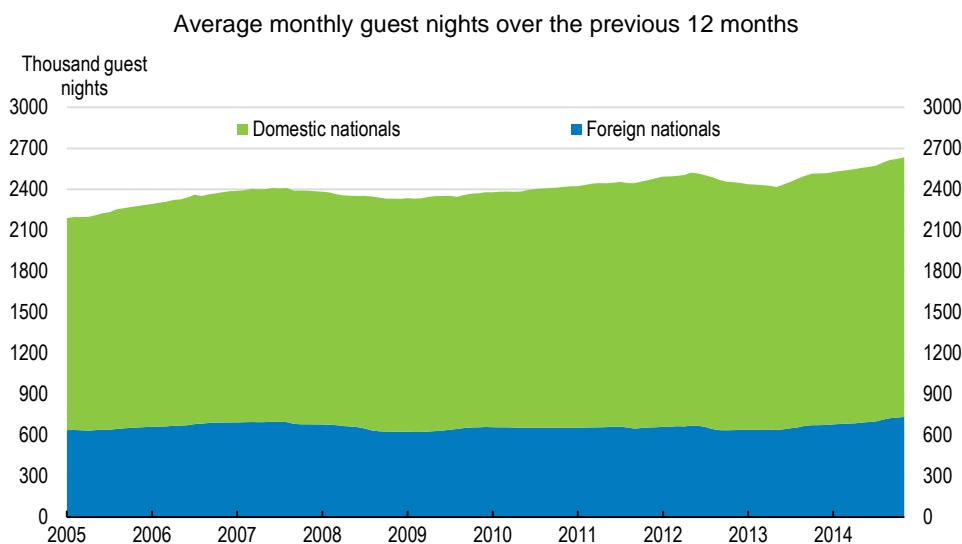


Source: Norwegian Directorate of Fisheries (2015).

Rural tourism: there remains considerable potential

Norway has considerable natural resources for rural tourism, with many dramatic and unusual landscapes (such as the fjords and arctic landscapes) and uncommon experiences (for instance, the “midnight sun” of the summer solstice in the far north). In addition there are less exotic but nevertheless economically important segments of the tourist industry, notably ski facilities and second homes within easy reach of urban centres and that generally serve the domestic population. Tourism (both urban and rural) accounts for about 3% of GDP and 6% of employment. Guest-night data suggest an upward trend in domestic tourism, but little trend growth in inbound foreign tourism (Figure 10).

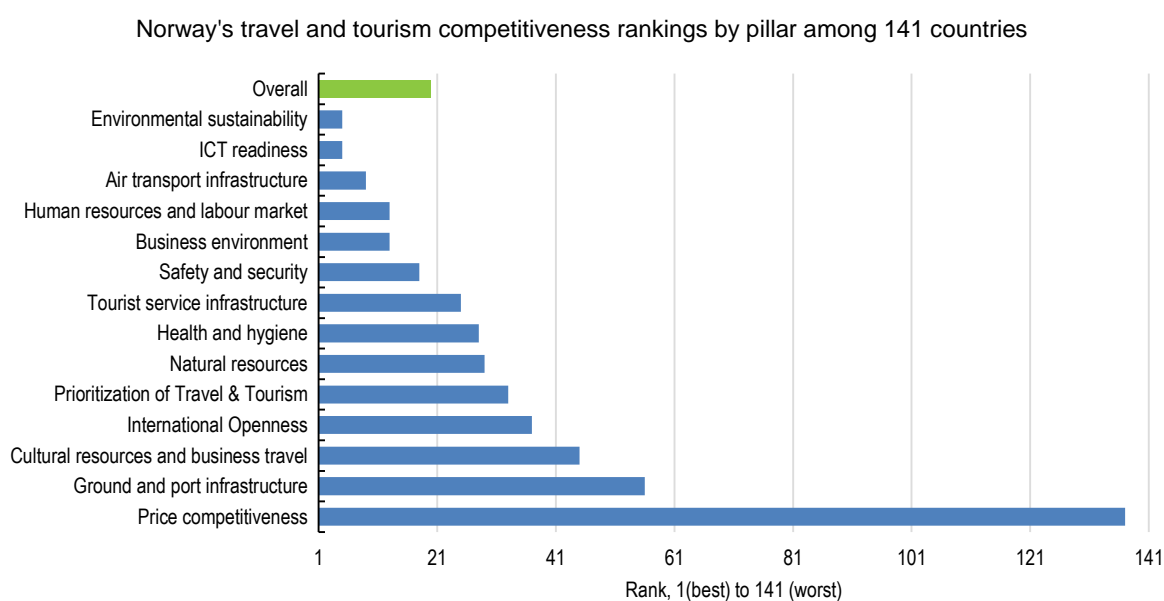
Figure 10. Trends in tourism



Source: Statistics Norway (2015), Table 8401.

However, tourism and travel in Norway is comparatively expensive, and consequently inbound tourism is fairly specialised. This is reflected in the World Economic Forum's tourism and travel competitiveness index in which Norway ranks quite well on many criteria, but not on cost competitiveness where it ranks 137th out of 141 countries (see Figure 11). Norway's poor cost competitiveness is partly because the country's oil wealth and related activities have ramped up costs throughout the economy and generated a comparatively strong local currency. High prices and a strong local currency affect the volume and nature of tourism from abroad but also that of the domestic population, encouraging foreign travel and tendency to seek budget solutions to domestic leisure activity (for instance this may partially account for the preponderance of second homes).

Figure 11. **High price is a major barrier of competitiveness in Norway's tourism industry**



Source: World Economic Forum (2015), The Travel & Tourism Competitiveness Index Dataset.

Tourism responds to price changes. Therefore, episodes of currency depreciation, such as that which occurred when oil prices fell in late 2014 and early 2015 are certainly a bonus for the sector, and have a positive effect on the trade balance. For the longer term, economic transition in response to declining oil-industry activity, in principle suggests improved cost competitiveness via domestic-price and exchange-rate adjustment and this will also benefit tourist activity. Still, policy thinking on tourism should not count on huge gains on this front. Any trend improvement in cost competitiveness will probably be gradual and Norway's margin on low-cost destinations is likely to remain substantial. Furthermore, the remoteness and climatic conditions in many of Norway's tourist destinations mean there are unavoidable additional costs compared with many other destinations. Certainly for inbound tourism, Norway is likely to remain a comparatively niche market, and highly seasonal, for the foreseeable future.

General macroeconomic policy and structural policy that improve framework conditions for the domestic services sector as a whole are generally also good news for the tourism sector. Issues relating to wages and labour flexibility, planning regulation and transport infrastructure are of greatest relevance. Specific regulatory issues of particular concern for the tourism sector include, uneven control and enforcement of food and drink regulation across municipalities and shop-opening hours regulation (especially restrictions on Sunday opening).

However, there are complications and trade-offs in tourism policy. In the Norwegian context, getting the balance between developing tourism (for instance by relaxing planning regulation) and ensuring the essential qualities of tourist destinations are retained is challenging given the nature-based, “wilderness” dimension of many top attractions. Government-sponsored promotion of tourism in Norway is conducted by Innovation Norway, a government agency operating under the Ministry of Trade and Industry, with wide responsibilities in promoting Norwegian business.

Ensuring tourism issues get sufficient airplay in policy design can be a challenge in itself. To this end, OECD analysis emphasises that the policymaking process can often better exploit the linkages, synergies and trade-offs between tourism and related policy areas, such as the promotion of small-and-medium enterprise and environmental policy (Haxton, 2015).

Regional policy and rural development

Regional policy can also play a positive role in encouraging economic sustainability in rural areas. “Soft” government support in the form of information services and promotional campaigns, similar to that used in tourism, can make an important difference at the margin. Also, financial incentives encouraging businesses to locate in economically weaker regions can usefully help policy shift away from a focus on subsidy and towards investment.

The pros and cons of Norway’s regionally differentiated employers’ social contributions

As in many countries, the tax and transfer system is tilted towards encouraging businesses to locate in certain regions. Unlike the approaches taken in many countries Norwegian policy on this front has a welcome transparency and simplicity. Indeed, there is only one major direct and dedicated mechanism of regional financial support in the form of regionally differentiated employer social contributions.

Regionally differentiated employers social contributions were introduced in 1975. The standard employer social contribution rate is 14.1% (of gross wages). Meanwhile, lower rates apply to five geographical zones; rates range from 10.6% in the southernmost zone to 0% for the northernmost zone (EFTA, 2014). The zones cover most of the land area of the country but only about 18% of the population (i.e. around 1 million people). In effect, the standard social contribution rate applies only to the Oslo area and to some other coastal urban centres in the southern part of the country, such as Bergen. Given the importance of the wage bill in costs of most enterprises, the mechanism provides a powerful financial incentive to locate in the less populated areas of the country.

As Norway is part of the European Free Trade Agreement, the regionally differentiated employer contributions are subject to scrutiny under the Agreement’s state-aid rules. A legal case was brought in the 1990s, initially resulting in a decision that such differentiation transgressed the rules and Norway was condemned to abolish it. However, the Norwegian authorities successfully made a counter argument in favour of retaining the mechanism on the grounds that it is an allowable form of regional aid, helping prevent rural depopulation. In accordance with the latest assessment by the European Free Trade Agreement Surveillance Authority (published in June 2014), the Norwegian authorities are committed to commissioning an evaluation of the scheme that will assess whether the scheme accords with state-aid regulation criteria requiring that such support schemes have tangible impacts in relation to stated objectives.

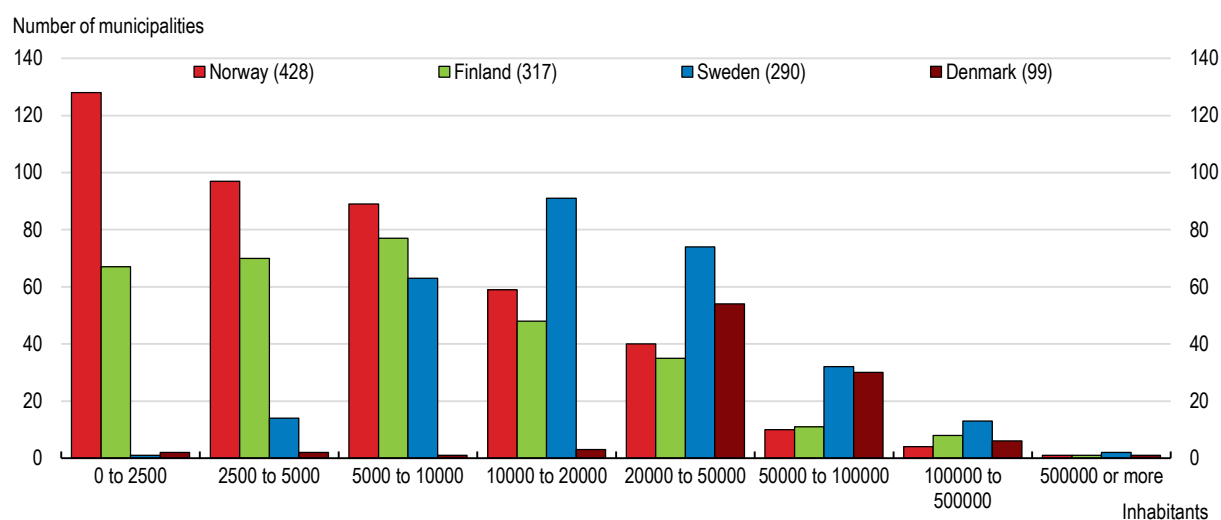
In many respects, the regionally differentiated social contributions are a good way of supporting rural communities. The system is “horizontal” in that it applies to all forms of business activity (save some selected sectors). In this sense it is better than, say, agricultural support, as it does not prejudge what economic activities are appropriate for rural areas. And, furthermore, the mechanism favours businesses where the wage bill forms a large proportion of costs, which ties in more closely with the objective of preserving local populations than do, say, investment incentives.

Nevertheless, there are downsides. The deadweight loss may be considerable as the scheme applies to established as well as new businesses and there is no time limit on the support. Indeed, the implicit fiscal cost of the concessionary contribution rates is sizeable. For instance, according to the latest assessment under the European Free Trade Agreement, the forgone revenues amounted to NOK 13 billion in 2013, i.e. equivalent to around 0.5% of mainland GDP and equivalent to a subsidy of about NOK 13 000 per head of the population living in the eligible zones (i.e. about EUR 1 400 at an exchange rate of 9.2). Despite these downsides, regionally differentiated employer contributions are certainly superior to subsidy for specific areas, and could be used to offset cutbacks in the latter.

Avenues for improving local-government efficiency

Norway's sub-national government comprises 19 counties and 428 municipalities of widely varying population. Oslo, with a population of around 650 000 or about 12% of the population, is both a county and a municipality. Meanwhile, the smallest county, Finnmark, has a population of 75 000 and nearly 130 municipalities have populations of less than 2 500 (Figure 12).

Figure 12. Size distribution of municipalities

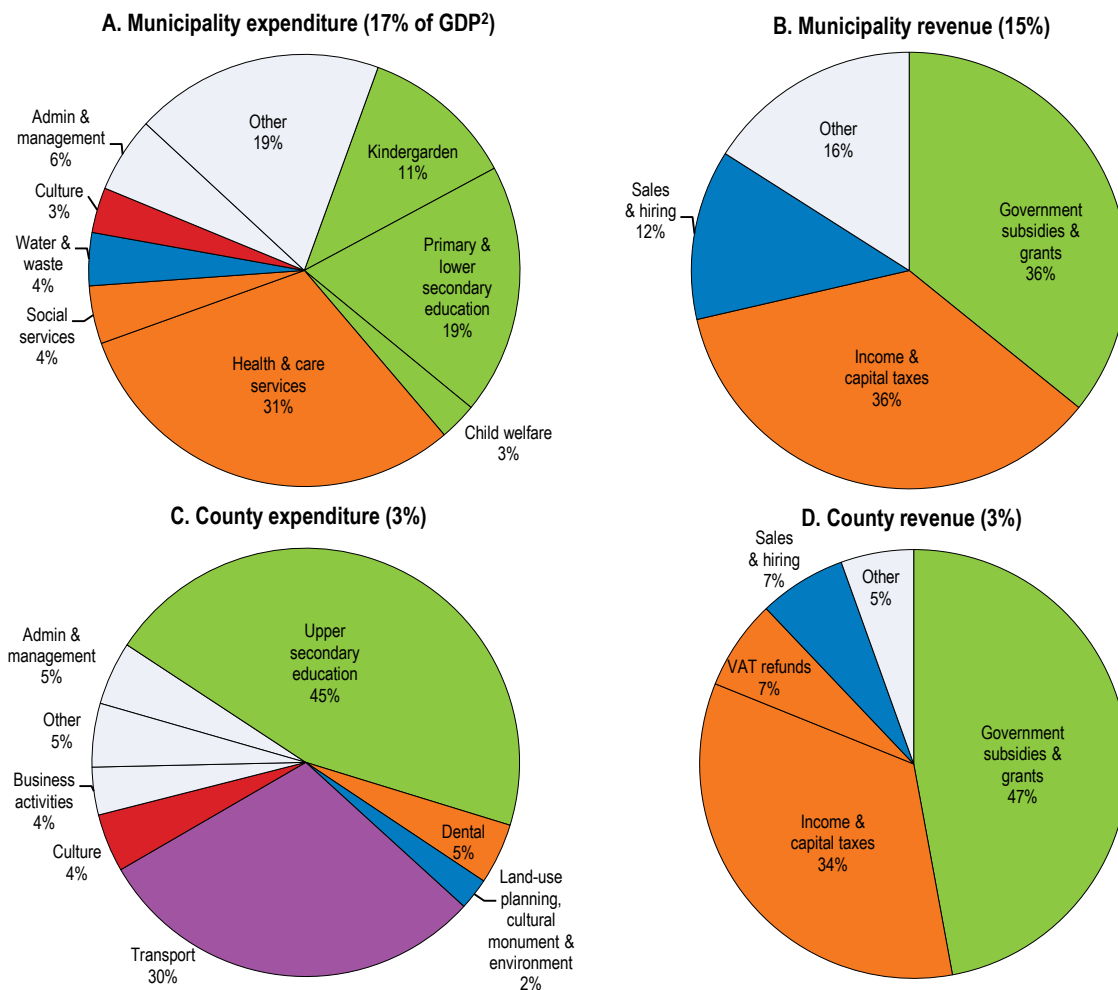


Note: () indicates total number of municipalities in the country. 2015 data for Norway and Sweden, 2014 data for Denmark, 2013 data for Finland.

Source: Statistics Norway; Statistics Finland; Statistics Sweden; Statistics Denmark.

Counties and municipalities are responsible for substantial segments of education, health services, social support and infrastructure (Table 6). This is echoed in the scale of sub-national government spending and in the distribution of expenditure (Figure 13). The dividing lines on government responsibilities are, in general, similar to those found in many other countries. For instance, in education local government runs primary and lower-secondary schools, regional government is responsible for upper-secondary education and some types of tertiary education, while national government runs the university sector. However, there are some unusual features. In particular, in the health-care system, primary and secondary services are strongly separated with the former being run by municipalities while the latter are supervised by national government (this is discussed further below).

Figure 13. The composition of municipal and county expenditures and revenues¹



1. Country-wide composition, composition across municipalities and counties varies. 2014 data.

2. Mainland GDP.

Source: Statistics Norway, Public Sector Statistics.

As in other countries, sub-national governments having legal responsibility for a public service does not necessarily mean strong powers in allocating resources or policy direction. This is because central government can exercise influence through financing and regulation. Also, national agreements often drive the wages and employment conditions of county and municipal employees and this also narrows the room for manoeuvre for sub-national government. For instance, funding current education expenses typically occupies a significant share of sub-national governments' outlays but there is little leeway to alter the amount spent. Norway's Productivity Commission report (Productivity Commission, 2015) argues that, in broad terms, central-government intervention is excessive and suggests systematic trials to see where scope for reducing central control lies.

Table 6. The division of responsibilities across levels of government

	Municipal government (428 jurisdictions)	County government (19 jurisdictions)	National government
Education	<ul style="list-style-type: none"> Primary and lower-secondary school (1st grade to 10th grade) 	<ul style="list-style-type: none"> Upper secondary school Vocational training colleges (upper secondary and tertiary) 	<ul style="list-style-type: none"> University sector (universities and “university-colleges”) Oversees secondary health care, notably hospital services which are delivered by four regional health authorities (within which there are 20 health trusts)
Health care	<ul style="list-style-type: none"> Primary health care 	<ul style="list-style-type: none"> Dental care 	
Welfare	<ul style="list-style-type: none"> Kindergarten services and (most) child welfare services Safety net support (cash support and in-kind services) Elderly care Housing support Some areas of child welfare 		<ul style="list-style-type: none"> Most cash welfare benefits (via the NAV) Employment services and labour-market training
Water, transport, energy and communication	<ul style="list-style-type: none"> Fresh water and waste water infrastructure and services Most hydropower facilities are owned and run by municipalities Local (municipal) roads 	<ul style="list-style-type: none"> Regional road construction and maintenance Local and regional public transport 	<ul style="list-style-type: none"> National roads National rail system Telecommunications and energy
Other notable roles and responsibilities	<ul style="list-style-type: none"> Local planning and development 	<ul style="list-style-type: none"> Regional planning development, including attracting greenfield investment and tourism 	<ul style="list-style-type: none"> The “usual” national responsibilities, such as national defence, foreign policy and the justice system

Sub-national government financing comprises a mix of block and tied grants from central government, a share of ordinary-income personal-income tax and local taxation (see Table 7). The system includes fairly powerful equalisation mechanisms at both the municipal and county levels.

Both municipal and county level governments that meet the balanced budget requirements are permitted to borrow in order to finance capital expenditure (roads, schools, elderly care facilities and water infrastructure). Jurisdictions that do not meet the balanced budget requirement must follow special approval processes (Table 7). There is a welcome absence of an explicit central-government guarantee on local and regional government debt.

Oversight and exchange of information on municipal services is facilitated by Norway’s “KOSTRA” system in which municipalities and counties log data on a large number of performance indicators. The system is often held as a model approach in international assessment of public administration (see, for instance, OECD, 2014a).

Table 7. **Municipal and county financing systems**

Type of benefit	Details
Main revenue sources	<p>Municipalities:</p> <ul style="list-style-type: none"> • Income tax: municipalities receive a share of the “ordinary income” personal-income tax revenues from incomes of those resident within their jurisdiction as well as share of the net wealth tax • Tax on immovable property: municipalities have sizeable leeway on which bases are taxed and how • Block (and tied) grants • Special taxes and levies on hydropower facilities • Fees and charges on services to inhabitants <p>Counties:</p> <ul style="list-style-type: none"> • Income tax: a share of the “ordinary income” PIT revenues from incomes of those resident within their jurisdiction • Block (and tied) grants • Fees and charges on services to inhabitants
Tax and expenditure equalisation mechanisms	<ul style="list-style-type: none"> • For municipalities the tax equalization mechanism is based on tax revenues from PIT, wealth-tax revenue and natural resource taxation (note, not property tax). For counties calculation is based on their revenues from PIT and natural resource taxation • Municipalities (counties) with tax revenues below 100 % of the national average are compensated 60 % (87.5%) of the difference between their own tax level and the national average. Municipalities (counties) with tax revenues above 100 % of the national average are deducted 60% (87.5%) of the difference between their own tax level and the national average • For municipalities there is an additional element of tax-equalisation. Those with tax revenues below 90 % of the national average receive an extra compensation of 35 % of the difference between their own tax level and 90 % of the national average. This extra compensation is financed through an equal deduction per capita in all municipalities • Expenditure equalisation. Municipalities and counties are compensated for differences in “expenditure needs”. The latter are calculated on the basis of objective criteria, such as the age structure of the population, travelling distances, socio-economic factors etc. Expenditure equalisation is carried out as a redistribution within the block grant
Deficit and debt rules	<ul style="list-style-type: none"> • Municipalities and counties that meet the balanced budget requirements are free to borrow to finance capital expenditure
Procedures in case of financial difficulty	<ul style="list-style-type: none"> • Municipalities and counties that do not meet the balanced budget requirement must have the approval of the county governor or the Ministry of Local Government and Modernisation in order to make lawful decisions about borrowing and long-term leases • In cases of extreme financial distress sub-national government can be put under administration by central government, but this procedure has never been used

Restructuring municipalities: a scheme promoting municipal mergers is underway

Today’s municipal structure is problematic on several fronts. Of particular relevance for rural areas is that small municipalities face difficulties in providing quality services efficiently, due to challenges in tapping into economies of scale and limited capacities and expertise in public administration and in providing some types of service. A common problem is that small municipalities are often engaged in a large number of co-operation arrangements with other municipalities for the provision of services. These often reflect well-intentioned efforts towards providing services efficiently but for many municipalities the number and the complexity of the arrangements is difficult to manage. One study (Leknes et al., 2013) has estimated that there are approximately 1 200 inter-municipal co-operation agreements in operation with

each agreement involving on average 5.6 municipalities and municipalities are, on average, engaged in 11 agreements. In addition, municipal borders often do not tie in well with the geography of local economies, generating significant challenges for co-ordination, though this is a greater problem in urban and suburban areas rather than in rural ones. According to calculations reported in the Norwegian Productivity Commission report (Productivity Commission, 2015), there is room for efficiency improvements of up to 30 to 35% in municipal service delivery.

In an effort to address these problems, the current administration has launched an initiative to encourage mergers between municipalities (there is a long history of such efforts, see Box 4). Municipal governments have been required to engage in consultation processes (organised at the county level) to discuss possible mergers. The aim is for these discussions to have been completed by the end of 2016 and for the consequent agreements to merge implemented by 2020. Various financial incentives are being offered, including a one-off payment for merging, coverage of expenses related to the merger process and continuing the payment of those rural grants (for 15 years following the merger) that could otherwise be cancelled if municipalities merge (for instance because of size-related criteria in some payments). However, these incentives do not fully offset assistance for small municipalities built into the funding system.

Box 4. Past restructuring of Norway's municipalities

Today's local-council system was established in 1837-38. At the time there were around 400 municipalities of various types, but the number subsequently grew; by the 1940s there were well over 700 "rural" municipalities, about 60 "city" municipalities plus several seaports with special status. A committee (the Schei Committee) was established in 1946 to rationalize the system and establish a new legal framework. The committee spent considerable time developing proposals and consulting with municipalities; it did not deliver its final round of recommendations until 1962. The implementation of the Schei recommendations took place between 1958 and 1967 and reduced the total number of municipalities to around 450. Implementation was not technically "voluntary" in that the mergers (and other dimensions of the rationalization) were legislated and voted on by central government. The committee's lengthy consultations with municipalities probably helped ensure agreement with the proposals at the local level (though in a few instances the Schei reforms were subsequently reversed).

Since the Schei Committee process, a number of national governments have favoured further rationalisation of municipalities but have sought to encourage rather than impose change. In 1995 a government resolution was passed that mergers should *only* be voluntary, *i.e.* made with the consent of the municipalities concerned. For instance, a programme operated between 2002 and 2006 that encouraged dialogue between municipalities and provided some financial incentives. There are therefore some similarities with the current initiative, though the latter is more forceful, as it is making municipalities engage in a dialogue about reform as well as providing financial incentives.

Enlarging the operational scale of small municipalities would not only help local administrations provide better services more effectively but also potentially create opportunity for greater autonomy from central government. In the present system, strong control and steerage by central government in part reflects the challenges that small municipalities have in developing and managing revenue streams and in running services. If the minimum scale of operations can be ramped up, then central government can potentially give more leeway to the local level. The present government is thinking along these lines. For instance its manifesto (Government of Norway, 2013) on municipal reform included intentions to bring a pilot scheme for the transfer of tasks from central and county authorities to the municipalities.

Even if there are extensive mergers, some co-ordination and efficiency challenges would remain

Even if the number of small municipalities is reduced, co-ordination and efficiency challenges will remain. Some local governments may continue to be entangled in overly numerous and complex co-operation agreements, for instance, that might be resolved by providing new avenues for co-ordination (giving counties a greater role in administering and brokering co-operative provision by municipalities in may be one way forward).

Also, specific issues in certain public services are likely to remain. In health care, primary care services are provided by municipalities while secondary care services are provided by 20 health trusts which are owned and overseen by 4 regional health trusts, which in turn are supervised by the national government. The absence of strong vertical integration between primary and secondary care can make for problems in co-ordination and efficiency. To their credit, the Norwegian authorities are aware of the challenges. Indeed, that latest major change, the Coordination Reform of 2012 has a central theme of putting greater emphasis on primary care with a view to curbing hospital-care expenditure (Box 5).

Many of the changes proposed in the Coordination Reform (Box 5) entail a greater role for municipalities. For instance plans initially included making municipalities responsible for financing a portion of hospital care, and the introduction of financial penalties for delays in the transfer of patients from hospital to community care. In principle these measures would more closely align the operational incentives of municipalities (as managers of primary care) and secondary-care providers, for instance by reducing cost-shifting. However, a recent review of the quality of Norway's health-care system suggests that reaping the full benefits of the Coordination Reform will require additional measures to improve co-ordination between primary and secondary care, such as new information infrastructure and some capacity building in municipalities (OECD, 2014b). The need for follow-up measures to the Coordination Reform is also acknowledged in the governing coalitions manifesto (Government of Norway, 2013) which included various alterations, including abandonment of the proposal for municipalities to co-finance hospital care.

Box 5. The Coordination Reform in health care

The Coordination Reform, introduced in January 2012, was designed to meet several concerns notably regarding: *i)* care co-ordination across health services; *ii)* incentives to engage in disease prevention and health promotion; and *iii)* population ageing and the associated rise in complex health and social needs. In broad terms, the measures aimed to shift care toward primary and community care settings away from the hospital sector, with greater emphasis on prevention. It introduced substantial economic and organisational changes principally aimed at giving greater responsibility to the primary health sector (and therefore municipalities). Notable measures include:

- Introduction of financial penalties on local authorities for failing to provide local care to a patient ready for discharge from general hospital such that hospital stays are prolonged.
- Requirements for municipalities and hospitals to enter into binding agreements in order to specify the distribution of duties and responsibilities.
- Requirements that municipalities set up emergency bed services.
- A requirement that municipalities co-finance 20% of hospital costs, this was introduced in 2012 but was terminated in January 2015.

Source: Based on Box 1.2 of OECD *Quality of Health Care In Norway* (OECD, 2014b) which itself is based on Norwegian Ministry of Health and Care Services (2009), "The Coordination Reform, Proper treatment – At the Right Place and Right Time", *Report No. 47 to the Storting (2008-2009)*.

In education, the organisation and management of municipal-based primary and lower-secondary schooling looks as an area for potential improvement given Norway's performance in international comparisons of student performance at these stages of the education system. The latest results from the OECD's PISA system, which evaluates 15 year-olds, are telling. In the mathematics and science tests Norway ranked 22nd out of the 34 OECD countries, while ranking at little better at 15th in the reading test. Multiple factors are contributing to these outcomes; and as the Norwegian Productivity Commission Report points out, the variable quality in municipal management of schools is likely one of them, given the large number of jurisdictions and wide variation in the scale of operations across them.

As regards welfare programmes, the division of responsibilities between national and municipal government is similar to that in many other countries, with the national government being responsible for the main financial support schemes and local government being responsible for safety-net financial support and welfare services. Yet this does not mean an absence of challenges in ensuring continuity and consistency in services in supporting the unemployed, families and the elderly.

Transport infrastructure planning and execution processes in Norway could be reducing the efficiency of public spending and transport services. Strong planning powers vested in municipal governments can result in complex and prolonged negotiation on the routes for new roads or rail track. Also, as discussed in the Assessment and Recommendations of the latest OECD *Economic Survey* of Norway, the influence of cost-benefit criteria (at least at the national-government level) on project selection is not always very strong. Clearly this second problem can reinforce the first: if municipalities believe project selection by national government is based more on political than economic criteria, then they will probably have few qualms about taking a “not in my back yard” stance. The government has taken, or intends, several measures to combat the problems in infrastructure implementation, including the establishment of an infrastructure fund, a review of parliamentary procedure in infrastructure decisions and improvement to compensation for property owners where projects involve the purchase of land (Government of Norway, 2013). Given that all levels of government are heavily involved in infrastructure development, co-ordination is key, as is stressed by the OECD *Recommendations on Effective Investment Across Levels of Government* (OECD, 2014c).

Changes to sub-national-government financing are planned

As part of a push for some consolidation in the structure of municipalities, the current administration is working on proposals to reform the income system for municipalities. A measure has already been proposed that aims to increase municipalities’ incentives to encourage enterprise and employment. The idea is to distribute one percentage point of the 27% corporate-income tax (i.e. one 27th of the revenue) to municipalities using an algorithm based on growth in the private-sector wage bill. The increased transfer will be met by a corresponding reduction in the transfer of personal income tax to municipalities, so that municipalities in aggregate will continue to receive about 40% of their revenues as taxes. The idea is that the new algorithm more strongly links with private-sector job creation than that implied by the personal-income tax transfer (the size of which depends on other factors, such as public-sector jobs, non-wage income and so on). Further measures are being formulated that, reportedly, will aim to increase the overall role of tax transfers in municipal financing and involve changes to the equalisation system.

Real-estate property tax could play a bigger role in sub-national government financing

Municipalities and counties have reasonable leeway in utilising transfers from central government budgets, as many are in the form of block grants (*i.e.* transfers that are not linked to specific items of spending) (Figure 13). This said, some argue that municipalities’ flexibility on this front is sometimes excessively compromised by the use of earmarked transfers by central government as part of specific actions plans; for instance, the Productivity Commission makes this claim (Productivity Commission, 2015).

Municipalities have considerable leeway in choosing what entities to impose real-estate tax on as well as on the method of calculation and rates of taxation imposed. The number of municipalities imposing property tax, as well as the taxes collected, has increased significantly over the last 10-15 years. A wide variety of approaches are taken. Revenue data for 2013 show that nearly 100 municipalities (covering 38% of the population) impose no property tax whatsoever, and that about 206 municipalities (covering about 53% of the population) impose property tax on private dwellings (Table 8). Understandably, municipalities take advantage of local circumstances. For instance, quite a number of jurisdictions raise

property tax from hydroelectric facilities, in some cases considerable amounts in relation to the number of inhabitants. Also, some municipalities reputedly endeavour to tap into second-homes as a source of property-tax revenue.

Table 8 **Coverage and value of tax on immovable property across municipalities**

	Number of municipalities	Share of population	Average value per habitant (where tax imposed) NOK annual
At least one form of property tax	330	63	2 804
...of which			
property tax on private dwellings	206	53	1 376
property tax on hydropower	253	47	976
...and accounting for at least 50% of revenue	101	7	5 257
property tax on other forms of property	320	60	949
<i>Memorandum: no property tax</i>	98	37	

Source: Municipal revenue data for 2013 provided by the Ministry of Finance

Given the textbook advantages of recurrent tax on real estate, the central government should encourage municipalities to make greater use of it. It would appear many municipalities have scope to widen property-tax bases which would raise more “own” revenue, giving more leeway to resource allocation. The authorities have recently given municipalities access to the new property-valuation system being used to calculate wealth tax. This may encourage greater use of property taxation as it provides a ready-made mechanism, potentially cutting through difficult debate on valuation methods and reducing administration costs (Box 6). The mechanism’s simplicity clearly has advantages but this might not suit all municipalities.

Box 6. Housing valuation for Norway’s wealth tax: a potential tool for municipality property taxation

Real-estate property valuation for tax purposes can be controversial and onerous to administer, and probably prime reasons why many municipalities do not impose such property taxes, particularly on housing. The central-government tax office has recently given municipalities the opportunity to use the system used for valuing domestic property in the calculation of the net wealth tax.

In the wealth-tax system, default property values are calculated using statistical analysis in which valuation data (per metre square) from past house sales is regressed against three variables, type of dwelling, the age of the dwelling and a dummy variable indicating location. In general, separate regressions are run for each municipality but in some cases municipalities are combined to generate enough statistical observations and separate regressions are run for different areas within some of the larger municipalities.

This is accompanied by a “safety valve”. Households can suggest a different valuation to the tax authority and this is generally accepted as long as it is backed by reasonable evidence and argumentation, such as valuations by real estate agents (the taxpayers proposal must be a certain percentage below the default valuation, or more, so as to prevent a large number of claims with comparatively little money at stake). The safety valve obviously implies undervaluation of property overall, but in many respects is a necessary mechanism given as the regression-based estimation is fairly basic and misses many of the factors driving property values.

For municipalities the valuation system is potentially attractive as an alternative to self-administered valuation systems as it saves on administration. The simplicity of the system is in many ways a plus but does imply that mean high-value property will tend to be under taxed, and to an extent low-value property over taxed (though the safety valve in principle limits this), compared with a more sophisticated valuation system. In the wealth-tax system the basic nature of the valuation is probably tolerated because in many cases there is a large “discount” (effectively a tax allowance) on property assets, for instance for owner-occupiers only 25% of the market valuation is counted in wealth-tax assessment.

Summing up the challenges

At present, policies and mechanisms are heavily focused on preserving the current structure of rural economies, especially in the case of agriculture. Policy goals and mechanisms need to be clearer, less focussed on preservation of the status quo through subsidy and more channelled towards encouraging change that helps rural communities thrive in the long run. The required approach is essentially that advocated in the OECD's general policy advice on rural economies. The "new rural paradigm" (see for instance, OECD 2014d) encourages the development of a wide range of sustainable economic activities (farming or otherwise) via support for investment and the encouragement of locally determined strategies involving inputs from all relevant stakeholders (for instance, local and regional government, the private-sector and non-governmental organisations).

Compared with many other countries, Norway has made patchy progress in modernising its paradigm for rural support. This is epitomised in the sharp contrast between the fishing and agricultural sectors. The former has seen dramatic re-structuring of the traditional fishing industry and rapid growth in aquaculture while the latter remains very oriented towards preserving the current structure of production, even though many farms face production costs that can only be supported thanks to protection from heavy import tariffs and direct financial support.

The breadth of issues covered in preceding sections underscores that a successful shift in policy on rural areas will require a campaign on many fronts, as summarised in Table 9. Aside from agricultural support, attention is needed to regional support and to ensuring promotional and informational support is efficient and that discretionary "sweeteners" to draw in new business to an area are appropriately gauged. The importance of framework conditions should not be underestimated. Good transport linkages enhance the attractiveness and feasibility of living in, and basing businesses in, rural communities. Improving transport can also help overcome the challenges in ensuring access to quality services in rural areas, for instance in health and education. Ensuring quality services also requires attention to the institutional frameworks of service delivery and in particular the roles and incentive structures of sub-national government.

Gathering the impetus for change requires at least a degree of consensus on policy goals and how to achieve them across a range of government institutions and interest groups. For instance, in agriculture this implies interactions between government and the two bodies representing farmers, the Norwegian Agrarian Association (*Norges Bondelag*) and the Norwegian Farmers and Smallholders Union (*Norsk Bonde – og småbrukarlag*) and may also involve discussions with the agricultural co-operatives (*Landbrukssamvirket*). Ensuring good framework conditions in rural areas regarding public services and transport relies on good communication and incentive structures between central government and sub-central government.

Table 9 Policy issues relating to rural economies

Policy area	“Classic” issues faced by OECD economies	Situation in Norway
Financial support to rural businesses		
Targeted support mechanisms for rural industries, most prominently, agriculture	Ensuring support mechanisms achieves goals efficiently	Limited progress in reform compared with many other OECD countries
Regional subsidy mechanisms	Multiple overlapping incentives involving preferential tax treatment and/or subsidies (often for employment)	Comparatively simple with only one major national mechanism
Non-financial business support		
Promotion and information campaigns supporting rural areas (e.g. for tourism)	Ensuring good co-ordination between campaigns across different levels of government and institutions	Centralised operation of campaigns via a central-government agency (<i>Innovation Norway</i>)
Government (often local) support to businesses, such as assistance with infrastructure to install new facilities in rural communities	Ensuring transparency, consistency and cost-benefit assessment in the in the depth and scope of assistance can be challenging	Similar challenges to other countries. Both counties and municipalities have some leeway to entice business with specific assistance
Framework conditions (with implications for both businesses and households)		
Public-service quality in rural areas (education, health care, services for the elderly, child care)	Accessibility, quality and cost challenges, especially where rural areas are depopulating	Municipal and county governments' extensive responsibilities means they have to be play a leading role in reform
Investment in (and maintenance of) infrastructure in rural areas	Ensuring project selection is based on economic criteria Balance between safeguards provided by planning regulation and leeway to develop Local resistance to projects (NIMBY, not-in-my-back-yard problems)	Final decisions on project selection have a reputation for often departing from those suggested by cost-benefit analysis Municipalities have strong rights over land use that can be used to resist project proposals

Recommendations on the rural economy**Achieve sustainability in agriculture and rural economies more efficiently and effectively:**

- Start reducing **import tariffs** as soon as possible.
- Reduce **direct cash support** to farmers for outputs and inputs to increase exposure to market signals and remove measures blocking structural shift towards more productive units.
- Strengthen **links between policy-objectives and pay outs** for cultural and environmental support mechanisms.
- Remove **legislative biases** that favour agriculture.
- Promote greater vertical integration in the **fish processing industry** (with regard to capture fishing, not aquaculture where vertical integration is already highly developed).
- Tackle environmental challenges in **aquaculture** so as to ensure continued viability and minimize negative spill overs.
- Strengthen **regional differentiation of employer contributions** by better targeting to areas where they are most needed.

Encourage more efficient and independent sub-national government

- Encourage **mergers** between small municipalities.
- Improve the efficiency and quality of **public services** in rural areas. Address co-ordination issues in the provision of health care services and quality issues in education.
- Address problems in the selection and implementation of **infrastructure** projects.

BIBLIOGRAPHY

- Aarset, B, and S.E. Jakobsoen, (2004), “On a clear day you can see all the way to Brussels: the transformation of aquaculture in Norway”, Institute for Research in Economics and Business Administration, Bergen ,Working Paper No. 63/04.
- Brooks, J. and A. Matthews 2015, “Trade Dimensions of Food Security”, OECD *Food, Agriculture and Fisheries Papers*, No. 77, OECD Publishing, Paris.
<http://dx.doi.org/10.1787/5js65xn790nv-en>
- Haxton, P., (2015), “A Review of Effective Policies for Tourism Growth”, OECD *Tourism Papers*, 2015/01, OECD Publishing, Paris.
- EFTA (2014), *EFTA Surveillance Authority Decision on regionally differentiated social security contributions (2014-2020)*, EFTA Surveillance Authority, June 2014.
- Government of Norway (2013), *Political Platform for a government formed by the Conservative Party and the Progress Party*, October 2013.
- Gray, E. M. Oss-Emer and Y. Sheng (2014), “Australian agricultural productivity growth; past reforms and future opportunities” *Australian Department of Agriculture, Research Report*, 14.2, 2014
- Leknes, E., A. Gjertsen, A.K. Tennås Holmen, B. Lindeløv, J. Aars, I. Sletnes and A. Røiseland (2013), *Interkommunalt samarbeid. Konsekvenser, muligheter og utfordringer* [Intermunicipal cooperation: consequences, possibilities and challenges]. IRIS Research Institute Report – 2013/008.
- Ministry of Foreign Affairs (2015), *Globalisation and trade: trade policy challenges and opportunities for Norway*. Report to the Storting (white paper) Summary.
- Productivity Commission (2015), *Productivity - Underpinning Growth and Welfare, Official Norwegian Reports*, NOU 2015: 1.
- OECD (2008), *OECD’s Producer Support Estimate and Related Indicators of Agricultural Support: Concepts, Calculations, Interpretations and Use (the PSE Manual)*, Trade and Agriculture Directorate, July 2008, OECD Publishing, Paris.
- OECD (2013a), OECD, *Economic Survey of Japan*, OECD Publishing, Paris.
- OECD (2013b), OECD *Review of Fisheries Policies and Summary Statistics*, OECD Publishing, Paris.
- OECD (2014a), OECD *Public Governance Reviews Kazakhstan, Review of the Central Administration*, OECD Publishing Paris.
- OECD (2014b), OECD *Reviews of Health Care Quality: Norway*, OECD Publishing Paris.

OECD (2014c), *OECD Recommendation of the Council on Effective Public Investment Across Levels of Government*, OECD Publishing Paris.

OECD (2014d), *OECD Rural Policy Reviews: Innovation and Modernising the Rural Economy*, OECD Publishing Paris.

OECD (2015a), *Managing Food Insecurity Risk: Analytical Framework and Application to Indonesia*, OECD Publishing, Paris.

OECD (2015b), *OECD Green Growth Studies: Green Growth in Fisheries and Aquaculture*, OECD Publishing, Paris.

OECD (2016), *OECD Economic Surveys: Norway 2016*, OECD Publishing, Paris.
DOI: http://dx.doi.org/10.1787/eco_surveys-nor-2016-en

Vitalis. V. (2007), "Agricultural subsidy reform and its implications for sustainable development: the New Zealand experience, *Environmental Sciences*, 4:1, 2007