Bread and butter issues. Food, agriculture and competition policies in Norway.

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Abstract

Norway has the highest food prices and the most heavily protected agricultural sector in Europe. Fifty percent of food consumed in Norway is imported but food shops have a limited range of goods and can at times run short of basic items. Cross border shopping is rapidly increasing and five percent of all Norwegian grocery expenditure occurs in Sweden. Norwegian competition policy uses as its test 'effects on general welfare including utilisation of resources' and not solely effects on consumer welfare. I review Norway's food, agriculture and competition policies, examine the pressures for changes, and the political economy of changing the policies.

Keywords:
Food policy, agriculture, competition policy.

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Introduction

Norway is an export-dependent, very high income country, which has the most heavily protected agriculture in the world. It provides an excellent example of a country using contradictory, poorly targeted agricultural, food and trade policies to achieve objectives that are increasingly costly, distortionary and unpopular amongst its own citizens. This paper examines how Norway came to reach this paradoxical situation, and the likelihood that the current policies will persist. These questions lead not just to study of agricultural, food, completion, and trade policy, but also to theory attempting to explain a nation's political actions. A number of authors have advanced theories to explain the introduction, persistence and barriers to removal of interventionist agricultural policies (Becker 1983, Alston and Carter 1991, Grossman and Helpmann 1994, Kay 2003, Daugberg 2003, Bullock et al. 1999). I assess how well those theories describe the Norwegian case and critique alternative explanations (Debus 2008, Skjæveland 2009, Rosendal 2012), for government formation, policy choices and persistence in coalition governments.

The paper is structured as follows. Section one briefly describes some pertinent features of Norway and its economy, particularly agriculture, food supply, international trade and international trade relations. Section two outlines the goals that Norway pursues in those areas and the policies in place to achieve that goals. In section three I evaluate the policies for the accuracy of their targeting, distortionary effects, fiscal cost, trade impacts, and comment on their domestic and international (un)popularity. In section four I consider the pressures for continuation and of change, to the Norwegian agricultural, food, competition and trade policies. Section five reviews theory that have previously been advanced to explain nation's policy choices, particularly agricultural and trade policies, and proposes an amendment to one theory. In section six I ask how likely it is that Norwegian agricultural, food, competition and trade policies will persist after the national election of 2013. The final section provides conclusions.

Agriculture, food, competition and trade

Norway is a very high income, export intensive country with 2011 GDP per capita of US$97,255 (IMF 2012). Norway's population is increasing at 1.3% per annum and reached 5 million in 2012. Cost of living is very high in Norway and the PPP adjusted GDP per capita for 2011 was US$53,471. Norway's income and wealth have greatly increased since oil was first produced from the offshore Ekofisk field in 1971. Norway is the world's fifth largest oil exporter and the third largest gas exporter. Oil and gas exports made up over 45% of total exports and comprised 19.2% of Norway's GDP in 2010 (Statistics Norway 2012). Fish are the third largest export by value from Norway after oil and gas, and metal products. Oil and gas production contributed 22% of Norway's 2011 GDP (Statistics Norway 2012). Agriculture and forestry contribute just 0.5% of GDP, and fishing and aquaculture 0.7% of GDP. On a calorie basis about 50 per cent of Norway's domestic agricultural consumption requirements are met through imports. Norse production has a narrow product range, relatively few products are produced domestically, and those products are generally protected by high tariff that block many imports (Government of Norway 2001).

Regulation of agricultural markets and prices has occurred for eighty years in Norway

following the Marketing Act off 1930 (Hammond 1991). That early legislation was succeeded by the 1951 General Agreement on Agriculture that broadened the scope of regulation in Norway and led to minimum wholesale prices being negotiated annually. As well, the Farmers Union could negotiate for many other types of interventions and programmes to support famers including production subsidies, freight subsidies, assistance for sick or disabled farmers and to permit all farmers to take holidays. When rural populations declined steadily during the 1950s and 1960s there was concern about reduced food self-sufficiency and abandoned rural communities in Norway. Agricultural programmes were revised again in 1976 and new measurable objectives were set (Hammond 1991) including:

- Production is to be sufficient to meet domestic consumption requirements for milk, beef. hogs, poultry meat, eggs and some vegetables. Food and feedgrain production is to meet domestic needs when this is not inconsistent with other programme objectives.
- The programme should contribute to the overall regional objectives by increasing incomes and developing employment opportunities in areas with imbalances and weak economies
- The average income per worker on farms should be such as to provide living conditions equivalent to those of the average industrial wage earner.

Dairy farming in Norway has been strongly influenced since 1930 by the Marketing Act authorized formation of a cooperative to process, distribute and price milk and milk prices. The National Dairy Cooperative is owned by the milk producers and almost all dairy farmers are members. The cooperative is a not for profit and all of its profits are returned to the owners, dairy farmers. The cooperative can act like a monopolist in pricing to final markets within Norway and the cooperative is able to price discriminate between different markets. The dairy cooperative pays farmers a price for milk based upon net average revenue product hance all of the revenue earned through price discrimination is passed on to famers by way of a higher price for the milk supplied. Imports of dairy products into Norway are restricted by trade barriers. Import tariffs are in the range of 250-400 percent although there are minimum access opportunities for five percent of the domestic market at lower tariff rates (Brunstad, Gaasland and Vårdal 2001). Because there is a high prices paid to farmers for milk supplied, production is increased above the level that would occur with lower (world prices). This additional supply is greater than is needed to supply the domestic market, and it is exported. Prices for dairy products in Norway are often considerably higher than world prices, and some Norwegian dairy exports are sold at much lower prices in the UK and other markets (Brunstad, Gaasland and Vårdal 2001).

The Norwegian Farmers Meat Marketing Association (NKF) is a cooperative. In 1991 it acquired and slaughtered about 80 percent of all meat animals purchased from farmers in Norway (Hammond 1991). Prices for red meat are strongly influenced by targeted returns for famers that are established after farm modelling. Direct subsidies of several types are used to ensure that target returns are achieved by livestock farmers. Import restrictions on meat are used as needed to protect domestic production and the NKF Cooperative is charged with dealing with any surpluses that arise which can lead to exporting meat at a loss (Hammond 1991).

Norway has an explicit goal of self-sufficiency in grain production. There are support prices for grain that are calculated to ensure farm incomes met target levels and during 1989 were set at three to four times international price levels. The Norwegian Grain Cooperative has a monopoly on purchases of grain from farmers and on all exports and imports (Hammond 1991). If it needs to purchases grain at international prices it can sell it at Norwegian prices for a profit. There are subsidies for grain producers that encourage on farm storage (Hammond 1991).

These Norse agricultural policies led to high minimum incomes per farm worker compared to agricultural incomes in many other countries. There have long been several quantity based subsidies available, and relatively small scale farm production has predominated in Norway. Because some direct subsidies were regionally differentiated, the location of agricultural production has shifted within Norway. Dairy production is centred on western areas and grain production in the south eastern region of Norway. Most food prices are very high, consumption per capita of red meat is lower than in some western countries, and the range of food available in shops is half that in neighbouring Sweden (Views and News 2012).

Despite the very supportive policies outlined above, between 1970 and 2007, employment in Norse agriculture fell by 68 per cent from 150 000 to 48 000 full-time equivalents.

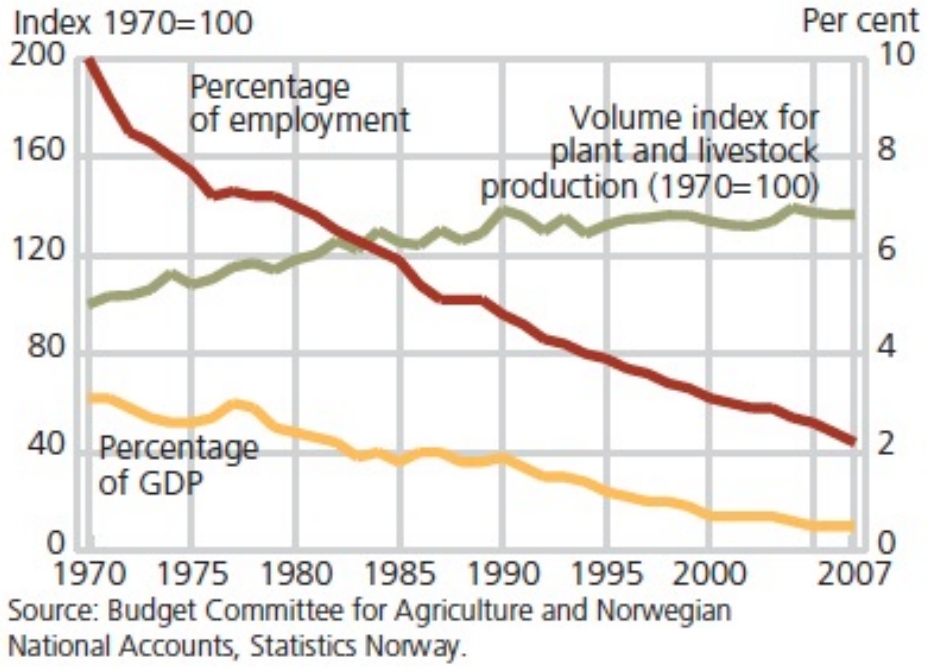

Figure 1. Norse agricultural production volume and share of employment in GDP. 1970-2007.

Norway is situated between latitudes 57-81 N°, and climate limits the crops it can grow, hence imports of many items are essential to provide a wide range of foodstuffs for consumption. While 38.2% of the land is forest covered, and about 90,000 km^2 or slightly less than 30 percent of Norway's land area is used for reindeer grazing, only 3.2 % of the total land area is used for agriculture (MAF 2008; Statistics Norway 2012). Cereals can be grown on about 1% of the land area. Despite the small area of land used for agriculture in Norway, and the limitations imposed by climate, 50% of food consumed in Norway, (including fish), is produced domestically.

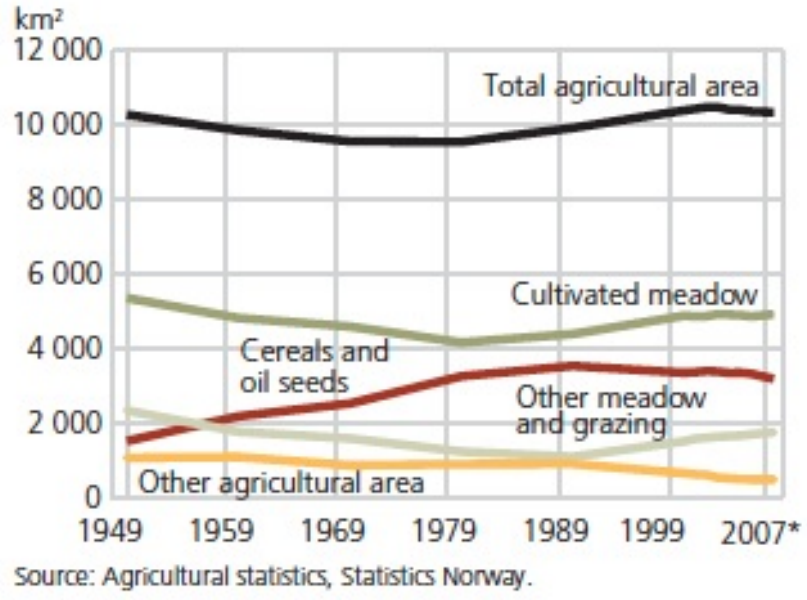

Figure 2. Agricultural area in use 1949-2007.

Farm size has steadily increased and number of holdings fallen rapidly during the last 60 years. Land on many of the abandoned farms is leased by nearby famers. In 2007, 39 per cent of the agricultural area in use was rented (Statistics Norway, 2008). These trends in land use have led to increased enterprise specialization (fewer output categories on each farm) and increased regional specialization (most cereals are grown in south eastern Norway, and dairy farming occurs mainly in western Norway).

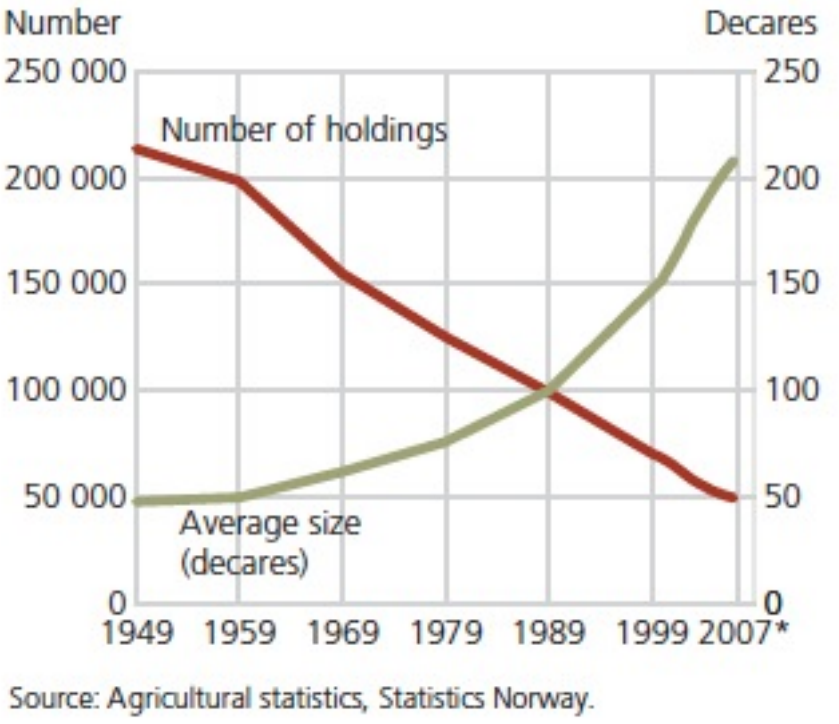

Figure 3. Number of holdings and average size of agricultural area in use, 1949-2007

All Norse countries (Denmark, Norway, Sweden, Finland, Iceland) have mixed economies and are universalist welfare states. They provide extensive benefits, and there is a large amount of wealth redistribution. Tax as a share of GDP in Nordic countries is amongst the highest in the world. In Norway, 30% of the labour force is employed by the government, 22% are on welfare and 13% are too disabled to work, amongst the highest proportions in the world. The egalitarian values of Norwegian society ensure that wage differences within most companies are smaller than in most western economies. The post tax and transfers Gini Coefficient for Norway is 0.25 (OECD 2012). Norse concerns for relatively equal incomes throughout society, for social cohesion, and concern to avoid wasteful underemployment and unemployment, may also influence the goals espoused by some lobby groups and political parties.

Norway is a northern European nation, with excellent transport links to the rest of Europe. It is well connected by shipping, air, road and rail with Europe and North America and there are no obvious impediments to import of foodstuffs, or any other items that are sought by firms or consumers. Norway has a very large trade surplus, currently X% of GDP, hence exports of agricultural or food items are not imperative to fund Norwegian imports. It might be argued that export of agricultural and food products from Norway occur in a vent for surplus manner, as prices for some exported commodities are well below domestic prices of comparable items (Views and News 2012). Of greater concern than exports for Norway is its ability to protect domestic production from international competition. Norway is not a member of the European Union (EU), but it is a member of the European Economic Area (EEA) and of the World Trade Organisation and of EEA. Both organisations are committed to freeing international trade. Norway works through the WTO and EEA to maintain or enhance trade opportunities for it's major exports, oil and gas, fish, while resisting policies that will increase import competition for its domestically produced food and agricultural products.

The EEA is based on the four freedoms of the EU: free movement of goods, persons, services, and capital among the EEA countries. The EEA comprises all 27 EU countries plus Iceland, Liechtenstein and Norway. The latter three countries can participate in the EU internal market, but they are obliged to adopt all EU legislation related to the single market, except for laws on agriculture and fisheries. Some specific EEA regulations impact agriculture and fisheries policies within the EEA. Unilateral decisions by an EEA member to increase tariffs on imported food or horticultural items can provoke strong adverse reactions from fellow EEA nations (Views and News 2012) and nervousness amongst Norske fish producers who foresee retaliatory action against Norske fish exports.

Norse agriculture, food, trade goals and policies

Norway subsidises and protects its agricultural sector, arousing ire amongst consumers and trade partners alike. Its food supply chains are sclerotic and retail competition within Norway is limited. Norway has very high food prices and a limited range of food products is available for consumers. Wine and spirits retail is a state owned monopoly in Norway. How can these unusual policies and outcomes be explained? In this section I consider the goals that Norway espouses in agriculture, food, and trade, and the policies that have been introduced to achieve those goals.

Norway was heavily reliant until about 1980 on agriculture, fishing and forestry to provide food and shelter for its population. It has long pursued multiple objectives for agriculture

and Hammond (1991) summarised the main goals set during the two preceding decades as: ensure food self sufficiency in milk, beef, hogs, poultry meet, eggs and some vegetables; contribute to regional employment and development; maintain income levels for workers on farms to enable equivalent living standards to industrial workers; reduce land erosion and soil and water pollution. Since 1980 oil exports have grown significantly in value and importance in the economy, and Norway has become very wealthy. Norway's reliance upon agriculture has diminished but today it espouses eight agricultural and food policy goals.

Agricultural and food policy goals (MAF 2008)

1. Secure food safety
2. Enhance diversity and other consumer considerations related to food production and marketing
3. Promote good plant and animal health and good animal welfare
4. Ensure sustainable resource management, including stringent land conservation measures, conservation and management of cultural landscapes and safeguarding biodiversity
5. Develop sustainable forestry as a basis for increased value creation through use of wood, bioenergy and commercial utilisation of non-cultivated land
6. Maintain a viable agriculture that contributes to employment and settlement throughout the country, and which enables increased value creation from innovative business activities
7. Secure national food supply, a competitive food industry and innovative, sustainable production of goods and services
8. Maintain a viable reindeer industry with sustainable use of grazing resources, and which contributes to maintaining the distinctive character of the Sami culture

Three frequently asserted Norwegian goals are: self sufficiency in food production, strategic occupation of land across the whole country, and maintenance of rural landscape. Some authors argue that the objectives Norway espouses beyond food self-sufficiency can be grouped under the label multifunctionality (Brunstad, Gaasland, and Vårdal 2005; Rosendal 2012). These goals include … "the viability of rural areas, cultural heritage, land conservation and the maintenance of agri-biodiversity" (Bjørkhaug and Richards 2008, 104).

Specific policies ad actions are targeted at each of the eight goals listed above. Given the scarcity of arable land in Norway, there is a focus on resisting loss of land to roading, rail, suburban sprawl. There are subsidies to maintain rough grazing, and dairying in mountain landscapes, subsidies for maintenance of biodiversity sites, support prices for most agricultural commodities and trade barriers on many food imports. Figure 1 shows that Norway provides a very level of support for its agricultural sector.
Agricultural subsidies. http://www.economist.com/node/16507149

Beyond the farm gate, food prices and food availability in a country can be influenced by a number of factors including degree of competition within the food processing, wholesaling and retail sectors, and the openness of a country to international trade. Countries can choose goals to aim for in each of those areas, and policies to achieve those goals. In Norway, agricultural commodities produced on land, by aquaculture, or captured in the sea that are destined for domestic consumption, are sold to four firms that control 99% of the

Norwegian grocery trade (Norwegian Inquiry Commission 2011). Grocery retail firms sell beer as well as food, but retail sale of wine and spirits only occurs at state owned shops, Vinmonopolet.

The oligopoly that dominates grocery retail trade exerts considerable influence over upstream supply chains. It annually enters into negotiations with producers and suppliers and the timing of these negotiations sometimes leads to surprising shortages in retail shops of such basic items as flour and butter.
The annual negotiations between the umbrella chains and suppliers are often referred to as the 'autumn hunt'. These negotiations are very important for producers, suppliers, umbrella chains, retail chains, shopkeepers and, not least, the nation's consumers. Which products will gain market access through the nation's stores the following year, and on what terms, is decided during a couple of months at the end of the year. In practice, all Norwegian and foreign suppliers negotiate with four buyers who control access to the grocery market in Norway. (Norwegian Inquiry Commission 2011, 2).

Competition policy in Norway differs from many other countries in the test it applies to determine if proposals are in the public interest. Norway uses as its test 'effects on general welfare including utilisation of resources' and not solely effects on consumer welfare (Norwegian Inquiry Commission 2011, 2). This provides a further explanation for the perceived low level of competition in food markets and for high food prices in Norway.

Norway has a population of five million, the second lowest population density in Europe, and the population is thinly spread across the country. NORDREGIO (2007) estimate that 44 percent of the total population live in an area with less than 150 persons per km^2 and having no town larger than 25,000 inhabitants. The goal of a populated countryside is a part of Norwegian regional policy (District Policy) and it is argued this goal is widely supported by the Norwegian population (NORDREGIO 14; Bjørkhaug and Richards 2008, 103; Rosendal 214). Norway has both agricultural and regional development policies that are centrally directed, but are at least partially regionally administered. Prestergard and Hegrenes (2007, 13) comment that these policies … "are intended to maintain agricultural activities, especially in the more remote areas, and to help farmers to start up new businesses based on the resources of the farm and the farm household." The policies include regionally differentiated support for agriculture and other economic activities in remote and sparsely populated areas.

Evaluation of Norse agriculture, food, competition and trade policies

Several researchers have critiqued the agricultural and food policies of Norway to determine if they are well targeted, effective and how costly they are. Principal interest is in how well the policies contribute to the goals of food security, maintenance of rural landscape and biodiversity - sometimes called multifunctionality, and strategic occupation of land across the whole country. Norway uses a range of trade interventions to protect domestic agriculture from international competition. The trade barriers include both price and quantity measures. These measures and the level of intervention in trade appear to contradict the EEA stance of free movements of goods and services, although trade in agriculture and food is subject to somewhat different policies.
Brunstad, Gaasland and Vårhal (1995) considered the food security goal and noted that a

wealthy country, Norway, can purchase sufficient food on world markets to supplement any shortfalls in domestic production or inability to produce tropical foods, to reliably meet all Norwegian demand for food. Specialization of production in low cost sites and international trade, as is widely known, provides lower cost food to trade partners than does pursuit of food self -sufficiency within each country (Anderson 2010). However, if there was some impediment to international trade in food, Norway may need to become closer to self-sufficient. Brunstad et al., use a price endogenous mathematical programming model to replicate Norwegian agriculture and food production. They then use the model to estimate the level of resource input needed to ensure two years supply of food are continuously available (based on mean intake of 2600 calories per person) if that were the sole public good required to be met. The assumption is that the goal of food security dominates other goals such as occupation of land or preservation of landscape. Results from the modeling indicate that only 55 percent of current land use and 46 percent of the current labour input need to be continuously available in agriculture to meet the Norwegian food security objective. The pattern usage of land changes significantly under the constraints imposed, but the implication is very clear, Norwegian agricultural policy was poorly targeted and the size of agriculture in Norway is well out of proportion to the needs of society (Brunstad et al., 1995, 48)

A second set of policy analysis has been completed by Brunstad, Gaasland and Vårhal (1999). They complete research using a model of the Norwegian agricultural sector to see how much landscape preservation and biodiversity protection would occur if incentive payments to farmers were provided based upon Willingness to Pay for rural landscape. They complete simulation experiments to determine optimal levels of production, land use, and employment in Norway if support for agriculture was solely for landscape preservation. When they run their model with the level of support for agriculture based upon empirically estimated WTP for landscape, they find that only a small part of current support level would be maintained, and production and rural employment in Norway would drop to low levels. However, the results show that level of support would keep a substantial part of 1990's agricultural area under cultivation.

In a subsequent paper, Brunstad, Gaasland and Vårhal (2005) ask what is the optimal policy for Norway when food security and landscape preservation are simultaneously pursued? They ask three questions. "To what degree are these public goods complementary in the sense that supplying one of them more or less automatically would lead to supply of the other(s)? How much support is necessary to sustain reasonable levels of public goods, and what policy instruments are efficient, when cost complementarities are considered?" (Brunstad, Gaasland and Vårhal (2005, 470). They adapt a model of the Norwegian agricultural sector to answer those questions that incorporates a willingness-to-pay function for landscape preservation, and a production function for food security. They conclude that state support is needed to achieve target levels of food security and landscape preservation, but current modes of support in Norway are badly targeted, and should be directed at land-extensive farm practices. With optimal policies in place, they argue that at most 40% of current support levels can be defended by a public goods argument.

Maintaining small scale rural farms and a rural landscape, and maintenance of habitats for biodiversity is threatened by other large forces that are at play in Norse agriculture. Many

small scale farms are being abandoned, farm size is rapidly increasing in Norway, and increased regional specialisation is occurring in rural land use (Statistics Norway). Rønningen et al., (2004) observe that many farmers find it difficult to manage a policy goal of rationalisation on the one hand and to produce public goods (landscape, biodiversity, regional settlement) on the other.

The OECD (1999) outlined the concept of multifunctionality and noted that beyond it's primary function of providing food and fibre, agricultural activity can also shape the landscape, provide natural resources and the preservation of biodiversity, and contribute to the socio-economic viability of many rural areas. Norway and several other nations have used the idea of multifunctionality to defend their support for agriculture and intervention in food trade. It is generally industrialised countries with very high levels of agricultural support that make a case for multifunctionality and Norway fits that description. Those countries have argued that the diversity of outputs provided from agriculture should be recognized as non-trade concerns, including within WTO negotiations, and provide a justification for the use of subsidies to agriculture through the Blue or Green Boxes (Rosendal 2012).

While countries, such as Japan, Switzerland and Norway emphasize the need to recognize agricultural diversity as part of the WTO non-trade concerns (multifunctionality), others, including the EU, argue that non-trade concerns should instead be 'targeted' through environmental protection programmes (Rosendal 2012; Grant, 2005; Potter & Burney, 2002). Rosendal (2012, 214) observes there is pressure in trade negotiations to change from production specific, trade-distorting domestic subsidies ('Amber Box') to non-production-specific domestic subsidies ('Blue' or 'Green Box'). Green Box subsidies are permitted and could mean more environmentally friendly agriculture, if they are linked to non-trade concerns like environmental protection. However, reducing agricultural subsidies will reduce farmers' incomes, which may put pressure on them to intensify land use, or increase the area of production, or in unprofitable cases let land lie fallow.

Increasingly multifunctionality is being scrutinized and found wanting. Rosendal, (2012) and Wynen (2002) argue that the stance is self-serving. They observe the public good aspects of agriculture (such as environmental quality and viability of rural areas) are not necessarily joint goods with agriculture. They further comment that the characteristic of joint product for which the government is asked to provide a subsidy, is not unique to agriculture. The stance of some industrialised countries of supporting agriculture and trade intervention on grounds of multifunctionality has so far proved resistant to criticism, but its days may be numbered.

Bryden in a review of Nordic rural policies comments (2007, 28): "Let us be quite clear, what the EU describes as its 'rural policy' is not a rural policy, but, overwhelmingly since 2000 and for the period to 2013, a series of measures directed at farmers, and legitimised by the 'environmental' label." Arguably, Norway's efforts to promote regional development and maintain rural population, are largely captured by agriculture, despite a rapidly falling proportion of rural population who are dependent on agriculture. As NORDRIEGIO (2007, 14) comment … "There is not a strong connection between rurality and dependence upon agriculture in the Nordic countries, and the assumption that the needs of the Nordic rural

population can be best served by interventions which have developed out of agricultural policy seems to rest upon a misunderstanding."

Pressure for change to Norse policies

Analysis indicates that Norwegian agricultural policies impose high food prices on its citizens, and taxpayers fund the support policies for agriculture. Analysis indicates that Norwegian agricultural policies have only to a limited extent been receptive to influence from international obligations on trade and environment. How to account for this? In most OECD countries agriculture is amongst the most protected sectors of the economy, yet it provides a small fraction of GDP, and employs an equally small percentage of the total labour force in most OECD countries. The fiscal cost of support for agriculture in many countries is quite disproportionate to its apparent importance in most economies. This is something of a puzzle and several economists have attempted to develop theory to explain how (protectionist) agricultural policies attain, and retain political support.

Within Norway, there are mixed messages about the links between agriculture and supply of some public goods such as biodiversity. Rosendal (2012,218) observes… "Norway's 2007 national report to the CBD on agricultural biodiversity stated 'In Norway, intensification has led to an increased uniformity of agricultural landscape and its biological diversity has been reduced by the growing use of chemical products'. According to the 2005 national report 'Some of the main threats to biodiversity in Norway relate to human physical impact on natural areas and land-use changes relating to increased efficiency in agriculture. Unfortunately, the trends are still negative regarding loss of important habitats'. This view, expressed by Norway's Ministry of Environment, of the problematic relationship between agriculture and environmental impacts stands out in contrast to the way multifunctionality has been presented in the WTO." However, the influence of the Ministry for the Environment is regarded as somewhat limited when up against other sector ministries such as fisheries and agriculture (Rosendal, 2012).

(Rosendal, 2012, 215) argues the influence of Norwegian farmers has been diminished to only a small extent, partly because agriculture is still highly institutionalized and scores highly on representation in Parliament and political influence. As well institutionalised agriculture has remained largely resistant to international environmental and trade concerns. Those two fields environment and agriculture share scepticism towards international trade and the pressures it exerts for specialisation, intensification, rationalisation. Rosendal (2012, 220) notes the similarity on WTO positions of Norwegian environmental NGOs and farmers' organizations. "Nature and Youth is set against any reduction in agricultural subsidies and demonstrated against the 'drastic cuts in tariffs protection for local, environmentally friendly food production'. Similarly, Friends of the Earth, Norway, argued that the WTO draft agreement on trade liberalization in agriculture was 'detrimental to local livelihoods and the environment'.

Becker (1983, 377) argues that politics is about pressure, and groups in society strive for political influence by spending time, energy, and money on the production of political pressure. There are many different pressure groups in a country, and political decisions are the outcome from pressures exerted simultaneously by many groups. While this might lead us to think that a small sector such as agriculture in a high income country might be too

small to be able to mobilise much pressure, Becker puts forward a very different suggestion. Becker (1983) argues that politically successful groups tend to be small relative to the size of the groups taxed to pay their subsidies, as this means the cost imposed by way of taxes on each taxpayer will be small, hence they will have little individual incentive to oppose them. He notes that agriculture is subsidised in countries where it is a small part of the economy (Israel, Japan, USA), and taxed in countries where it is a large part of the economy (Poland, Thailand, Nigeria). Norway clearly fits the former situation.

Grossman and Helpman (1994) in contrast, focus on incumbent governments who already have a powerful position in a country and can choose how to bolster their political support. Lobby groups represent specific industry interests and they are motivated to make contributions to government by the prospect of influencing policy. Governments receive offers of financial support from industry lobby groups that are linked to specific trade policies. The financial support is attractive to political parties, who regularly have to fight elections. A second factor of interest to government is voter well-being. Governments weigh up the offers they receive from lobby groups, and depending on the shape of their indifference curve, tradeoff financial support against impact of introduction of the associated policies on voter well-being. The agribusiness lobby in the US, it can be argued, is large enough and has sufficient financial resources to be able to 'buy' support for protectionists policies during the negotiation stages of US Farm Bills. Grossman and Helpman (1994) Proposition 2, a modified Ramsey rule, is relevant here: All else equal, industries that have high import demand or export supply elasticities (in absolute value) will have smaller ad valorem deviations from free trade. Imports of food into high income countries generally have low elasticities and are likely to have larger ad valorem devations from free trade.

Alston and Carter (1991) review theory and research attempting to explain farm policy both within countries such as the US and across multiple countries. They dichotomise theory as either Self-Willed Government (SWG) or Clearing House Government (CHG). The latter theory they judge, treat the political process as a clearing house whereby the government trades off political pressures amongst interest groups and the outcomes reflect the relative influences of lobbies at the margin. Becker (1983) is a prime example of CHG theory. Alston and Carter (1991) critique the literature in these two schools and judge there is more support for the CHG than for the SWG. However, they observe that theory is often crude in its characterisation of society as comprised of just two groups, farmers and producers, and just a single policy instrument – farm support. They argue group disaggregation and multiple policies, need to be recognised to achieve better understanding of how farm policy decisions than can be provided by the two group single-instrument (TGSI) model. Agribusiness they note is a further set of important players in US farm policy – perhaps more influential than farmers themselves (Alston and Carter 1991).

European researchers have also been prompted to develop theory to explain agricultural policies, not least because of the considerable fiscal and economic cost of the agricultural policies in the EU and in nearby European countries. While economists have puzzled over the rationale and justification of support for agricultural and rural policies, some politics researchers have focused on the median voter theorem to explain government formation. The median voter theorem was suggested by Galton (1907) and elaborated by Black (1958).

It holds that under an assumption of one dimensionality a party encompassing the median voter in parliament can always demand to be included in the government coalition. Skjæveland (2009) argues that the median voter theorem supplemented by a requirement on 'office capacity' amongst political parties can explain most government formation in Denmark and Norway since 1953.

Rosendal (2012, 214) observes that in the 1970s when Norwegian membership of the European Economic Community (EEC) was first considered an alliance was established between environmental, centre–left-wing parties and small-scale agrarian interests as a reaction to internationalization and intensified agriculture. The Norwegian Parliament in 2012 includes representatives from five parties. A coalition (often called Red-Green) led by the Norwegian Labour Party together with the Centre Party and Socialist Left Party has held power since 2005. The opposition include members of the Conservative Party and the Progress Party. The Centrist party is described as liberal, centrist and agrarian. It opposes Norway joining the European Union and focuses on maintaining decentralised economic development and political decision-making. The Centrist Party policies are strongly supportive of farming and Norwegian agriculture. It is also noteworthy that until perhaps 2010 almost all political parties in Norway supported policies that protected and supported domestic food production, occupation of land, maintenance of agricultural landscape. Tension between these goals and the goal of provision of continuous availability of food at internationally comparable prices has only recently become apparent within Norway.

In 2012 the Centre Party demanded higher import tariffs on meat and hard cheeses to protect Norwegian farmers from foreign competition and to lift farmer incomes closer to urban incomes. Increased import duties announced include 429% on lamb, 344% on beef, and 277% on all but 14 exempted hard cheeses (Ministry of Agriculture and Food 2012). The Minister for Agriculture and Food, Trygve Slagsvold Vedum is a member of the Centre Party and has resolutely defended increased support for agriculture (News and Views 10/10/2012).

Several incidents including mass demonstrations by famers for increased government support, seasonal shortages of items such as (domestically produced) butter and flour, announcement of increased tariffs on imports of some food items, increased cross border trade and investment in Sweden by Norwegians, have focused national attention on Norway's agricultural and food policies. While there is debate over the relative importance of farmer lobbies and food processors, the role of the Centre Party increasing import protection resulting in higher food prices and some food unavailability, has come at a political cost. Popular support for the Centre Party has fallen during 2012 with just 3.9 percent of poll respondents supporting it (Views and News 12/12/2012), less than the Norwegian threshold of 4 percent.

What are the prospects of Norway significantly altering its agriculture and domestic food production policies? Norway will next hold elections in September 2013. Agriculture and agribusiness are still able to lobby vigorously for policies that support Norwegian agriculture and domestic food supply. However lobbying by these sectors may be less effective if the policies they promote are no longer supported by the median voter. If the Centrist Party does not reach the 4 percent threshold required to have representatives in the Storting, the

median voter may be represented by a member of the Progress Party that currently enjoys strong popular support (Views and News 2012).

Bastiat observed in the nineteenth century "When goods cannot cross borders, armies will". Today, its shoppers who cross borders and Norway's population are voting with their wallets, driving to Sweden to purchase cheaper food (Views and News 2012). Five percent of all Norwegian grocery expenditures occur in Sweden (views and News 2012). Norwegian investors have noted these trends and are investing in retail outlets on the Swedish side of the border (News and Views 2012). Some political parties have noted the contradictions in Norway's agriculture, food and trade policies, and consumer dissatisfaction with high prices and a limited range of goods. The Progress Party has stated it does not support continued high levels of support and protection of Norwegian agriculture and domestic food production (Views and News 2012).

Conclusions

Norway's agriculture, food and trade policies provide a series of contradictions that have arisen from its history, have been tacitly accepted until quite recently, but now seem to destined to change. Norway was until about 1970 a relatively low income country by OECD standards, heavily dependent on agriculture, forestry and fishing. There as long been acceptance in Norway of the role and importance of agriculture in producing food, contributing to incomes and employment, and providing a range of public goods including landscape, biodiversity, and strategic occupation of land. Norway, today is a highly trade dependent country, has the most heavily protected agriculture in the world. It is a European country close to the vast food producing European plains, but it has the world's highest food prices, a limited range of foodstuffs in the shops, and sometimes runs short of bread and butter. However, there is now considerable popular concern about high food prices and lack of choice in Norway and shoppers are increasingly voting with their wallets, shopping in Sweden.

Norwegian policies strongly support agriculture and intervene to protect it from international competition. That case is increasingly difficult to defend as the notion of multifuncionality is increasingly rejected as being scrutinised and rejected. A centrist party, which represents agrarian interests, and is strongly opposed to integration with the EU, occupies a pivotal position in the formation of government in Norway. However the policies the Centrist Party promote are now very unpopular and popular support for the Party is less than the four percent threshold required to be represented in the Storting. Norway will hold Parliamentary elections in September 2013.

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