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ABSTRACT/RESUMÉ

Product market competition and economic performance in Norway

Norwegian growth has been strong over the past decade. This development has been supported by the off-shore sector, but depleting oil reserves implies that growth will have to rely increasingly on the mainland economy. Empirical work shows that competition is important for promoting economic growth. Recognising the benefits of competition, the government wants to introduce regulatory reforms to stimulate economic growth. However, the promotion of competition has often conflicted with other policy objectives, such as maintaining a regionally dispersed population and a high degree of public ownership. This has lead to weak competition in a number of sectors, resulting in high prices, weak innovative activity and inefficient resource allocation. Reforms to promote product market competition in Norway should therefore *inter alia* focus on separating the public sector's roles and functions as owner and regulator. This requires an increase in the independence of sector regulators, establishing independent appellate bodies, expanding the government's privatisation programme as well as increasing enforcement powers. Measures to create a level playing field and promote competitive markets should include opening up protected sectors to foreign competition and introducing clear and transparent regulation for acceptable public engagement in market activities combined with a more rigorous approach for evaluating and financing the net cost of universal service obligations in network industries.

Key words: Norway, productivity and growth, product market competition, competition law, regulatory reform, retail sector, network industries, public procurement, public ownership.

JEL codes: K21, L11, L16, L33, L43, L81, L87, L9, O57

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Concurrence sur les marchés de produits et performance économique en Norvège

La Norvège a connu une croissance vigoureuse au cours des dix dernières années. Cette expansion a été alimentée par le secteur pétrolier offshore, mais l'épuisement progressif des réserves implique que l'économie continentale va devoir prendre peu à peu le relais pour soutenir la croissance. Des travaux empiriques montrent que la concurrence contribue de manière importante à l'expansion économique. Conscient des bienfaits de la concurrence, le gouvernement entend réformer la réglementation pour stimuler la croissance économique. Néanmoins, la promotion de la concurrence est souvent entrée en conflit avec d'autres objectifs, tels que le maintien d'une population géographiquement dispersée et du contrôle étendu de l'État sur diverses activités. Cela se traduit par un faible niveau de concurrence dans un certain nombre de secteurs, qui a pour corollaires des prix élevés, un manque de dynamisme en matière d'innovation et une allocation inefficiente des ressources. Les réformes destinées à promouvoir la concurrence sur les marchés de produits en Norvège devraient donc être axées, entre autres, sur la séparation des fonctions de gestion et de réglementation du secteur public assumées par l'État. Cela passe par un renforcement de l'indépendance des autorités de réglementation sectorielle, la création d'organes de recours, l'extension du programme de privatisations du gouvernement, ainsi que le renforcement des pouvoirs d'exécution de la puissance publique. Afin d'harmoniser les règles du jeux et de favoriser la concurrence sur les marchés de produits, les autorités devraient notamment ouvrir les secteurs protégés à la concurrence étrangère et introduire des règles claires et transparentes définissant les conditions acceptables de participation du secteur public aux activités marchandes, conjuguées à une approche plus rigoureuse en matière d'évaluation et de financement du coût net des obligations de service universel dans les industries de réseau.

Mots-clés : Norvège, productivité et croissance, concurrence sur les marchés de produits, droit de la concurrence, réforme de la réglementation, commerce de détail, industries de réseau, marchés publics, actifs publics.
JEL codes: K21, L11, L16, L33, L43, L81, L87, L9, O57

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PRODUCT MARKET COMPETITION AND ECONOMIC PERFORMANCE IN NORWAY

by Jens Høj and Michael Wise[1]

I. Introduction

1. A strong macroeconomic performance over the past decade -- supported by exploitation of oil wealth -- has left Norway as one of the richest countries in the OECD area and with low unemployment and surpluses on the current account and the government balance. However, the importance of the large off-shore sector is set to decline over the coming years as oil reserves are being depleted. As a consequence, growth will have to rely on the mainland economy. An important factor in this respect is a well-functioning labour market, which is analysed in Chapter 4. The aim of this chapter is to focus on product market competition, which in the OECD Growth Study and other empirical work has been shown to play an important role in the process of economic growth. In Norway, the promotion of competition has often conflicted with other policy objectives, such as maintaining a regionally dispersed population. Also the government ownership of firms competing alongside private companies gives raise to competition issues. As a consequence, competition is weak in a number of sectors -- notably in some network industries, agriculture and food processing -- leading to relatively high prices, weak innovative activity and inefficient resource allocation to these markets. Recognising the benefits of regulatory reform, the government has made the promotion of competitive markets a key policy in stimulating economic growth as elaborated in the recent budget and in the ongoing reforms of the regulatory framework for competition.

2. The chapter starts out with a short review of Norway's growth performance over the past decade. Attention is then turned to indicators of product market competition in order to gauge the strength of competitive pressures as well as the implications of barriers to trade and foreign direct investments. This is followed by an assessment of the general competition policy framework and its role in promoting competition. The competition issues associated with public ownership are then analysed. The chapter next examines a number of sectors where regulatory policies can be expected to have particularly large impacts, including retail distribution, professional services and network industries. Subsequently, public procurement and possible macroeconomic effects of regulatory reform are discussed. The chapter concludes with a set of policy recommendations.

II. Macroeconomic performance and indicators of competition

Overall good economic performance over the past decade conceals sectoral problems

3. Over the past decade, economic growth has equalled that of the OECD and has been much faster than the EU average. However, the slowing of growth in the mainland economy since 2000 has led some observers to point to the problem of insufficient structural reforms (Klovland *et al.*, 2003 and Table 1). During the 1992-2002 period, average employment growth has been twice as fast as in the EU and faster than the increases in labour force participation, leading to a fall in unemployment. Together with relatively rapid productivity growth and the wealth originating from the off-shore economy, this has allowed Norway

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1. This paper was originally prepared for the *OECD Economic Survey of Norway* published in March 2004 under the authority of the Economic and Development Review Committee of the OECD. Jens Høj is an economist in the OECD's Economics Department and Michael Wise is a lawyer in the Competition Division in OECD's Directorate for Financial and Enterprise Affairs. They are indebted to Jørgen Elmeskov, Michael Feiner, Val Koromzay, Andrew Dean, Nicholas Vanston, Alexandra Bibbee, Flavio Padrini, Maria Maher, Willi Leibfritz and other colleagues in the OECD for useful comments. Special thanks to Sylvie Foucher-Hantala for technical assistance and Chrystyna Harpluk for assistance in preparing the document.

to attain one of the highest levels of GDP per capita in the OECD. Focusing solely on mainland GDP per capita, Norway still compares favourably with other EU countries. This reflects, on the one hand, high labour force participation and high average hourly productivity, while on the other hand average hours worked are relatively low and declining. The high level of hourly productivity is partly reflecting the low average working time, which would indicate that reforms to increase labour supply may put downward pressure on hourly productivity unless they are accompanied by product market reforms.

Table 1. Output, employment and productivity

	Norway	Mainland	Sweden	Finland	France	Germany	Italy	Japan	United States
A. Growth decomposition, 1992-2002									
Average GDP growth	3.3	3.1	2.2	2.6	1.9	1.4	1.5	1.1	3.2
of which:									
Productivity	2.1	1.9	2.5	2.6	1.2	1.3	1.3	1.1	1.8
Employment	1.2	1.2	-0.3	-0.0	0.8	0.1	0.2	-0.1	1.4
of which:									
Unemployment[1]	0.1		-0.1	-0.2	0.0	-0.3	-0.1	-0.3	0.1
Labour force	1.0		-0.2	0.2	0.7	0.3	0.2	0.3	1.3
B. Labour productivity growth, 1992-2001[2]									
Agriculture and forestry[3]	4.8		2.8	6.5	2.9	5.4	4.6	0.2	1.5
Total manufacturing	0.7		7.0	5.5	3.1	2.1	2.0	3.0	3.9
Food products, beverages[4,5]	1.2		2.8	4.2	-0.7	1.3	1.1	-0.2	-1.7
Printing and publishing[5]	-1.6		5.1	4.4	0.9	1.4	1.2	-0.1	-1.8
Electricity, gas and water	1.5		1.0	6.5	1.6	5.7	4.8	2.4	1.2
Construction	-0.2		1.3	-0.3	-0.9	-0.3	0.0	-2.8	-0.2
Total services	2.0		2.1	1.8	0.2	1.1	1.0	0.9	1.6
Wholesale and retail trade[5]	5.6		3.7	2.8	0.6	-0.9	1.2	0.6	3.8
Communication[5]	3.5		4.1	5.0	2.5	7.9	3.6	1.4	2.3
Financial services	4.8		6.7	8.2	-0.1	4.0	3.2	4.8	4.1
Non-financial services	1.9		1.8	1.6	0.2	0.9	0.9	0.7	1.4
Memorandum items:									
GDP per capita[6]	103.7	80.0	73.9	75.3	76.6	74.9	75.2	75.6	100.0
GDP per hour worked[6]	131.2	102.2	84.2	84.1	105.4	99.1	108.0	72.3	100.0

1. A positive sign indicates that unemployment has declined and contributed to boost output growth.
2. 1992-2000 for France.
3. Including hunting and fishing.
4. Including tobacco.
5. 1993-2001 for Sweden.
6. 2001 levels, PPP-based. United States = 100.

Source: OECD.

4. Productivity growth at the sectoral level shows the opposite picture of what is normally observed internationally, although as elsewhere the variation across sectors seems related to competition issues. Not only is productivity growth in the manufacturing sector much lower than in other OECD countries, but it is also much lower than in the Norwegian service sectors. This can partly be explained by some parts of the manufacturing sector being protected from foreign competition. The food processing industry (protected by agricultural barriers extending to processed food) and the publishing industry (protected from foreign competition by the market's need for timely deliveries and domestically by an exemption from the competition law) account together for about a quarter of the sector.[2] The better productivity performance in the electricity and communication sectors can be related to the opening of both markets during the 1990s. In the latter sector, the performance is lagging somewhat relative to a number of other countries, which may be related to a slower liberalisation process.[3] Indeed, the OECD's indicator for economy-wide regulation suggests a stricter stance than in most other OECD countries, as the result of high trade and FDI barriers and widespread public ownership in many network sectors, such as telecommunication, postal services and railways (Figure 1). The relatively high productivity growth in the distribution and financial sectors is the result of restructuring of the food retailing sector (from consisting of small independent shops to a highly concentrated and vertically integrated sector) and of the banking sector following the banking crisis in the early-1990s.[4]

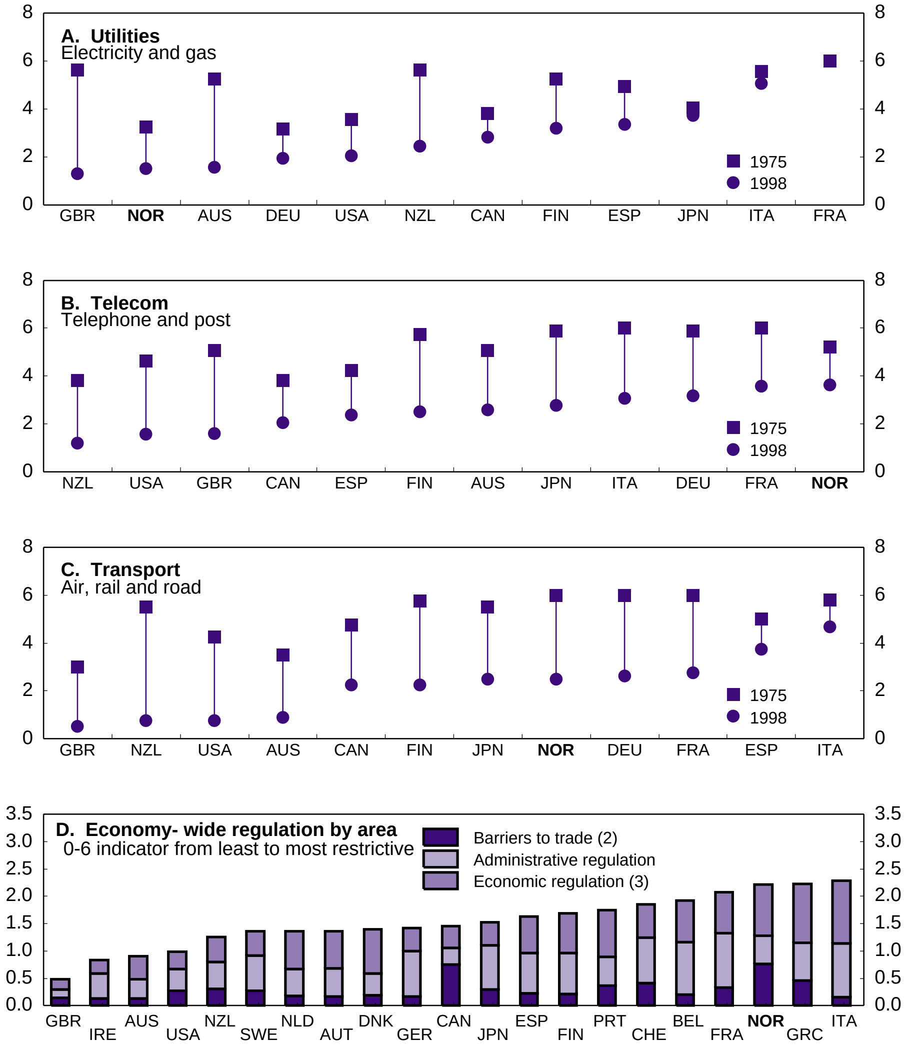
5. The relatively poor performance of the manufacturing sector may be related to low R&D spending, which at about 1½ per cent of GDP is below that of many other OECD countries. One of the explanations for the modest spending on R&D is the relatively small manufacturing sector and the relatively low share of manufacturing production that is taking place in sectors with a high intensity of technology (Figure 2, panel A and B). Recognising the importance of R&D in the economy's growth performance, the government has formulated an objective of reaching the average OECD spending share on R&D by 2005 (implying something like a doubling of the current R&D spending share) which is to be reached through policy measures in such areas as education, public research, infrastructure, and a better climate for entrepreneurs. However, the modest spending on R&D may also be related to the lack of competition, as an important stimulus to innovative activity is intense product market competition, which forces market participants to exploit product and process innovations to maintain or improve market positions. Empirical work indeed suggests that a lack of product market competition in Norway has been a factor holding back R&D spending (OECD, 2001 and Figure 2, panel C). More intense rivalry in domestic markets might therefore stimulate R&D spending and shift resources to higher value-added sectors.

2. For a discussion of problems associated with an international comparison of productivity performances in the manufacturing sectors, see Boug and Naug (2001).

3. The very high productivity growth in the service sector is apparently also related to some problems of comparability between data from the first and the second parts of the period (Klovland *et al*, 2003).

4. An additional factor that has boosted productivity in both sectors is the introduction of new ICT technology, although the importance of this factor is difficult to quantify.

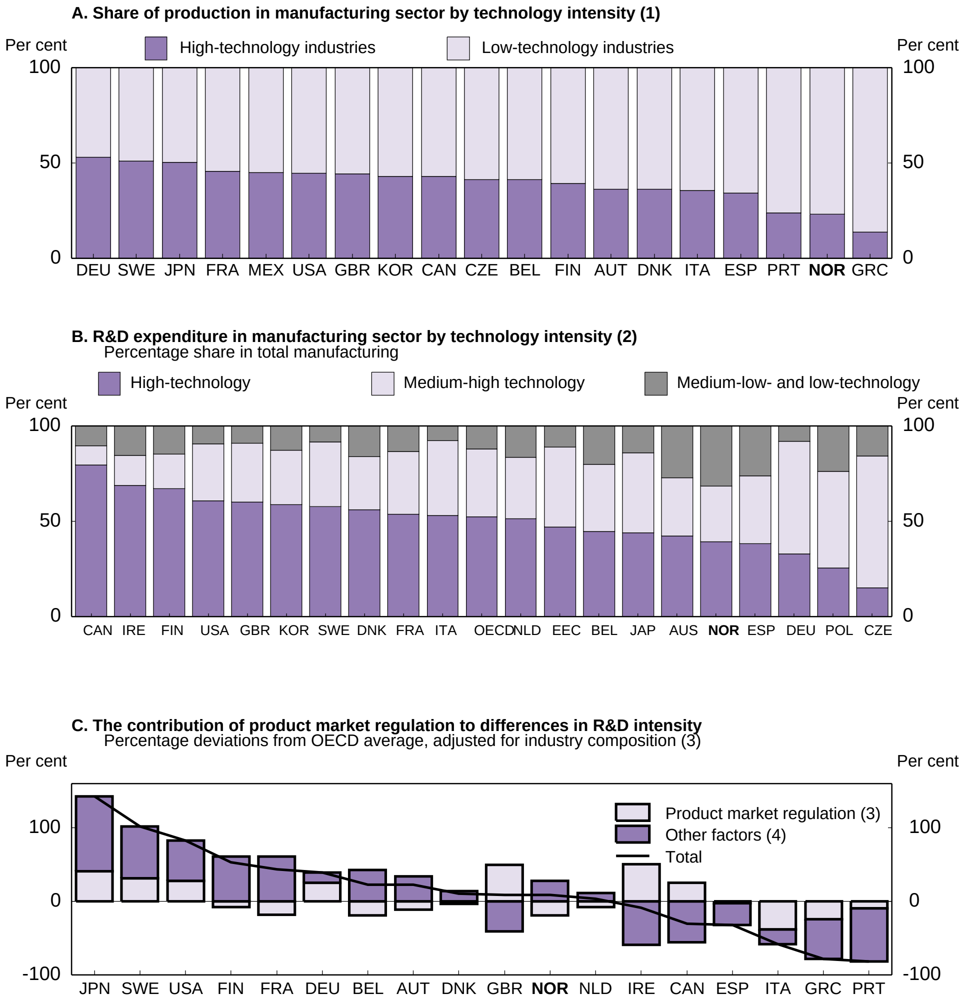
Figure 1. Progress in liberalisation of service sectors in OECD countries1



1. In each year and sector, the indicators have a 0-6 scale ranging from least to most restrictive of competition. They cover public ownership, barriers to entry, market structure, vertical integration and price controls. See Nicoletti and Scarpetta (2003) for details.
2. Includes trade and FDI restrictions.
3. Includes barriers to competition and state control.

Source: OECD Regulatory Database.

Figure 2. R&D spending and industry structure



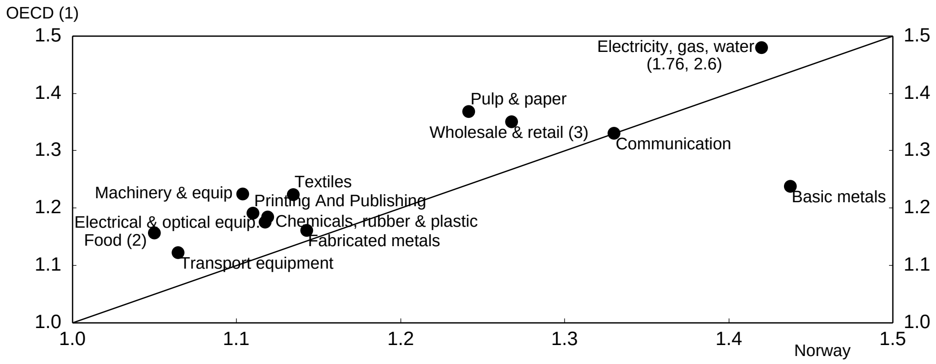
1. Latest available year: Denmark and United States: 2001, Belgium, Czech Republic, France, Mexico, and United Kingdom: 2000, Canada, Finland, Germany, Greece, Italy, Norway, Portugal, Spain and Sweden:1999, Japan and Korea: 1997.
2. 1998 for OECD and Norway, 1999 for Ireland, Denmark, France, Netherlands and EU.
3. Includes administrative and economic regulations.
4. Includes EPL, other controls, country-specific effects.
Source: OECD, STAN Database, ANBERD.

6. As in other smaller countries, *concentration* tends to be fairly high at the disaggregated level, although in sectors with no trade barriers the potential market power associated with high concentration is countered by foreign competition. However, the openness of the economy could be improved and concentration in some of the sheltered sectors is worryingly high. Concentration in the primary production of food is very high (with a near monopoly in dairy products), particularly when taking into account the prevalence of co-operatives in this sector, which increases horizontal integration. Co-operatives and franchising in the food wholesale and retailing lead to high degree of horizontal and -- to a lesser extent -- vertical integration within the four chains that dominate the industry, an unusually small number even for a small country. These types of integration may improve efficiency gains, but reduce competition. The high

concentration in passenger land and air transport (excluding taxis) can be explained by the near monopoly status of the (fully or partially) government-owned incumbents and relatively few companies offering long-distance bus transport. Also, in other service sectors with a significant degree of government ownership, such as telecommunications and financial services, exhibit high concentration. Furthermore, *mark-ups* in most industries are either *at par* or below those in other OECD countries. When relatively low mark-ups are observed in protected sectors with low productivity growth, such as in the food processing industry, this could be an indication of low pressures for improving profitability (Figure 3).

Figure 3. Industry-level mark-ups in Norway and other OECD countries

From 1981 to the latest available year



1. Average of Austria, Belgium, Canada, Finland, France, Germany, Italy, Japan,Netherlands, United Kingdom and United States. OECD estimates based on the Roeger method.
2. Including beverages and tobacco.
3. Including restaurants and hotels.

Sources: OECD, STAN database.

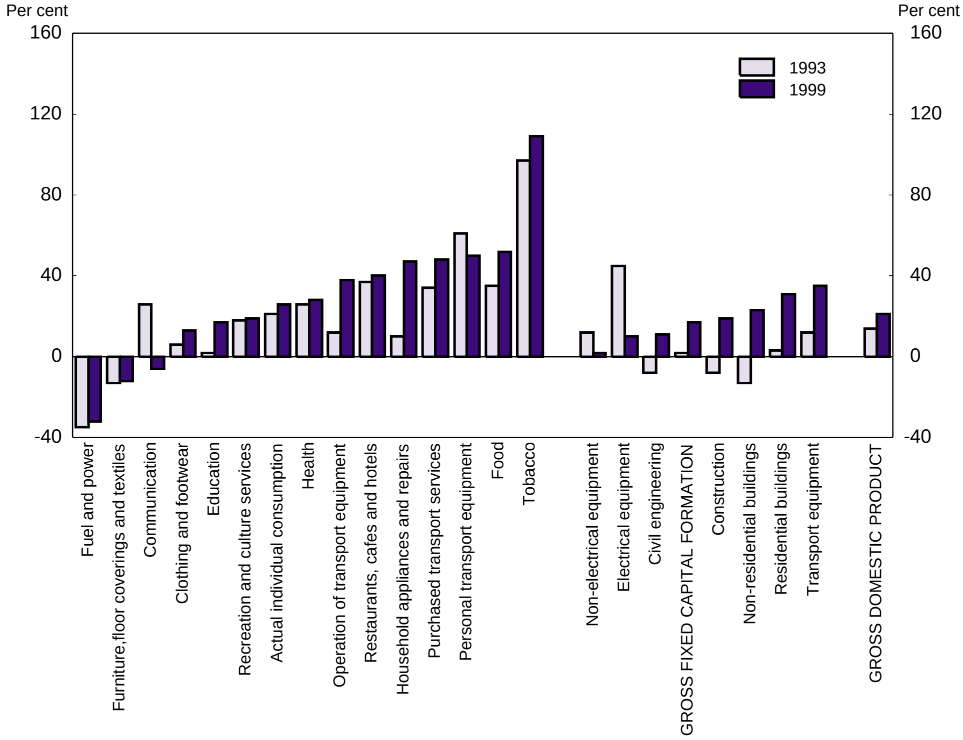
7. The overall *price* level is higher than in the EU countries and seems to have widened in many cases during the 1990s, although direct comparisons are imprecise due to definitional changes (Figure 4).[5] The relatively high price level is partly related to such factors as a higher income level in Norway, [6] high indirect taxes, and the cost effects of low population concentration in a relatively large country. On the other hand, a substantial part of the higher price level can be explained by high prices for products and services originating in sectors with little competition, such as the heavily protected agricultural sector. Equally, the high prices for transport sector services are likely to be related to the lack of competitive pressures in passenger transport sectors, which are often dominated by publicly owned companies and with little intermodal competition. Even in cases where high indirect taxes might explain the higher prices, such

5. Comparing prices across countries is complicated by exchange rate movements. Using PPP equilibrium exchange rates is a way to avoid being misled by short-term fluctuation in actual exchange rates. An additional issue is that the price effects of exchange rate movements vary depending on whether the goods in question are internationally traded and the degree of product market competition. For example, with fully competitive markets an appreciation of the krone would *ceteris paribus* lower energy prices in Norway relatively to other countries. On the other hand, the same exchange rate movement would increase price differentials for non-traded goods.

6. Prices tend to increase with income levels as wages in low-productivity service sectors may be determined by wages in high-productivity manufacturing sectors, resulting in relatively high prices for services, which are relatively more in demand in high *per capita* income countries.

as for tobacco,[7] it turns out that pre-tax prices are higher than in other northern European countries. More generally, for many internationally traded and standardised goods, such as gasoline, prices in Norway are relatively high, which is difficult to explain except by a lack of competition (see below). On the other hand, in sectors that have been liberalised, such as the telecommunication sector, prices have decreased, pointing to the benefits of regulatory reform.

Figure 4. Price difference between Norway and the EU[1]



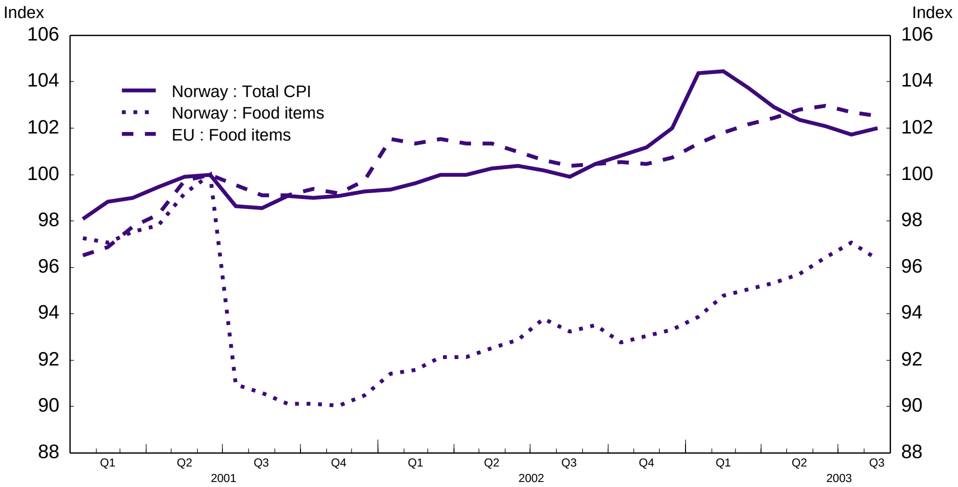
1. Percentage differences between price levels in Norway and the weighted average of EU15 countries.
Source: OECD, Purchasing Power Parities.

8. High prices can also reflect market power. The food distribution sector appears to have some power to pursue a pricing-to-market strategy. The VAT rate on food and non-alcoholic beverages was halved on 1 July 2001 under substantial media attention, which led to a roughly 10 per cent fall in the retail prices for these items – equivalent to consumers enjoying the full benefits of the VAT reduction (Larvik, 2003). However, over the following two years retail prices for food and non-alcoholic beverages increased twice as fast as the total consumer price index and the comparable EU area index (Figure 5). A bit less than a third of the rebound can be explained by increases in prices for food and non-alcoholic beverages, where producer target prices for Norwegian products are negotiated between the Ministry of Agriculture and the sector. By mid-2003 the consumer price index for food and non-alcoholic beverages was still a bit below its level prevailing prior to the VAT reduction, although prices for most of the items in the index had

7. As a consequence, nearly 30 per cent of all tobacco consumed in Norway is bought in other countries. (Finansdepartementet, 2003*a*).

returned to their previous levels with the exception of prices for mostly imported food items.[8] The deterioration in consumer welfare may, in part, be the result of market power exercised by the highly concentrated and vertically integrated distribution sector and/or by highly concentrated domestic producers.[9] [10]

Figure 5. Food prices in Norway and the EU area
June 2001 = 100



Source: Statistics Norway and OECD.

Market openness could be improved

9. Foreign competition is important for the promotion of competitive markets, particularly in smaller countries with weak competition in domestic product markets. Norway appears to be a relatively open economy from the point of view of the import share of GDP, which is as expected when taking into account such factors as per capita GDP and transportation costs. Nevertheless, there are areas, particularly agriculture, where market openness could be improved. Following the Uruguay round, Norway shifted from non-tariff barriers to having some of the highest tariff barriers in the OECD. The latter can almost exclusively be explained by very high barriers for agricultural products, which in terms of producer support estimate (including production and price support) has remained around 70 per cent over the past years – one of the highest levels in the OECD (OECD, 2003*a*, Walkenhorst and Dihel, 2003 and Figure 6). Some details of agricultural tariff barriers are provided in the Sustainable Development section of this survey (Chapter 5).

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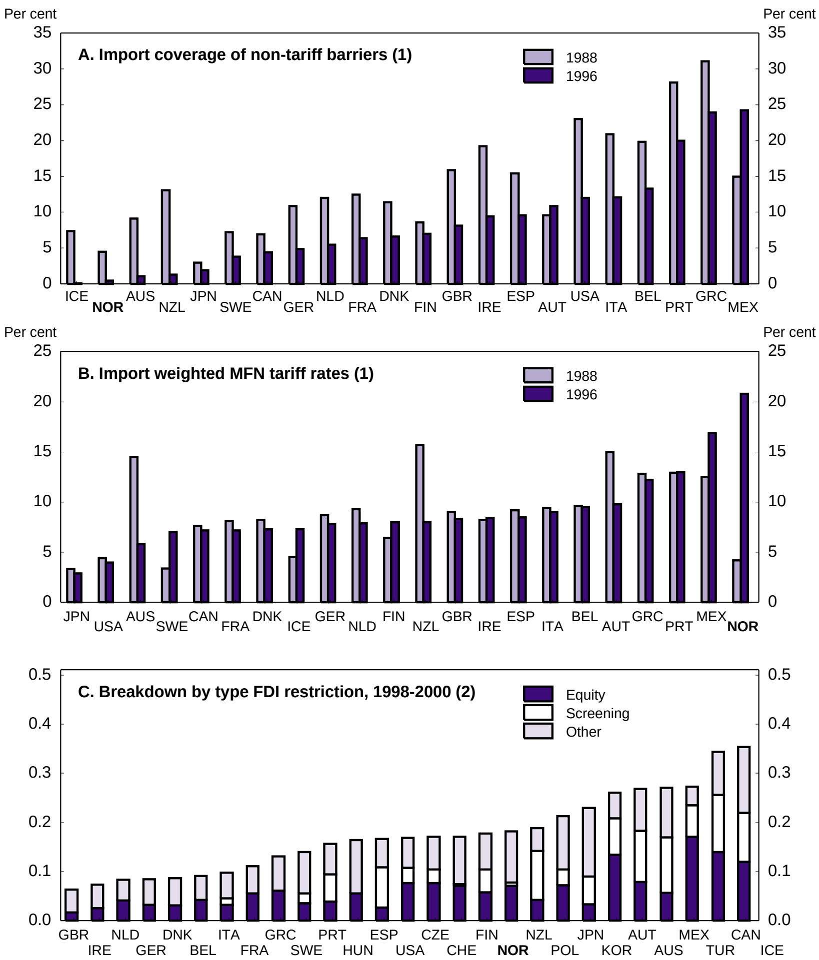
8. Over the period there was a fall of about 5 per cent in the prices of imported goods.

9. Similar indications of market power have been found in the markets for non-food branded goods, where the price differentials with Sweden are on average about 20 per cent. (Finansdepartementet, 2003*a*).

10. An alternatively interpretation of these price developments could be that the relatively faster price increases reflect a faster expansion of Norwegian costs, again pointing to a lack of competition. This interpretation, however, runs counter of the finding that price margins in the dairy sector have been constant in contrast to falling price margins internationally, which indicate a certain degree of market power for Norwegian dairy producers.

10. Inward FDI is fairly high and is mostly found in the off-shore sector and the financial sector. The relatively low inward FDI in other sectors is to some degree related to barriers to inward FDI. Formal barriers are only found in fisheries and indirectly in electrical power generation because of asymmetric concession rules (see below), but the relatively extensive government ownership (sometimes stipulated as requirements) hinders foreign investors' access and they are often faced with high effective marginal taxation of their inward FDI (Yoo, 2003) (Figure 6, panel C).[11] Moreover, politically motivated resistance to foreign control in areas such as banking may in itself have a perceived negative effect on inward FDI. In addition, other policies may also have a deterrence effect, such as trade policies and labour market policies. OECD research suggests that such policies are relatively strict in Norway and if they were aligned with the least restrictive in the OECD area, Norwegian inward FDI could be boosted by about a third (OECD, 2003*b*). Using a broad measure of international integration (including direct factors such as foreign investment and indirect factors, such as the possibilities for international economic transactions) indicates a more closed economy than if only using traditional trade openness measures (Andersen and Herbertsson, 2003). In sum, a number of sectors in Norway seem to be protected from foreign competition.

Figure 6. Openness indicators in the OECD area



1. OECD calculations based on UNCTAD data. Aggregation from 2-digit level tariffs to national level using sectoral value-added weights.

11. The inward FDI position used to be dominated by investment in the off-shore sector, but the importance of this factor has receded with the strong growth of inward FDI in the financial sector since the mid-1990s.

2. The indicator ranges from 0 (least restrictive) to 1 (most restrictive). The most recent year for which data are available varies across countries between 1998 and 2000.
Source : UNCTAD, OECD.

III. The competition law's compliance instruments need strengthening

11. The competition law's compliance instruments are not strong enough. The current law's provision for "intervention" against abuse of dominance does not provide sufficient deterrence to serious abuses, although the pending legislative package would adopt the more robust EEA-EU approach to abuse of dominance by 2004. Moreover, the Norwegian Competition Authority (NCA) has decisional independence, but the appellate body is the Minister of Labour and Government Administration, under which the NCA belongs. The powers of the NCA have been weakened by the power of the Minister to overturn its decisions on grounds other than competition policy and by parliamentary intervention. In this respect, some mergers involving government-owned firms have proved to be contentious (Box 1). The lack of independent appellate bodies is also found in areas with sector regulators. However, the creation of an independent appeal body -- countering undue special interest and political pressures -- may at the earliest take place after the next election as the government has committed itself not to submit such a proposal in this election period. The government's proposal for a new competition law would allow the Minister of Labour and Government Administration to overrule the NCA only if the authority's decision is not in accordance with the competition law. Sanction procedures are excessively cumbersome and time-consuming, in part because they require criminal procedures, and resulting fines are below the level that would be expected to deter. Instruments for ensuring compliance need to be strengthened. Additional resources are required to accelerate the legal process, and leniency and whistle-blower programmes are needed to destabilise cartels. Relating sanctions to the harm to individuals and the economy would increase deterrence and raise awareness of the damages of anti-competitive conduct.[12] Criminal liability should be limited to hard-core clandestine collusion, while the NCA should be empowered to issue administrative fines for lesser breaches. The proposed new competition law introduces powers to the NCA to issue administrative fines as well as a leniency programme.

Box 1. Norwegian competition policy and enforcement

The current competition law dates from 1994, when efficiency was made the goal of competition policy and when the Norwegian Competition Authority (NCA) was established as the enforcement body. Norway's substantive law is moving toward the full EEA-EU system. The last step, included in the pending legislative package, would adopt the EEA-EU approach to abuse of dominance, in time for the "modernisation" of the EEA-EU enforcement process in 2004. At present, Norway's law provides only for "intervention" against abuse of dominance, a method that is appropriate for ambiguous conduct but that does not provide sufficient deterrence to serious abuses.

The Ministry of Labour and Government Administration provides the framework for NCA's activities, and the Minister may in principle instruct NCA about individual cases. There has, however, been a history of non-interference, and the right to instruct is removed in a proposed new competition law. But many of the NCA's enforcement decisions may be appealed to the Minister, who may reverse those decisions on grounds other than competition policy goals, such as the promotion of employment or regional policies. In a recent case even the parliament intervened. After the NCA prohibited the largest, state-owned, electric power firm from acquiring dominating interests in two other producers, the Minister permitted one of the acquisitions, conditional on structural measures, while upholding the NCA decision in the other. But parliament then enacted a special rule for electric power mergers and called on the Minister to reconsider the decision. The rule just restates standard analytical principles, though, and the Minister decided that he need not reconsider his decisions under the new, but similar, standard. The process may have left the public impression that political pressures affected the outcome. Another occasion to test competition principles against other claims -- such as keeping the headquarters of a major bank in Norway -- arose in a major bank merger. The lack of an independent appellate body is repeated in sector regulation, where in some cases the appellate body is the ministry that is responsible both for regulating the industry and for managing the State's ownership interests in it.

12. Norwegian business evidently does not yet take the issue seriously: when two managers of a Norwegian shipping company were recently fined and jailed in a US cartel case, the company announced it would pay their fines and treat their prison time as paid leave.

Acknowledging the advantages of an independent appeal route, the government had planned to create an independent appeal body, as recommended by a study committee (and by the *2003 OECD Regulatory Reform Report*), but it agreed not to submit that proposal to the parliament before the next election.

Sanctions against violations, fines and imprisonment for individuals, must be imposed through criminal processes. Thus the NCA must refer the case to the prosecutor for economic and environmental crime, Økokrim, who must often redo much of the NCA's investigation to address constitutional and human rights concerns. Hard-core price fixing and bid rigging are prohibited virtually *per se*, yet the enforcement record is spotty. Økokrim's resources are stretched and its priorities are complex, so the cases pile up. Taking action against allegations of price-fixing in electrical equipment took two years. The biggest success, four years ago, was a fine against ABB and Siemens for price fixing, market sharing, and bid rigging in supplying equipment to hydropower stations. In a promising sign of stepped-up attention to horizontal cartels, the NCA referred another large bid-rigging case, in construction, in mid-2003.

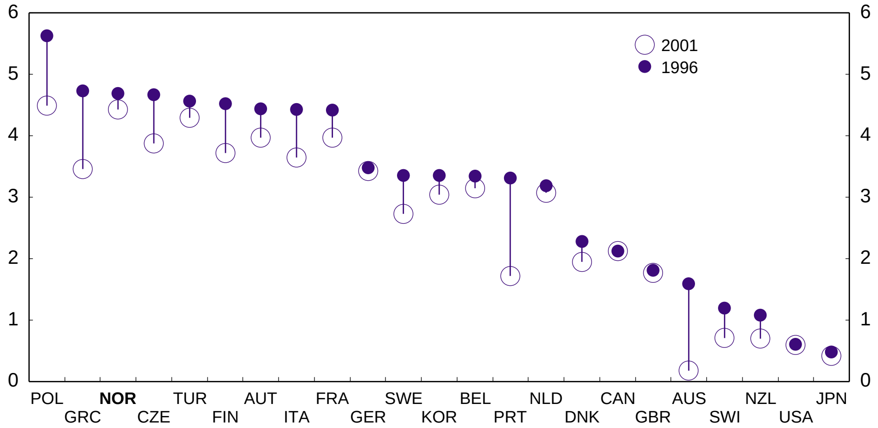
Still, fines are far below the level that would be expected to deter. In the ABB-Siemens case, the firms' turnover in the market at issue during the course of the conspiracy was 75 times greater than the fine (€2.5 million). Penalties against individual decision-makers are virtually unknown. Both problems appear to result from the reliance on criminal process for enforcement. In non-criminal matters, the only consequence of violating a statutory prohibition is an order to stop doing it. Injured parties can sue for damages, and that process has proved more successful. Customers who followed the ABB-Siemens case with claims for damages reportedly settled for nearly €7 million. As an alternative to the criminal process, a 2003 committee report recommended empowering the NCA to issue fines against companies that violate prohibitions. Presumably, such administrative fines would be demanded after a simpler process that required a lower burden of proof. Whether it would be a more significant deterrent depends on how it fares in the inevitable appeals, testing both how this novelty fits into the Norwegian legal system and how large a sanction the judges will actually permit the NCA to demand.

IV. Extensive public-ownership creates competition problems

12. A defining feature of the Norwegian economy is the high degree of public ownership (Figure 7).[13] As in many other OECD countries, publicly-owned firms are active in traditional network industries, but they are also active in sectors which in other countries often are within the private domain, such as alcohol retailing, air transportation, financial services and oil. When government-owned companies participate in market activities, the issue of a level playing field arises. In electricity generation, publicly-owned operators are favoured through asymmetric concession rules (see below). In other sectors, a perception of an uneven playing field is related to political interference, the acceptance of lower profit rates or implicit financial guarantees. Publicly owned firms in network industries have substantial scope for cross-subsidisation between competitive and monopolistic market segments, which is often countered by requiring accounting separation. However, this measure suffers from problems of asymmetric information that often exists between the regulated and the regulator and the subjective nature of accounting rules. These problems point to the need for formal -- legal or ownership -- separation.

13. The substantial amount of government ownership reflects partly historical developments, but also other considerations, such as cost control as a criterion for keeping the sale of alcoholic beverages in a state-owned monopoly; securing Norwegian headquarters and research activities (financial markets, oil industry); securing universal service obligations (telecommunication, postal services); and securing minimum standards (social and health services). It should be noted that other countries have managed to pursue similar objectives without resorting to public ownership.

Figure 7. Relative size of public enterprise sector[1]



1. Index 0-6 scale from lowest to highest share of public enterprises, index based on the extent of state ownership and (gross) proceeds from privatisations.
Source: OECD.

13. Competition may be damaged by strategic behaviour, such as when dominant companies engage in predatory strategies. The competition law also applies to publicly-owned companies, but the deterrence effect of sanctions may be limited and there is a risk of political pressures being applied to reverse the competition authority's decision. Alternatively, privately-owned firms may refrain from competing fiercely because of the political risk associated with a state-owned company going bankrupt, and prefer to exploit their higher efficiency by allowing the government-owned company to be the price leader. Often the lower efficiency of government-owned companies has been related to their corporate governance not being focussed on profit maximisation and efficient operation (Box 2).[14] Nicoletti and Scarpetta (2003) have calculated that MFP growth in Norway could increase by as much as one percentage point per year over a 10-year period, if the level of public ownership is reduced to the average level prevailing in the OECD.

Box 2. Government ownership and its implications for corporate governance

Corporate governance in government-owned companies is complicated by a number of factors:

- A 100 per cent state-owned firm has no market value to provide constant and direct monitoring and performance evaluation. The market valuation of partly-privatized firms will be influenced by the constraints that governments are facing in the management of their shareholding.
- The monitor function of lenders to state-owned firms is reduced as loans may be either explicitly or considered to be implicitly guaranteed by the government. Additional financial support may arise from governments having lower demands on rates of return on invested capital as compared with private investors.
- Managers of state-owned firms are less likely to be dismissed for poor performance and are seldom remunerated for good performance, further reducing performance incentives.
- In addition to maximizing profits state-owned firms are likely to be expected to pursue additional objectives linked to public policies, such as regional and employment considerations, universal service obligations, *etc*. Furthermore, these objectives may change over time in ways which are not clearly defined and may be in conflict with each other.
- The number of participants in the oversight of state-owned companies -- boards, parliament, civil servants, ministers, *etc*. -- is larger than for privately owned companies and they do not necessarily have uniform or consistent goals.

14. An example of how other policy objectives are pursued is the March 2002 government announcement that board membership of state-owned enterprises should be at least 40 per cent female. Similar legislation is intended to be implemented for private companies in 2005.

14. Recognising the above problems, the government's white paper "A Reduced and Improved State Ownership" in spring 2002 proposes a general reduction in public ownership as a means to level the playing field and increasing market discipline in corporate governance. However, due to a lack of parliamentary consent, the government has been asked to proceed on an *ad hoc* basis.[15] Most publicly-owned companies are organised as limited companies as a measure to level the playing field vis-à-vis private companies, furthered by the recent abolition of explicit state guarantees for loans. The ownership control of most government-owned companies has been transferred from the ministries with regulatory responsibilities to the Ministry of Trade and Industry. This process should be completed to include the government-owned companies in sectors that are still only partially liberalised, such as railways and postal services. A further step to level the playing field is to introduce measures to improve corporate governance of government-owned companies.[16] However, only an extensive privatisation programme in the context of extensive regulatory reforms would solve the competition problems associated with publicly-owned companies.

V. Regulatory policies at the sectoral level

15. Regulatory policies for private service sectors vary in scope. Some sectors, such as retail distribution and professional services are inherently competitive. However, entry controls and self-regulation hamper competition, pointing to the necessity of a forceful implementation of, and the removal of exemptions from, the general competition law. On the other hand, network industries are characterised by "natural monopoly" segments, where competition is difficult to introduce. In these industries regulatory efforts should be directed to securing non-discriminatory access to the networks for third parties and opening potentially competitive segments to competition. International experience shows that gains from regulatory reform in network industries are potentially very large. In cases where concerns about supply reliability and insufficient network capacity have been raised, these problems have been related to the design of reforms and not to deregulation *per se*.

Retail distribution is highly concentrated

16. Retail distribution in Norway is characterised by a relatively high outlet density and by high concentration. Food retailing is dominated by four vertically integrated chains, with each chain having a network of medium sized shops across Norway and with individual chains often having a very strong position within local areas. Labour productivity is on a par with northern Europe, but still lagging best practices. In addition, the high level of labour costs has led to a relatively low level of value added per unit of labour costs as compared with other European countries (Table 2). The structure of retailing is a reflection of the relatively dispersed population. In food retailing, it is the result of a marked restructuring during the 1990s, transforming a sector of small independent shops into one dominated by four chains, including co-operatives and franchises, who tend to compete on similar parameters and on a relatively narrow range of goods (restricted by the limited shelf space). The restructuring of food retailing has increased efficiency in the sector, which tends to improve consumer welfare through lower prices. Yet, consumer welfare may be undermined by the lack of choice, due to the absence of both small independent shops and also of large-scale shops. The lack of large-scale operations also means that potential efficiency

15. The parliament did not endorse the white paper's proposal of reducing state-ownership in general or the proposal to concentrate state-ownership in sectors where such ownership can be an instrument in achieving particular policy goals or be a sensible investment of the state's savings. Instead, the parliament directed the government to improve management of state-owned companies and pursue industrial policy objectives. The parliament has also asked for an assessment of the benefits of transferring ownership to holding companies with a committee expected to report in March 2004.

16. Some measures are in place to counter such problems, such as rules that prevent civil servants and members of parliament from being board members of state-owned companies and that require a clear statement of non-commercial goals with transparent monitoring and reporting requirements. For a more extensive discussion see OECD (2003*d*).

gains are not realised. However, obtaining such consumer welfare gains is difficult as long as regional policies discourage concentrations of population and large commercial developments.

Table 2. Key structural features of the retail distribution sector, 2000

	Outlet density[1]	Employees per enterprise	Value added per employed person[2]	Value added per unit of labour costs[2]	Concentration in food retail[3]
Austria	43	7.7	109	98	45
Belgium	80	3.5	109	95	48
Denmark	47	8.1	103	99	52
Finland	46	5.0	132	110	69
France	64	4.2	134	104	31
Germany	35	9.0	113	116	30
Ireland	36	9.3	95		52
Italy	130	2.2	82	72	9
Netherlands	54	8.5	80	117	41
Portugal	150	2.5	43	81	46
Spain	133	2.8	74	97	23
Sweden	65	4.3	130	88	60
United Kingdom	36	14.2	99	124	41
European Union	71	6.3	100	100	
European Union, excluding Italy, Portugal and Spain	70	7.4	111	106	
Norway	**68**	**6.0**	**112**	**98**	**86**
Switzerland	56	6.8	91		81

1. Number of enterprises per 10 000 inhabitants.
2. EU = 100.
3. Market shares of the three largest firms based on 1996 sales.
Sources: Eurostat, New Cronos.

17. There are several indications of reduced competition in the sector. As mentioned above the experience with the recent VAT reduction indicates that market power is being exercised. The high concentration has induced the competition authorities to signal that further consolidation of the sector would not be tolerated -- unfortunately such signals also blunt incentives for intense competition as they rule out successful strategies for taking over competitors. In addition, the restructuring was in part brought about by a permissive attitude of granting exemptions from the competition law to franchises and co-operatives (OECD, 2003*d*). The NCA's price surveys reveal homogenous prices across the country within each chain, which is surprising given that transport costs and geographical differences in markets would normally give rise to significant price variation.[17] A lack of competition arising from tacit collusion or resale price maintenance could explain such homogenous prices. In addition, the high degree of vertical integration facilitates foreclosure of new entry along the product chain. Access to foreign suppliers can be a problem, particularly for new entrants, as imported food quotas are distributed according to historical market share. These problems are further accentuated by the high concentration in the food production industry and in agriculture (see Box 3).

17. In a throwback to the era when it was the Price Directorate, the NCA still issues survey reports about retail supermarket prices. The process might encourage competition among the small number of national chains—but it may inform the competitors, too, about how close they are to the industry consensus.

Box 3. Organisation of the dairy market in Norway

Strategies of preventing new entry (market foreclosure) are an issue not only in the retail sector. For example, in the dairy product market, government regulation has charged the dominant cooperative Tine AB -- a vertically integrated producer, distributor and exporter of dairy products -- with the role of maintaining the Ministry's target price for milk products.[1] Combined with a system of compensation payments, the target price has effectively become a maximum price and gives strong incentives for members of the cooperative to maintain their relationship with Tine AB (Konkurransetilsynet, 2003). To enable new entry into the dairy market small-scale producers can (since mid-2003) opt out of the quota system and the cooperative is under the obligation to deliver milk to other dairy producers, but only up to a quota limit.[2] While these measures have the potential to increase competition and establish alternative sources of supply, then they also contain an element of market foreclosure because of the dairy industry's substantial economies of scale in collecting, processing and distributing milk. The market foreclosure effects are reinforced by the high tariffs on imported milk. The import tariff is suggested to be made dependent on the price in the domestic market to allow import of milk when domestic production does not suffice to meet demand. However, given existing economies of scale and the importance of timely deliveries in this sector, foreign milk can only effectively compete if imported under long-term contracts. At the same time, the compensation payments imply a transfer from high to low productive units, which with the lack of competition from foreign milk means that there are no incentives to improve efficiency. On this background, it is perhaps not surprising that Strand and Aas (2001) can demonstrate that contrary to the developments in many other countries the price-margins of dairy products in Norway have not declined over the long-term -- an indication of a lack of competition. This is further underpinned by the finding of the Danish competition authority that the Norwegian (whole) milk pre-tax price in 2001 was about 40 per cent higher than the average pre-tax price in other North European countries -- reducing consumer welfare by about NOK 1 billion per year. Brunstad (2001) estimates that the cost to the economy is about NOK 2½ billion per year or about 22 per cent of value added in the sector. The Norwegian milk support system has the additional objectives of income distribution, landscape preservation, and the maintenance of regional economic activity. Within a liberalised dairy product market, such objectives could be pursued by policies that directly target such outcomes.

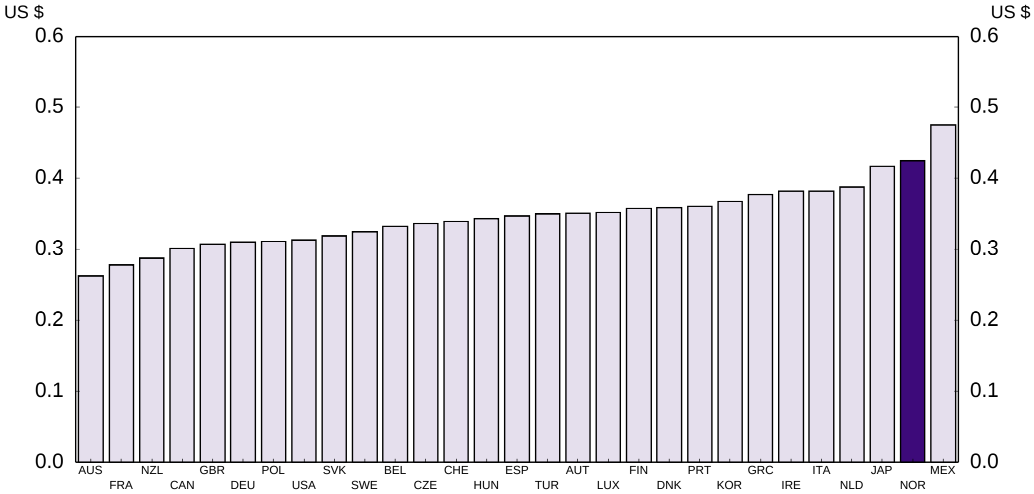
1. Other parts of the food industry also have high concentration and with the market leader having a regulatory role. The resulting high prices have led to border trade with for example meat products accounting for a substantial part of overall border trade. Finansdepartementet (2003*a*).

2. New regulation entered into force 1 January 2004, which set out increased quota limits. There is no limited quota for milk per year to be used as input into other dairy products, while the delivery obligation for milk designated for final consumption is only to secure the milk deliveries promised by the outsider's own suppliers. For new entry, Tine AB is obliged to deliver a maximum of 15 million litres of milk per year for three years. Beyond the limit of 15 million litres, own supplies of milk are required to release further deliveries from Tine BA, amounting to twice the volume of own supplies. The Ministry of Agriculture has proposed to significantly increase these quotas as well as introduce other reforms in 2005.

18. Outside food retailing, there are also signs of competition problems in the retail market for gasoline, which is dominated by a few chains. Empirical studies indicate that the regional variation in gasoline prices is mostly a function of the existence of neighbouring competitors and that transport costs play little role (Konkurransetilsynet, 2001). Moreover, according to IEA statistics, pre-tax prices for gasoline are among the highest in the OECD area (Figure 8). This indicates that either competitive pressure is not sufficiently strong to secure efficiency or a rent is being obtained.[18]

18 . Two of the largest chains in the Norwegian market are partly owned by the government (Statoil Detaljhandel and HydroTexaco) and they have been fined in Sweden for participating in a price cartel (Konkurrensverket, 2003).

Figure 8. Pre-tax prices for gasoline in an international perspective, Q3 2003[1]
US dollars per litre of unleaded gasoline



1. Or latest available.
Source: IEA, Energy prices and taxes (2003).

19. Framework regulation tends to reduce competitive pressure in the retail sector. Earlier zoning laws were interpreted as a ban on establishing shops larger than 3000 m^2. Still, new entrants in the food and gasoline retailing sectors have been denied permits by local authorities for ostensibly environmental reasons, such as visual attractiveness. This may mask the influence of local incumbents' interests. Shop opening hours have been partially liberalised and shops are allowed to choose their own opening hours during weekdays, while only smaller shops are allowed to remain open on Sundays. Special and more restrictive opening hour rules are in place for the government-owned Vinmonopolet, which has a monopoly on sales of alcoholic beverages (Box 4). As in other countries, only pharmacies are allowed sell prescription drugs, but there has been a recent partial liberalisation of sales of non-prescription drugs.

20. The variety of entry problems indicates that efforts to further enhance competition in retailing must rely on a multi-pronged pro-active strategy, involving enforcement (including leniency programmes to counter collusion), abolishing agricultural trade barriers, removing (self) regulatory responsibilities that enable market foreclosure, and a revision of the licence requirements for establishing large shopping centres outside densely populated areas. Furthermore, consumer welfare could be increased by allowing shops to exploit economies of scope in terms of selling a greater range

Box.4. Vinmonopolet and the market for alcohol in Norway

The government operates a retail monopoly for sales of alcoholic beverages – Vinmonopolet -- for public health reasons. The market for import and wholesales was liberalised in 1996 and has led to the entry of about 90 wholesalers. However, competition in the wholesale market remains limited. The Vinmonopolet has monopsony power as other importers and wholesalers can sell only to it or the much less important restaurant and hotel segment. Moreover, the law stipulates that wholesalers must deliver -- at uniform prices -- to all shops and warehouses owned by the Vinmonopolet, effectively amounting to entry-preventing price discrimination since transportation costs differ. The retailer's price policy -- consisting of a fixed charge and a mark-up with an upper limit to cover costs -- and a legal ban on promotional offers and discounts on alcoholic beverages prevent the use of strategies for promoting new products or clearing unwanted stocks. The latter leads to a demand for frequent deliveries of small quantities, increasing costs and further hampering new entry. Also the Vinmonopolet's selection process of products, including testing backlogs of two years, has a negative effect on new entry. Non-selected products can still be sold through a so-called ordering list. However, the list is not an attractive marketing device as the associated distribution costs can be high as ordering list products are sold in relatively small quantities and on an infrequent basis.

Since early 2003, the monopoly has come under increasing pressures as an EFTA court ruling led to the liberalisation of sales of alcoholic beverages with less than 4.76 per cent alcohol and as EU rules have required the other Nordic countries to remove import limits for private import of alcohol, inducing the countries to lower alcohol taxation to avoid an increase in cross-border sales. The latter is also a problem in Norway, where the high price differentials for liquor -- estimated to be three times the EU averages and some 10-40 per cent higher than in Sweden, combined with their transportability, have induced Norwegians to cover half of their liquor consumption through private imports or illegal activities. Increasing border trade leads to tax revenue losses and blunts the effectiveness of controlling alcohol consumption through the state-owned monopoly. In other OECD countries, the main instruments for controlling the availability of alcohol -- taxation, location, opening hours, age limits and right of refusal to serve -- are compatible with retail competition.

Sources: OECD (2004), Norwegian Competition Authority (1995), Lavik (2003), Finansdepartementet (2003).

of goods -- as with the recently implemented liberalisation of selling non-prescriptive drugs -- to other goods, such as alcoholic beverages. Such a liberalisation would also allow new entrants to use a wider range of items for promotional purposes, expanding possible marketing strategies and thus ease entry. An additional measure to increase competition in the retail sector could be to review Norway Post's high administrative charges for VAT handling for goods purchased over the Internet (see below).

Professional services are being exposed to more competition

21. Professional services are subject to the Norwegian Competition Act. At the same time, the NCA recognises that the self-regulation of these services to maintain professional standards in terms of educational requirements and codes of conduct is important to reduce asymmetric information problems vis-à-vis clients. Anti-competitive measures, such as restraint of entry or price collusion, are only allowed if an explicit exemption has been granted. The NCA has been active in promoting competition in professional services, such as lawyers, accountants, engineers, and architects by repealing association rules concerning size and application of fees and ethical rules restraining competition, such as with respect to advertisement. Nevertheless, a recent report (NOU, 2002) has highlighted additional problems in the area of legal services. Ownership restrictions remain in place, such as a ban on cross-ownership and a requirement that law firms must be owned by lawyers with a Norwegian degree (effectively preventing foreign ownership), hampering mergers in the professional services sector.[19] In terms of marketing, there are no general restrictions. However, the bar association's ethical rules prevent lawyers from describing themselves as specialists and stipulate that pricing practises should inform clients about the hourly charge,

19. For example a law firm may hire accountants, but a merger between an accounting and a legal firm is not possible.

although an estimate of the full cost of legal advice could be more useful to a consumer. Thus, more could be done to promote competition in self-regulated professions.

Network industries are characterised by public ownership and high concentration

22. Network industries (*i.e.* electricity, gas, water, transport and communications) account for a bit less than 9 per cent of employment and about 11½ per cent of value added. Thus, not only is the performance in these sectors important for enhancing consumer welfare, but it can also have a significant impact on overall economic performance. There is now a solid body of cross-country evidence that liberalisation policies in network industries have led to higher productivity, better quality and, often, lower prices.[20] However, capturing these benefits is not straightforward and close attention needs to be paid to the design of reforms (Gonenc *et al.*, 2000). Apart from being a frontrunner in the liberalisation of the electricity sector, Norway has mostly been following EU deregulation programmes.

The successful liberalisation of the electricity market should be secured by additional measures

23. The liberalisation of the Norwegian electricity market and the subsequent development of a Pan-Nordic electricity market during the 1990s yielded considerable benefits for consumers as prices fell to some of the lowest levels in the OECD area (Box 5). In addition, the substantial excess generation capacity that was prevailing in the early 1990s as the result of previous over-investments in hydro-power plants has been gradually removed as demand -- in response to the lower prices -- has grown faster than capacity (Figure 9).[21] Moreover, the liberalisation and subsequent integration of the Norwegian electricity market into the Pan Nordic electricity market largely removed national operators' market power in individual markets outside peak load periods despite existing entry barriers and increasing concentration (Bergman, 2002). However, very high prices were observed in the very cold winter 2002/3 as low precipitation in 2002 had reduced available hydro-power resources -- a weather pattern that was shared with Sweden, the other major hydro-electric producer in the Nordic countries. Subsequently, prices declined but not to their prior level, indicating a more permanent increase in capacity utilisation. Adding to the problem is the planned phasing out of Swedish nuclear power plants. A more permanent increase in capacity utilisation is likely to increase the incidences of peak loads, which without countervailing measures may expand the possibilities for exercising market power.[22]

20. See OECD (2001) which reviews the literature and adds evidence on the relationship between regulation and performance in these sectors. In addition, the OECD Reviews of Regulatory Reform constitute a rich source of information on the effects of industry-specific reforms on performance.

21. Maintaining a certain degree of excess capacity may be socially beneficial as a measure to reduce supply and price risks, but the cost of doing so becomes excessive unless the market price structure reflects the society's preference for security of supply (Newbery, 2002). For an overview of the liberalisation process, see IEA (2001).

22. Currently an option based system is in place to secure peak load capacity either by calling in contracts on additional capacity or making very large consumers cease consumption. However, if demand continues to grow without corresponding expansions of generating capacity, the incidence of full peak load capacity utilisation will increase and thus raise the cost of buying reserve capacity (Nilssen and Walther, 2002).

Box 5. The Norwegian and Nordic electricity markets

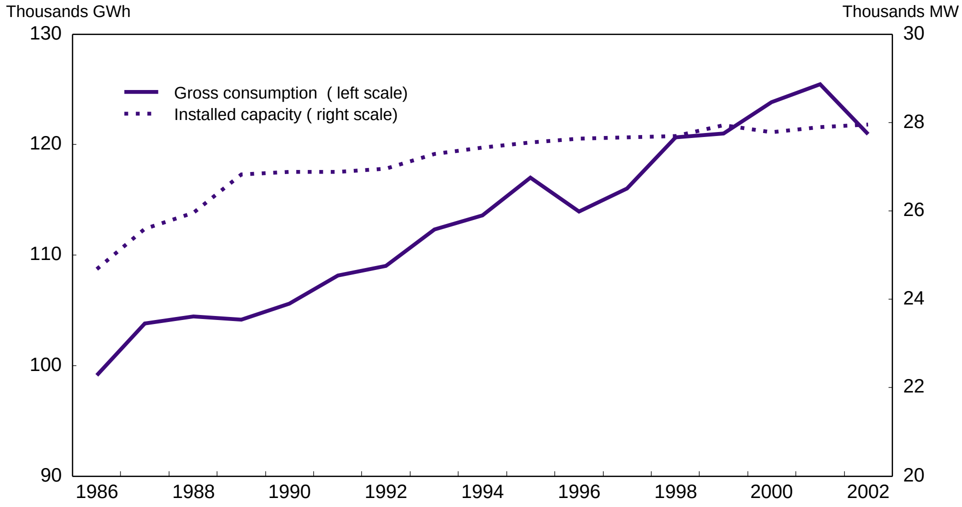
The Nordic electricity market is one of the major European markets, only surpassed by Germany and France. This is mostly explained by a prevalence of energy-intensive industries and the importance of electrical heating in Norway, Sweden and Finland. Compared with the EU average, per capita electricity consumption in Norway is about four times higher and in Sweden and Finland about twice as high. As a result, electricity expenditures for high volume consumers are relatively high, constituting between 4 and 10 per cent of total production costs and household expenditures.

Almost all Norwegian electricity comes from hydro-power plants, which are flexible enough to provide both base and peak load. However, due to relatively large variations in precipitation – with generation being up to 40 per cent higher in wet years as compared with dry years -- import and export of electricity can vary substantially from year to year. As a result the Norwegian inter-connector capacity is -- at around 20 per cent of peak demand – fairly high, although internal congestion problems often lower available capacity. Most of the hydro-power generators were constructed before 1990. Hydro-power capacity can be expanded by up to 10 per cent by upgrading and extending existing hydropower plants (including the transfer of water resources), according to the Norwegian Water Resources and Energy Directorate (NVE). However, the concession rules act as a barrier for private investment in existing hydro-power plants as private concessions (defined as companies with a private shareholding of more than one third) are limited to 60 years from the day production commences, while the duration of public concessions is unlimited. A committee is currently reviewing this particular legislation. Moreover, for environmental reasons it is very difficult to get permission to develop new hydropower plants. Permission has been given to develop privately owned natural gas generators, but electricity prices are apparently too low to make them commercially viable.

Since the liberalisation began in 1991 – a process well ahead of similar EU reforms -- and with the subsequent integration of the Nordic electricity markets, there has been a considerable degree of structural change and increased concentration, particularly in generation, in the Norwegian electricity market, as companies strived to achieve at least minimum efficiency size. However, the consolidation has also led to a market dominated by the state-owned Statkraft – producing more than a third of all electricity in 2001 -- while other generators are considerably smaller and mostly owned by municipalities. Statkraft's dominance is magnified by its substantial shareholdings in other electricity utilities, leading the NCA to block recent merger proposals (Nordic Competition Authorities, 2003). The sector is regulated by the Norwegian Water Resources and Energy Directorate, but its multiple functions – including economic regulation and technical planning – may conflict with the objective of promoting competition in the sector. Moreover, its independence is limited by the agency being subordinate to the Ministry of Petroleum and Energy. The latter is also the appellate body for decisions made by the regulator.

Around half of the about 300 utilities are also engaged in distribution and retailing with accounting and management separation between monopoly and competitive activities (IEA, 2001). The transmission system operator – Statnett – is a publicly-owned company. Both Statnett and the distribution companies operate under an income gap regulation (a hybrid of RPI-X and rate of return regulation). All tariffs are set by the grid companies and should be cost reflective in accordance with NVE regulation. Tariff disagreements may be complained to the NVE. The cost of accessing the grid is rather low as compared with other countries. The final balancing is undertaken by so-called "balance responsible" parties, comprising generators and large consumers. In addition, Statnett is purchasing options from these parties to use generating capacity and/or curtail demand during peak hours – with the increasing use of the latter option being a new development (Nilsson and Walther, 2001). Due to transmission capacity limitations, the Nordic market is at times divided into different price areas. Norway is further divided into regional price areas, of which there are normally two but even more during periods with high capacity utilisation. Such effects can be significant -- for example only during half of 2001 could the Nordic region be considered as a one price area. In Norway there was an average 8 per cent price difference between highest and lowest area price in June 2003 and similar sized difference between the highest Norwegian area price and Swedish prices during the spring of 2003 (Bergman, 2002).

Figure 9. Electricity, consumption and production capacity



Source: Norwegian Water Resources and Energy Directorate (NVE).

24. Market power can be limited through focussing merger control on competition issues (see Box 1), increasing generation capacity and by expanding interconnection capacity within Norway and to other countries.[23] The latter measure should be fairly simple to implement as the interconnectors are owned by the Nordic transmission system operators. Within Norway the income cap regulation in place does not provide sufficient investment incentives to secure an optimal interconnection capacity, pointing to the need for basing such investment decisions on cost-benefit analysis in the absence of market based incentives.[24] Expansion of interconnection capacity would also to some degree address security of supply concerns. Generation capacity can be increased through new private entry, although private investment in generation is effectively prevented by the asymmetric concession rules and environmental concerns. This also has negative spill-over effects on consolidation efforts in the upstream part of the sector. Equalising concession rules for private and public investors enhances market based incentives for investing in upgrading hydro-power turbines as well for achieving at least minimum efficient size in the upstream part of the sector. An additional measure to secure the continued expansion of generation capacity is to remove restrictions on type of generators and address environmental concerns through taxes or other market-based instruments.[25]

25. The sector is characterised by the widespread local government ownership. Accounting separation is currently used to prevent cross-subsidisation between monopoly and competitive activities,

23. A merger between hydro-power companies increases the possibility to exercise market power through hydro-power's ability to satisfy peak load demand. In addition, parliament has provided NOK 16 billion to Statkraft in equity, loans and guarantees, allowing the company to pursue an aggressive merger strategy.

24. Each of the participating countries in Nordic Market have their own transmission system operator, pointing to the need for replacing the current bilateral agreements on operations with the establishment of a single operator for the whole market to secure that interconnector capacity is developed in line with market developments.

25. The effects of the restrictions on choice of technology are currently probably rather small as three licenses for gas-powered generators have been granted but no investment has taken place due to the current low prices. A number of small hydro-power plants are in the pipeline, although because of their limited capacity during winter peak seasons, they are unlikely to be effective in meeting peak load demand.

although in merged firms legal separation is required. Due to the subjective nature of cost allocation and the problems of asymmetric information, separation through legal or ownership unbundling requirement would be more effective and should be in place prior to any privatisations.[26] Government ownership in itself gives raise to a risk of inefficiencies in the management and investment decisions. An additional problem is that the regulator's multiple and complex functions detract its attention from promoting competition. For reform to become effective and to avoid a conflict between the regulatory role and government ownership, it is necessary that the regulator become independent of both industry and government. An additional step in such a reform should be the establishment of an independent appellate body to replace the current arrangement where appeals have to be lodged with the Ministry.

The emergence of a competitive telecommunications market is slowed by the publicly-owned incumbent

26. The 1998 liberalisation of the Norwegian telecommunications market was somewhat behind similar developments in the other Nordic countries. The government owns about two-thirds of all shares in the incumbent -- Telenor -- although the parliament has approved a further reduction to 51 per cent and is requiring the government to retain majority ownership. With the new electronic communication law in July 2003, telecommunications regulation remains in conformity with the EU telecommunications framework. However, regulatory action in telecommunications has been slow. The telecommunications regulator decided in spring 2001 that Telenor's accounting separation was not sufficiently effective and recommended additional measures, but subsequent appeals to the relevant ministry led the confirmation of the decision to be postponed by more than two years. Even if it is only the perception that the delay is motivated by a desire to protect the incumbent's interests, this underscores again the need for an independent appellate body and the need for separating the government's role as an owner and as a regulator. The market structure remains highly concentrated, particularly in the mobile phone segment, where the incumbent's mobile phone service provider and one private provider have about 90 per cent of the market. The latter has recently become subject to cost-based regulation of its termination charges as the regulator ruled that it is possessing significant market power (SMP). Concentration in the mobile phone market is likely to fall as the three UMTS licensees commence operations, although the third license was only issued in October 2003. An international comparison of telecommunications prices indicates that prices for business users are among the lowest in the OECD area, which is in contrast with the relatively high prices for household users and mobile phone services (Figure 10).

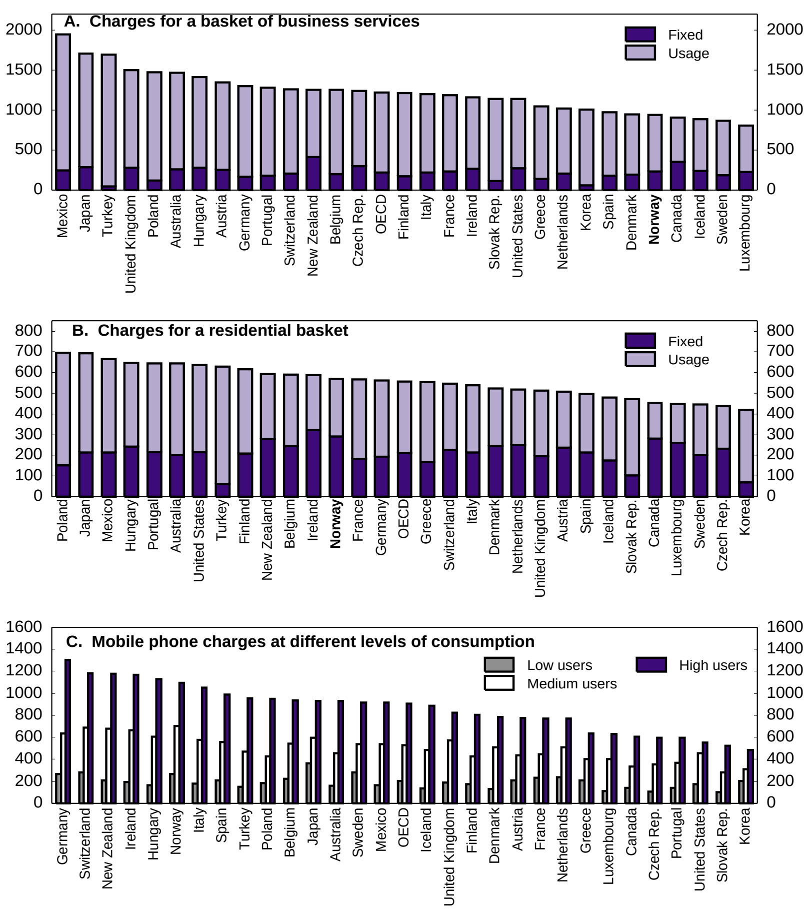
27. As in other telecommunications markets that are being liberalised, the key regulatory problem in Norway is assuring third party access to networks, and in particular ensuring non-discriminatory interconnection charges. Charges in Norway are currently set to cover the historical cost of constructing the telecommunications network (based on a historic Fully Distributed Cost Model).[27] The FDC model yields higher interconnection charges than the LRIC model preferred in the EU, which bases the charges on incremental costs, thus making it a more disadvantageous system for new entrants. Interconnection charges vary with distance with the highest charge being about three times higher than the lowest, yet marginal cost in telecommunications typically is a function of network capacity utilisation and largely independent of distance. Indeed, the incumbent has introduced a single price for all fixed line calls in Norway with the only variation arising from peak and off-peak time calls, which implies that there is little capacity restraint in the digital network, indicating trivial cost differences between local and long-distance

26. Other members of the Nordic electricity markets -- Finland and Sweden -- require legal separation and with the latter even requiring legal unbundling of distribution companies into a network company and a supply company.

27. Moen and Riis (2003) have even argued that as much of the historical cost was financed by the government, the incumbent should only be compensated for its own investment, *i.e.* investment costs since 1994 -- when the incumbent was incorporated.

calls.[28] Combining this with the distance related interconnection charges means that new entrants in the long-distance market could be subject to a price squeeze and placed at a disadvantage relative to the incumbent. In the mobile phone segment, termination charges in Norway are fairly low as compared with the EU countries, although some EU countries (such as the United Kingdom and France) are implementing regulation that will cut current termination charges by almost half over the coming couple of years. Nevertheless, termination charges for calls to mobile networks are amounting to as much as more than two-thirds of the pre-VAT telephony cost, pointing to the need for continued regulatory attention to this area with little competitive pressures.[29]

Figure 10. Telecommunication prices in the OECD
US dollars, August 2003



Note: Composite basket that includes international calls and calls to mobile networks.
Source: OECD.

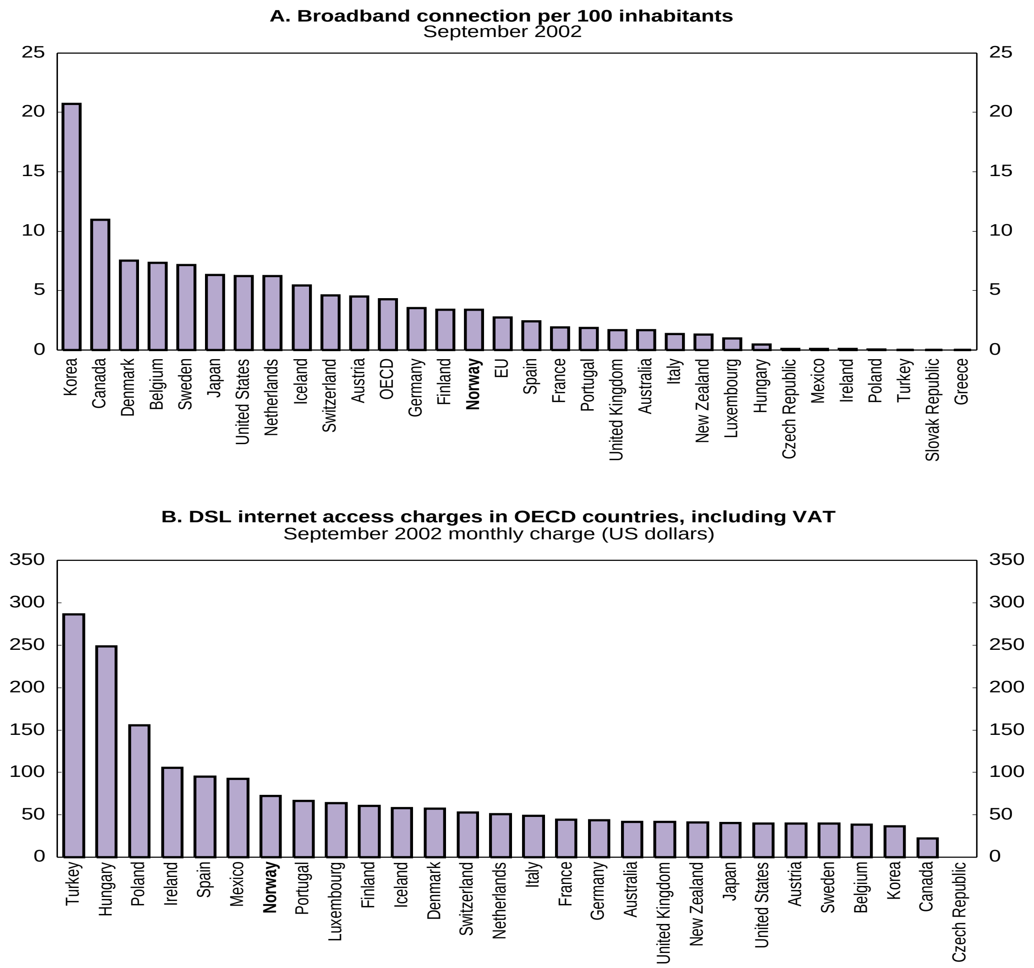
28. The government has ambitious objectives with respect to broadband coverage as outlined in its 2003 White Paper. Such objectives are most effectively pursued by a market based strategy focussing on

28. Many other EU countries have retained a system with multiple areas as well as peak and off-peak price differentiation on the grounds that the marginal cost of telephony increases with capacity utilisation.

29. The lack of competitive pressures stem from the fact that the calling party has little option, while the receiving party (the subscriber) is only concerned in so far as termination charges have a deterrent effect on the calling party.

introducing competition between networks. However, the incumbent (Telenor) is the proprietor of most alternative networks in Norway. In addition to the local loop, the incumbent (Telenor) controls other communication networks, including the national radio and television broadcasting networks, cable-TV

Figure 11. Broadband penetration and user charges in OECD countries



Notes : Commercial ADSL service was not available in the Czech Republic, Greece and the Slovak Republic. Modem rentals, where applicable, are excluded as in most countries these can be purchased by users.
Source: OECD.

networks, satellite and mobile telephony networks (Moen and Riis, 2003). These networks are potential competing networks for telephony services with for example almost half of all households being physically close to a cable-TV network, but such competition is unlikely to emerge as long as the networks remain under common ownership. Moreover, the incentives for accelerating the roll-out of broadband connections are reduced by Telenor's ownership of alternative technologies. For example, the incumbent has a relatively large number of ISDN (Integrated Services Digital Network) connections, lessening incentives for investing in faster broadband technologies like DSL (Digital Subscriber Lines).[30] In order to exploit

30. Spiller and Ulset (2003) directly link the slow roll-out of DSL with Telenor's previous large investment in the slower ISDN technology, leaving room for the main competitor (NextGen Tel) to exploit the new DSL market segment.

existing ISDN connections, charges for DSL are relatively high, explaining the relatively slow roll-out of broadband (Figure 11). Indeed, OECD (2003*e*) points out that private operators have been quicker in rolling out broadband networks and offering faster connections. Such rivalry requires the horizontal separation of networks, implying that Telenor should divest its networks (Norwegian Government, 2003).

The liberalisation of the postal market could be accelerated

29. The monopoly rights of Norway Post for postal services -- granted to finance universal service obligations -- were reduced in mid-2003 to delivering letters less than 100 grams (Norway Post, 2002). However, such a financing scheme provides no direct link between associated costs and compensation and is often a high-cost solution. The provision of universal service obligations should be evaluated in terms of the cost of provision and the benefits of a nation-wide network.[31] In Sweden and New Zealand, for example, the benefits of owning nation-wide networks (in terms of for example brand recognition) are considered to be larger than the associated costs of universal service obligation and the incumbents receive no compensation for performing such obligations. If the net cost is positive, the compensation should take the form of a fiscal transfer from the government, ensuring that no cross-subsidisation arises from servicing marginal areas and levelling the playing field vis-à-vis competitors. Dynamic efficiency could be pursued -- as in the domestic air transport sector -- through competitive tendering for the public service obligation. Such cost-benefit considerations should be extended to other services provided by Norway Post (Box 6).

Box 6. Norway Post and purchases over the Internet

The Norwegian postal market is being liberalised in line with EU directives. A number of EU members have moved more decisively than stipulated in the relevant EU directive by lowering the monopoly rights well ahead of the timetable in the directives, while Norway Post (the publicly-owned incumbent) was allowed to maintain monopoly rights for letters less than 350 grams until mid-2003. Furthermore, it is expected that in line with the EU deregulation programme for postal services the monopoly rights will be reduced to 50 grams by 2006 and completely abolished by 2009. As part of the liberalisation process, Norway Post was incorporated in mid-2002 under the responsibility of the Ministry of Transport and Communication.

Norway Post is also providing customs clearance service in connection with VAT payments for goods purchased abroad through postal-order catalogues and the Internet. The company is allowed to charge NOK 120 for goods with a value above NOK 200 (unless the purchase is destined to be a gift, in which case the limit is NOK 1000). For goods of a lesser value, customers are allowed to do the registration directly over the Internet with the tax authorities, but nevertheless Norway Post charges NOK 50. The charge is supposedly cost-based, although the recent introduction of commercial accounting rules makes this difficult to verify. In some other countries, the charge is lower (equivalent to NOK 61 in Denmark and NOK 115 in Sweden). Other countries, such as France and Germany, have no charge, but ensure VAT compliance through spot checks by the tax authorities on the premises of the postal providers. When charges are not cost based they can act as a barrier to entry and inhibit consumer welfare. An additional concern is whether -- in a thinly populated country like Norway -- the cost evaluation should include the benefit of promoting competition in the retail sector.

There has been slow progress in opening up the transport sector

30. Between 1993 and 1997 the air traffic market was liberalised. However, the liberalisation process eventually led to the partly government-owned SAS taking over its only competitor (Box 7). The competition authority has been trying to introduce more competition in the *domestic air transport sector*, principally by banning the use of frequent flyer programmes on domestic routes (constituting asymmetric

31. Post Norge is exploiting its network to provide private services, such as the selling of mobile phone subscriptions.

regulation as the ban is only applied to SAS).[32] A recent development is the entry of a new competitor, which got off to a flying start by obtaining a large customer contract with the central government. However, since its initial break-through the company has not been able to make further inroad into the important large customer contract market segment and it remains unclear whether the new entrant has obtained sufficiently high load-factors to secure long-term survival. However, additional measures can be taken to ease new entry into the domestic air transport market. New entry is hampered by the high cost of using government-owned infrastructures and by the incumbent SAS being able to dominate the market for routes with universal service obligations (see below). Moreover, the liberalisation process has only to a limited extent included effects of Scandinavia effectively being served by the incumbent SAS as one integrated air transport market, requiring a combined regulatory effort of the involved countries' competition authorities.

Box 7. Initial experiences with more competition in air transport

The initial attempts to open domestic air transport for competition led to a semi-public monopoly. The liberalisation of domestic air travel for Norwegian operators in the mid-1990s induced the two incumbent service providers to compete on expanding capacity but not on price, except on restricted discount tickets which were not attractive for the important business traveller segment (Steen and Sørgard, 2002). The consequent increase in capacity was not matched by a similar increase in passengers. In 1997-98 the market was opened to foreign operators and there was an expansion of slot capacity through the opening of a new main airport in Oslo. Capacity competition continued and the only new entrant was forced out after about one year. Subsequently, capacity was reduced in an apparently concerted manner at the same time as large customer contracts increased in scope, which again arguably increased full fare prices.[33] During the second half of 2001, SAS (with a combined 50 per cent shareholding by the Swedish, Danish and Norwegian governments) was allowed to take over the private service provider (Braathens), which was effectively bankrupt. The Norwegian Competition Authority invoked the "failing firm" doctrine to permit the acquisition; that is, because Braathens was going out of business in any event, allowing SAS to become a monopolist by purchasing its competitor would not change the market situation. The merger demonstrates why the "failed firm" argument is contentious, as it can permit a transaction that leads to adverse effects on competition and consumer welfare. Both the unions and the two airline companies were strongly in favour of permitting the merger, because it allowed the employees to keep their seniority based salaries and career paths, maintained some value (about NOK 1 billion) for the owners of Braathens and ensured for SAS that no new entry took place via a purchase of the bankrupt competitor. In September 2002, a new entrant came into the market, operating domestic and inter-Scandinavian routes, as well as some other international destinations typically served by charter companies.

The Scandinavian market is integrated through SAS's dominant position and the company's operation of a "spoke-hub-spoke" system, where intra-Scandinavian travellers are fed into the larger international airports in Scandinavia for transfer to international routes. SAS's dominance of the three segments of the Scandinavian market may allow the company to cross-subsidise loss-making activities in one segment with profits obtained in other segments. During the liberalisation of the Norwegian domestic air transport market the strategies applied by SAS might be described as being part of an anti-competitive predatory strategy, or at least leading to the outcome that predatory behaviour is seeking. The company has in other instances been engaged in anti-competitive actions, such as operating a price cartel with a privately-owned carrier on the important Copenhagen – Stockholm route, leading to a combined EU fine of about EUR 50 million in 2001.

31. Since 2000, there has been new entry into the regional market of some 50 routes with public service obligation for serving regional airports. The market continues to be dominated by a SAS owned company Widerøe -- the sole Scandinavian owner of aircraft that fulfil the narrowly specified service

32. Frequent flyer programmes are considered to increase prices for non-members and lead to undesirable lock-in effects, thereby hampering new entry.

33. Large customer contracts are entered between the carriers and larger firms, specifying a percentage reduction of the full price ticket for large volume of tickets. Such "all-or-nothing" contracts mandate secrecy conditions for the involved parties, but the repeated nature of contracts in combination with intense rivalry typically leads to increasing discounts over time.

quality standards and the STOL (Short Take Off and Landing) criterion required on many of the routes.[34] Competition has been introduced in the form of tenders. However, the three-year contracts contain a one year withdrawal clause. This *de facto* renegotiation of contracts is considered to benefit Widerøe, which has the capacity and experience to adopt schedules to allow for repeated bidding for new and for cancelled contracts, introducing incentives for strategic bidding.[35] Competitors have complained that Widerøe is engaged in predatory bidding by submitting low bids for potentially competitive routes (involving airports with longer runways) and high bids for routes where its aircraft fleet provides a comparative advantage.[36] [37] Furthermore, the relative shortness of the tender contracts -- in line with EU regulations -- may hinder new entry, which is discouraged by the inability to cover fixed costs of establishing services.[38] Measures to undermine the incumbent's dominant position should include a relaxation of the service standards to only specify the required service in terms of seat volume per relevant time period, opening up for the utilisation of other types of aircrafts. Moreover, to avoid strategic tender bidding a contract holder that has used the withdrawal clause should be excluded from bidding for the vacant contract.

32. Successfully introducing competition in the domestic air transport market also requires measures on the infrastructure side. The government-owned company Avinor is the proprietor and operator of 17 main and 28 regional airports across the country, of which only three produced a surplus in 2002.[39] The company is self-financing with the exception of a government subsidy of NOK 250 million for the regional airports. About 75 per cent of its revenue comes from geographically uniform aeronautical and airport handling charges (fixed by the Ministry of Transport and Communication) and the remaining from sale of services. Since cost structures vary across the network, the uniform charges imply a large element of cross-subsidisation. In addition, there used to be another cross-subsidy from profitable to non-profitable airports, amounting to some NOK 340 million in 2002. But from 2003 onwards the deficits of regional airports are financed by the central government. A cost-benefit analysis of ten regional airports concluded that all of them were clearly or most likely unprofitable. Maintaining operation of such airports with the current subsidisation system increases airport charges and thus hampers new entry. However, a proposal to close three of the airports was opposed by the parliament (OECD, 2003*d*). In addition, the subsidisation raises efficiency concerns in the absence of incentives to improve operations. Resource allocation could be improved by combining the tendering system for PSO services with making the airports independent, preferable through privatisation. The latter would give airports incentives to compete in the provision of

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34. These standards -- set individually for each route -- include seat capacities on planes, minimum frequencies, maximum fares, non-stop flight requirements, *etc*. The only aircraft with STOL capabilities that fulfil all the criteria is a De Havilland Dash 8 with a non-standard high-power turboprop engine, which apparently is no longer produced.

35. Such clauses may reduce the cost risks for service providers, potentially leading to higher bids for the tenders.

36. Until 1998 Widerøe ran all domestic routes with a government subsidy. Between 1998 and 2000, Widerøe won all tendering contracts, while the claims of predatory bidding stems from the second tendering period 2001-2003.

37. See DAFFE/COMP/WP2/WD(2003)13 – Roundtable on Non-Commercial Service Obligations and Liberalisation – Norway.

38. The relevant EU regulation is The Council Regulation (EEC) No. 2408/92 on access for Community Air Carriers to Intra-Community Air Services article 4, which stipulates that contract terms shall not exceed three years.

39. Even the main airports tend to be fairly small in an international context, with only four of them having a passenger volume larger than 1 million passengers per year. Moreover, with 45 airports Norway appears well-endowed with airports when compared with the 47 airports in Sweden (which is larger both in geographical and population terms) and the 22 airports in somewhat smaller Finland.

services, lowering entry costs and thus stimulating new entry in air transport services.[40] In addition, a market based system for slot allocation would further improve resource allocation.

33. The first step to liberalise *railway transportation* was taken in the mid-1990s, when the incumbent railway company was split into a service provider (NSB) and a track owner, both fully owned by the government. At the same time, a regulatory authority was established, although it is mostly pre-occupied with technical regulation. Currently, the market for passenger transport is organised with the government as the purchaser of passenger transportation services from NSB in the form of public service contracts. The next step of introducing competition through competitive tendering for these contracts awaits the establishment of rental rules for NSB's rolling stock.[41] Moreover, there is a lack of intermodal competition from long-distance bus companies. NSB is the proprietor of the largest bus company, offering long-distance as well as local bus transportation. Open licensing for long-distance transportation between counties was only recently permitted, so competition has only started to emerge on a few routes. Indeed, competition is restricted by the approval requirement of both operations and tariffs. Moreover, the ability to compete by offering alternative routes or bus stops intra-county is curtailed by restrictions on local transportation imposed at the local government level to avoid direct competition with (often government operated) local bus services. To further increase competitive pressures in the markets for land-based passenger transportation, non-discriminatory rental charge rules should be established along with granting the railway regulator the authority to secure competition in the market for railway services. As an additional measure, intermodal competition should be enhanced by implementing ownership separation between the incumbent railway company and its bus company. The latter should also be separated into long-distance and local service operations to avoid cross-subsidisation between profitable and loss-making activities. Moreover, local governments' restriction of bus services should be reviewed with the aim of giving greater freedom to long-distance bus companies to tailor their services to the market.

VI. The public sector has a key role to play in introducing more competition into the economy

Public procurement

34. Public procurement is a vehicle to improve public sector efficiency and a means to increase product market competition. Public procurement accounts for around 15 per cent of GDP, with a roughly equal split between central and local governments. The 1994 public procurement law requires the publication of contracts above NOK 200 000 (stricter than the EU norm) in a single database and provides clear rules for information requirements. Moreover, the Ministry of Labour and Government Administration has introduced measures to decentralise contracts to make them the responsibility of the utilising administration. In a further move to level the playing field between private and public service providers, the government has introduced VAT compensation for all municipal purchases from private companies, removing an advantage for public service providers (Finansdepartementet, 2003*b*). A further step in this direction would be to establish clear and transparent rules for which activities should be fully left to the private sector and for which activities public participation is acceptable or at least, as in the Netherlands and Australia, introduce framework regulation for market access and conduct.

35. Firms that have lost the tender can request a written justification and in cases of non-compliance obtain compensation through the courts. To lower the cost of settling disputes a Complaint Board on Public Procurement was established in the beginning of 2003 with the powers to issue non-binding opinions,

40. An additional problem is that aircraft handling in most airports is carried out by the carriers themselves – a costly solution for new smaller entrants -- or purchased from one of the three SAS owned handling companies. Independent handling is only secure at large airports as part of EU regulation. The lack of competition in handling in itself raises competition problems and outsourcing leads to asymmetric information problems.

41. Goods transportation on the railway system was formally opened up to foreign providers in early 2003.

reviewing the legality of the procurement in question. The board received more than 70 complaints within its first four month of operation. The Auditor General has uncovered a number of purchases without due recourse to the law and reportedly not all municipalities publish their tender announcement.[42] Another area of concern is whether government-owned firms, such as Norway Post, are observing procurement rules when purchasing from subsidiaries. The lack of compliance may be related to a lack of administrative capacity at the municipality level and the recent decentralisation of contracts. However, public procurement regulation is clear and transparent, pointing to the need for introducing sanctions in case of non-compliance and a dispute authority with enforcement powers extended to declaring non-complying contracts null and void (OECD, 2003*d*).

Regionalisation carries a high cost to the economy

36. Regional policies have maintained a dispersed population pattern with nearly half of the population living in small municipalities (Figure 12).[43] In addition to their fiscal costs, such policies carry an indirect cost in terms of insufficiently competitive markets arising from the lack of agglomeration, which reduces the scope for economies of scale and choice. Indirect costs are difficult to estimate with any degree of accuracy.[44] Assuming that about half of the retail sector's 8 per cent productivity differential to Northern Europe can be explained by regionalisation effects then the associated costs would be about NOK 5 billion. This cost estimate would be doubled if the cost of reduced choice amounts to something like 2 per cent of the sector's value added. Consumer welfare is further reduced by agricultural protection. If the latter were reduced to EU levels a conservative estimate would indicate a halving of the price differential *vis-à-vis* the EU, adding NOK 15 billion to consumer welfare, and somewhat more if one takes into account the cost associated with the lack of choice. The increase in competitive pressures should also lead to a more efficient agricultural sector, which alone in the dairy sector could lead to efficiency gains on the order of NOK 2½ billion. The burden of financing universal service obligation in the transport sector is to a large extent carried by the consumers through higher prices and entry barriers, possibly amounting to 5 per cent of value added (about NOK 5 billion). Adding up these admittedly partial numbers, the indirect costs could easily be as much as 3 per cent of mainland GDP. The direct cost of regional policies, using a broad interpretation as those policies that preserve economic activity at the regional level (and which may include sectoral objectives), in terms of subsidies and tax expenditures and including price support to the agricultural sector, amounts to more than 2½ per cent of mainland GDP, boosting total costs to about 5½ per cent of mainland GDP.[45]

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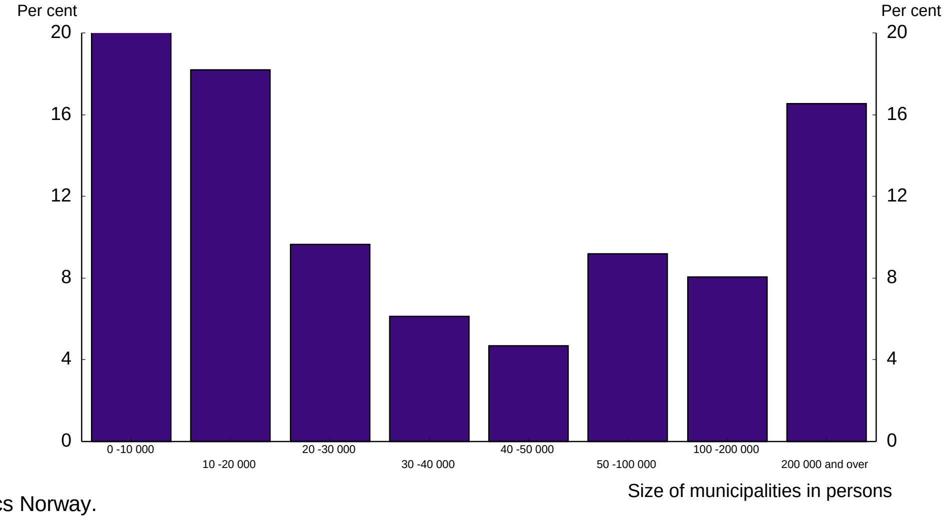
42. The smallest public administrative units -- the municipalities -- are on average smaller than in other Scandinavian countries, which may possibly explain part of the lack of compliance. The average size of a Norwegian municipality is about 10 000 people as compared with about 20 000 in Denmark and 30 000 in Sweden.

43. Even before oil exploitation began, there was a tradition of conducting a wide range of policies -- such as education, communication and transport, social security, labour market, health and general welfare -- with a rather strong emphasis on regional objectives. The budgetary cost of regional policies in 2000 was assessed to be nearly NOK 2 billion for special programmes for regional development, NOK 14 billion for sectoral policies with the explicit goals of equalising regional imbalances and another NOK 100 billion for sector policy measures of vital importance to regional development, but without explicit regional goals. See OECD (2003*f*).

44. Even the high number of municipalities is a problem with an estimated savings of NOK 3 billion from halving the number of municipalities through efficiency gains in service provision (Langørgen and Aaberg, 2003).

45. The estimate includes subsidies to primary industries, but not around NOK 2 billion in transfers to local governments in the outer regions arising from the fiscal equalisation system in Norway. The source for the estimate is the recently approved National budget.

Figure 12. Population by municipalities
As a percentage of total population



Source: Statistics Norway.

VII. Macroeconomic effects of regulatory reform

37. The macroeconomic benefits of reforms to increase competitive pressures in the economy are substantial. The propagation and channels through which product market reforms affect the economy depend on a number of factors (Box 8). Obviously, assessing the impact of such reforms is a complex undertaking, but at least two simple approaches are useful to provide some rough indications. First, including synthetic indicators of regulatory stance in regressions of aggregate performance variables is a relatively straightforward method that does not require assumptions about the character of reforms. Following this method, Nicoletti *et al*. (2001) estimated that product market reforms in Norway in the 1980s and 1990s have increased the employment rate by an around 1¾ percentage point and if Norway moved towards best practices for product market liberalisation in the OECD, then the employment rate could increase by another 1¼ percentage point.

Box 8. Economy-wide effects of sectoral reforms

In general, sectoral reforms change relative prices, which improve overall resource allocation and consumer welfare – effects that are further enhanced by dynamic effects. Reforms within a sector improve the sector's economic performance through a number of channels.

Reforms reduce output prices via a lowering of price-cost margins, which in turn diminishes the scope for rent sharing, putting downward pressure on wage premia in the sector. Aggregated real wages, however, will be increased as output prices decline.

Reform forces firms to reduce slack in the use of input factors (boosting X-efficiency), enhancing labour and/or capital productivity.

In addition to these static gains, a more competitive environment stimulates efforts to innovate and adopt new technologies, which raises productivity growth.

Quantifying the possible magnitude of the effects of reforms on sectoral performance, let alone their timing, is bound to be subject to considerable uncertainty, which is only multiplied in the assessment of economy-wide effects. An example is that a sectoral reduction in wage premia may have beneficial effects on wage formation more generally. Furthermore, propagation of sectoral effects into the wider economy depends on the labour market, as the initial effects of a sectoral reform may be a reduction in employment, which has to be employed elsewhere in the economy, highlighting the importance of a flexible labour market in maximising the economy-wide effect of reforms.

Table 3. Assumptions and effects of pro-competitive regulatory reform in selected industries

	Energy	Post and telecommunication	Road transport and railways	Retail distribution	Professional services[1)]	Community social and personal services[2)]	Total economy
Assumptions (per cent change)							
Costs of intermediate inputs	0	0	-5	-5	0	-5	
Labour costs							
Labour productivity	-5	-10	-12.5	-7.5	-10	-7.5	
Wages	-10	-5	-5	0	-10	-5	
Capital costs	-10	-20	-15	-10	0	-10	
Profits	-10	-10	-10	-10	-15	0	
Price elasticity of demand	-0.5	-0.5	-0.2	-0.5	-0.5	-0.2	
Sectoral effects (per cent)							
Direct price effect	-7.3	-8.6	-9.5	-6.4	-12.4	-9.2	
Price-induced output effect	3.7	4.3	1.9	3.2	6.2	1.8	
Employment, price-induced effect[3]	-1.3	-5.7	-10.6	-4.3	-3.8	-5.7	
Economy-wide effect on (per cent)							
Producer prices, direct effect	-0.1	-0.2	-0.9	-0.8	-0.5	-1.0	-3.6
Producer prices, total effect[4]	-0.2	-0.3	-1.3	-1.1	-0.9	-1.0	-4.9
Labour productivity (weighted by share in total economy)	0.1	0.2	1.2	0.9	0.4	0.8	3.7
Memorandum items							
Share in aggregate employment	0.9	2.2	6.7	17.1	7.9	37.0	
Share in aggregate value added	2.6	2.2	7.4	11.8	13.5	21.5	
Share in aggregate output	1.9	1.9	9.8	12.5	4.3	11.3	

1. ISIC74, Other business services.
2. Effects from improving public procurement policies and greater use of competitive tendering.
3. Resulting from the direct effect via productivity and the induced (offsetting effect via higher output).
4. Combines the direct effect of the fall in prices of the sector being deregulated with that resulting from the fall in prices in other sectors due to lower input costs.
Source: OECD.

38. The second approach is to make explicit assumptions about the potential for product market reforms to reduce price-cost margins and to enhance productive efficiency and performance. Following this approach Table 3 presents estimates for the possible effects on sectoral and aggregate economic performance of reforms in network industries, distribution and professional and community services. The estimates presented suggest that the scope for regulatory reform in these sectors may increase aggregated labour productivity by 3-4 per cent and lead to a decline in producer prices of some 3-5 per cent. The estimates rely on judgemental assumptions about the scope for reducing price-cost margins and increasing labour and capital productivity within each sector based on realignment with practices internationally. The economy-wide effects are obtained by using the 1997 input-output tables. To avoid assessing the degree of labour market flexibility, aggregate employment was conservatively left unchanged even though dynamic effects of regulatory reform are likely to lower the NAIRU and increase the labour supply. The reported estimates do not include the effects of increased dynamic efficiency and an improved resource allocation.

VIII. Overall assessment and scope for further action

39. The weakness of competitive pressures in Norway arises from a combination of factors. Historically, there has been relatively little enforcement of competition policy and the oil wealth may have diverted policy attention away from dynamically oriented structural reforms and towards statically oriented regional policies. Not surprisingly, economic performance in some sheltered sectors has suffered and the manufacturing sector has been trailing the performance in other countries. Thus, the main thrust of reform

must be to refocus policy attention on the cost of static policies and the benefits of structural reforms. The latter should aim at facilitating greater dynamism in the economy and at increasing rivalry in protected markets. This requires a strategy that recognises the important links that exist between the various policies that promote competition, as witnessed, for example, in the air transport market.

40. For the competition authority and the sector regulators to carry out their tasks effectively, it is important to ensure that they have the necessary instruments and powers. Measures should be implemented to separate out the public sector's roles and functions as owner and regulator. This implies strengthening the independence of sector regulators as well as establishing independent appellate bodies for both the competition authority and the sector regulators. Specific measures should be introduced to make enforcement less time consuming and more effective, such as powers to issue administrative fines, which would need to be subject to legal scrutiny but without delays in implementation. Moreover, leniency and whistleblower programmes should be introduced to combat cartel activities. The proposed new competition law introduces powers to the NCA to issue administrative fines as well as a leniency programme, and is therefore important for increasing the efficiency of the NCA. Other measures to create a level playing field and promote competitive markets include measures to increase foreign competition and an expansion of the government's privatisation programme. The latter should be supplemented by clear and transparent regulation stipulating acceptable public engagement in market activities as well as a more rigorous approach for evaluating and financing the net cost of universal service obligations. Besides these general recommendations, a summary of the more detailed recommendations is presented in Table 4.

Table 4. Summary of recommendations

The competition framework needs strengthening

- A more pro-active regulatory stance is required. Thus, the NCA should be able to issue administrative fines for relatively minor infractions of the competition law. An additional measure would be to increase prosecution capacity, possibly by giving such powers to the NCA.
- Sanctions need to be substantial and credible to secure deterrence. Moreover, the scope of criminal liability should be reduced to hard-core cartels. Such a rebalancing of sanctions could be instrumental in persuading courts to apply the law more severely. This would also allow the introduction of effective measures explicitly aimed at cartels, such as leniency and whistleblower programmes.
- Independent appellate bodies should be established to ensure that unwarranted special and vested interest groups do not have undue influences. Particularly, the possibilities for ministerial appeals should be constrained to exceptional cases of national interest.
- As a part of a comprehensive programme to expand the role of competition, remaining barriers to trade and inward FDI should be abolished to increase foreign rivalry.
- The economy-wide impact of regional policies should be included in their formulation, particularly with respect to improving the trend growth rate of the economy.
- In publicly owned companies -- and more generally in network industries -- formal separation between competitive and non-competitive activities should be introduced. A further step to level the playing field is to introduce measures to improve corporate governance of government-owned companies. However, only an extensive privatisation programme in the context of extensive regulatory reforms would solve the competition problems associated with publicly-owned companies.

Regulation in retail distribution should be relaxed

- Licence requirements for establishing shopping centres outside densely populated areas should be revised to facilitate new entry.
- Agricultural protection should be removed to increase competitive pressures from abroad.
- New entrants' access to imported food supplies should be secured by relaxing imported food quota rules.
- The state monopoly in alcohol retailing should be removed to increase economies of scope.

Sector regulation needs comprehensive reforms

- The role of sector regulators should be reviewed to focus their activities on economic regulation. Moreover, their independence should be secured and independent appellate bodies should be established.
- A common approach to universal service obligations needs to be introduced, entailing cost-benefit analysis to determine the net cost of such obligations, which should be financed through a fiscal transfer.
- The successful initial liberalisation of the *electricity sector* should be secured by expanding interconnection capacity within Norway and other countries. To stimulate private investment incentives, the asymmetric concession rules should be replaced with symmetric ones. Further measures to secure security of supply are to abolish the restrictions on generation technologies and pursue environmental objectives via market based instruments.
- In the *telecommunication sector*, government ownership restrictions should be abolished. To stimulate the creation of network competition, the publicly-owned incumbent should divest its holdings of alternative networks. Interconnection and termination charges require continued regulatory attention.
- In the *postal sector,* the incumbent's monopoly rights should be abolished and the financing of universal service obligation should be based on a cost-benefit analysis and competitive tendering for the USO should be introduced. Moreover, charges should be cost based.
- In the domestic *air transport sector*, cost-based user charges for airport services should be introduced.
- Terminate present cross-subsidies of regional airports, which should be privatised and finance unprofitable airports through a fiscal transfer.
- A market based system for slot allocation should be introduced to improve resource allocation.
- The liberalisation process in the railway sector should be accelerated, including setting non-discriminatory rental charges for rolling stock.
- Inter-modal competition should be promoted through ownership separation between the incumbent railway company and its bus company. Local restrictions on long-distance bus services should be reviewed to promote inter-modal competition.

Public procurement can be used to promote competition

- Introduce clear dispute and settlement facilities in public procurement with sanction measures, such as fines for non-compliance or even the annulment of contracts.

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