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A Case against the Simultaneous Use of Market Access Restrictions, Domestic Support,

and Export Subsidies

Roberto J. Garcia

Agricultural University of Norway

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and Export Subsidies

Abstract: The Uruguay Round of GATT introduced market disciplines to international trade in agricultural commodities. However, in cases where countries negotiated the right to limit market access, support domestic production at high levels and subsidize exports, the spirit of the WTO rules have been violated. The Norwegian meat market (beef, pork, lamb and mutton, and chicken) situations are studied in terms of the policy implications and WTO commitments. If Norway's policy objective is to target some level of production that satisfies its non-trade concerns, then semi-decoupled income support could be an improvement over a policy mix that simultaneously restricts market access, provides domestic support and applies export subsidies.

Keywords: Norway, meat, market access limitations, domestic support, export subsidies

Introduction

The Uruguay Round (UR) of GATT is credited with having introduced market disciplines to international agricultural trade through the WTO Agreement on Agriculture (AonA). Prior to the UR-GATT, agricultural trade was distorted directly through prohibitive tariffs, quotas, unrestricted use of domestic support and export subsidies. Despite coherent rules for which agricultural commodities are to be traded, there are cases in which countries negotiated the right to restrict market access, to provide high levels of domestic support, and to subsidize export, violating the spirit of the WTO rules if not the intent.

The purpose of this study is to report on how simultaneous use of various policy measures, as defined and permitted under current rules, have in some cases undermined the disciplines to which WTO Members have pledged themselves. The objective is to analyze the meat (beef, pork, lamb/mutton and chicken) market situations in Norway since the implementation of the WTO Agreements, assessing the compliance implications of existing policies. The meat policy regime, negotiated by Norway and accepted multilaterally, is studied as a case for how foreign negotiators might approach the upcoming multilateral talks to seek greater liberalization while respecting the concerns that Norwegian society has for its agricultural and rural sector.

Norwegian Policy Objectives

Norwegian agricultural policy is aimed at maintaining high levels of agricultural activity in all parts of the country, implying that agriculture cannot be simply measured in terms of the ability to produce food. Agricultural policy has four principal objectives, ensuring that agriculture contributes to: (1) rural development, employment and settlement; (2) supply of environmental public goods, linked to the preservation of the rural landscape;

(3) long-term food security; and (4) consumer welfare linked to production methods that improve the health of animals and plants (Royal Ministry of Agriculture; OECD; WTO_d).

The WTO recognizes the multifunctional role of agriculture (Article 20, WTO AonA), giving Members the right to satisfy non-trade concerns related to food security, rural viability, cultural heritage, land conservation, maintenance of rural landscapes and agrobiological diversity in a manner consistent with WTO rules (GATT). Market access limitations (protection for domestic producers), high levels of price and income support (domestic support) with production controls, and export subsidies are features of the policy regime.

The policy debate on multifunctionality and non-trade concerns centers around the degree to which trade liberalization undermines legitimate domestic social policy objectives, and the appropriate policy response (agricultural protection, or indirect versus direct support), as embodied in WTO rules, to achieve those objectives. This essentially involves a determination of how direct is the link between agricultural production activity and the other functions performed as a result of production activity, i.e., the jointness of production with improved environmental and social conditions, with rural community development and economic viability, and with security through stable food supplies (Anderson; Bohman et al.).

Meat Sector in Norway

In the past 30 years, total production of meat in Norway has increased on aggregate and for each of the meats studied, except for lamb and mutton, which has declined slightly relative to the highs in the mid-1990s. Production of meat as a percentage of domestic availability, defined as production plus imports, has essentially been maintained at 100% for each of the meats. Between 1990 and 2000, production exceeded consumption in beef for most years, and about half the years in pork and lamb and mutton. Chicken production has been practically the same as consumption. (Market data are reported in the appendix.)

The annual per capita consumption of each meat type varied considerably during 1990-2000 with chicken consumption increasing at a rate of 5.91%, pork at 1.72%, beef at 0.5% and lamb and mutton consumption declining by 0.23% per capita per year. While meat consumption in Norway is highly tied to price and real income as in other countries, per capita consumption is not comparable to the levels in other industrialized countries, reflecting, in large part, the much higher relative prices of meat (Nersten; Rickertsen). In the absence of market access limitations and domestic support, Norway is expected to be a net importer of meat products because domestic meat prices exceed border prices.

WTO Commitments and Compliance of Meat Policy

Market access

Prior to the UR, Norway had quantitative import restrictions. Meat was imported only to stabilize prices on the internal market. A result of the UR, the WTO principle of tariffs as the only means of protection applied also to agricultural trade, requiring the conversion of quotas into tariffs. For products for which the historical imported quantity was less than 3% of consumption (of the base year) a minimum access quota was established through a tariff-rate quota (TRQ). The quotas expanded over the 1995-2000 implementation period. In Table 1, the TRQs for meat, each of which is administered under an import auctioning system, are presented along with the actual imports of meat and the quota rents from the auction (Morttjernsberg). Only in the case of lamb and mutton is the fill rate (of the TRQ) greater than 90% over the period. For pork, imports exceeded 90% of the quota only in the second half of the period. For beef, the fill rate peaked at 81% (excluding 2001), and for chicken, the fill rate was less than 5%, except for 2000.

[Table 1 about here]

The tariff-only regime has not led to significant increases in food imports as feared by many farmers. This is due to the fact that imported goods still had higher prices than Norwegian product prices. Norwegian negotiators used domestic prices that were substantially higher than the average market price in the base period (1986-88) in their calculation of the tariff equivalent. The specific tariffs were set equal to the difference between the upper price level in Norway and the border price. The ad valorem tariffs on meat were calculated by dividing the specific tariff by the border price multiplied by 100% (Nersten). The base period tariffs ranged between 341% (for chicken) and 505% (lamb and mutton). Reduction commitments brought meat tariffs down to between 290% and 429%.

The targeted import volume specified under the TRQ is not a guaranteed import level, but rather the binding commitment on market access over which future limitations cannot be made stricter (Abbott and Morse). In theory, for a targeted volume of imports, Q_q , under the market access quota (MAQ), setting a tariff rate that achieves the result is a straightforward matter. In practice, it appears as if in-quota tariff rates were negotiated without the intention to import Q_q . For Norway, the in-quota tariffs, in ad valorem terms, ranged from between 109% and 162% for meat and the actual quantity imported averaged less than 60% of the MAQs for meat. Hence, the higher out-of-quota tariffs (which are the MFN bound tariff rates that apply for all import in excess of Q_q) were never applied. Price data and the in-quota tariffs for meat are reported in Table 2.

[Table 2 about here]

In cases where the MAQ was never met, there are a few plausible explanations: inquota tariffs were set so high such that too few imports entered; transactions costs associated with importing when added to the price of the imported meat caused import prices to increase relative to the price of the domestic product; the quota level was set too high relative to import demand (at domestic prices); or that import demand has declined (since the time of the negotiations) such that the negotiated quota cannot be binding (Abbott and Morse; Abbott and Paarlberg; Boughner, de Gorter and Sheldon). However, to understand TRQ underfill in the case of Norwegian meat, a review of domestic support and export subsidies is needed.

Domestic support

Domestic support is concentrated on a few products, namely dairy, beef and pork which together accounted for some three-quarters of Norway's agricultural support. Livestock producers received price and income support, as target prices were set above the world price, but below the domestic regulated market price. Farmer-owned meat associations implement the market stabilizing regulations through price-setting, storage functions, coordinating imports and exports (in cooperation with private firms) and through sales promotion programs (IMC).

Livestock production is affected by the prices of other protected agricultural sectors which serve as inputs into meat production, such as feed grains and feed concentrates. Prices of feed grain and concentrates were regulated to keep livestock production in line with demand and to stimulate domestic fodder production. Grain prices were fixed at high rates and have not responded directly to market forces. In the case of chicken, feed adjustment support was provided. To keep farm income at desirable levels, a substantial part of the farmers' income is secured by way of non-price support (i.e., income support or blue box measures). These measures and other green box support are differentiated according to the size of production and the geographical location within Norway. A base deficiency payment is granted to livestock producers. In addition, regionally differentiated payments are paid to meat producers in the central and northern parts of Norway. There are also subsidies given to reduce transport costs of livestock from remote farms to processing centers (IMC). Table 3 reports on domestic support to livestock and meat producers.

[Table 3 about here]

Norway negotiated a bound rate of 13.8 million NOK in total aggregate measure of support (AMS) in 1995 which required 26% reductions over the implementation period. However, actual support levels were below the bound rates throughout the period, increasing in percentage terms (from about 70% in 1995 to more than 90% by 2000) as the bound rates declined according to the reduction commitments (WTO_e). This suggests that the bound rates on AMS, which Norway negotiated, were higher than necessary. The composition of domestic support across all agricultural activity is 18% green box, 34% blue box, and the remaining 48% is amber box (WTO_a). While the tendency is that Norway has made progress on decoupling its support, almost half of the support remains fully coupled.

Export subsidies

The right to subsidize exports serves as a valve to release the downward pressure on domestic prices when domestic production is high relative to demand. Export subsidies were negotiated for each of the meat categories. Bound rates of export subsidies were determined in terms of their value (budgetary outlays) and the volume exported. Table 3 shows the bound commitments and the reduction commitments on export subsidies in volume and value terms.

[Table 4 about here]

Actual subsidized exports are less than the bound rates in volume and value on an annual basis. However, for some years, the actual rates exceeded the bound limits for that year. Some Member countries opted to transfer allotments across years. That explains why, for example, beef and pork exports exceeded the bound rate for 1999. The use of export subsidies reflects the importance of a release mechanism to maintain beef and pork prices. It was used to a lesser extent for lamb and mutton and not exercised at all in the case of chicken. The net trade situation supports the claim that the trade regime existed to stabilize and maintain high domestic prices.

Simple Model of the Meat Markets

The objective of this study is to analyze the meat market situation since the implementation of the WTO Agreements, assessing the compliance of the existing policy regime. From the production information reported in the appendix table and the notification data reported in Tables 1-4, it is possible to model the market situation in Norway. The evidence shows the country as a net exporter of each meat, except for chicken. The border price, P_B , is the average price of imports divided by the quantity imported. By adding the specific tariff rate (in each case the specific tariff was applied on imported meats) and the cost of the quota (i.e., the fee in this case is the bidding price from the auction on an average kilo of imported meat) to P_B , the domestic price, P_D , can be computed. Alternatively, given that export subsidies are used to sell the surplus (to maintain P_D) the government pays $P_D - P_B$.

In Figures 1-3, the market situations that characterize the Norwegian meat markets are presented in sets of two-panel diagrams. On the left-hand side are the market situations within the internal market, the gross trade flows, and the revenue or outlay associated with the different policy (domestic support, tariff revenue, export subsidy). On the right-hand side is the characterization of the market in a net trade setting.

The maximum domestic availability (DA) is defined as production (Q) plus imports (M). The internal price of each of the meats is supported at its respective price, P_D , which is always greater than the target price, P_T , of meat (except chicken), which in turn is higher than P_B (ICA). Part of the domestic support that is received by producers comes in the form of a price support (amber box) and another part in the form of coupled income support (blue box). Tariff revenues and the quota fee apply to the import volume (a revenue equal to $P_T - P_B$) and the export subsidy is applied to the volume of exports (a per unit cost of $P_D - P_B$).

Three cases summarize the market situations of the four meats for the period. The cases of beef and pork (for each year except 1998 and 1999 for pork) are described in Figure 1. For the overall period, domestic beef and pork production exceeds consumption, the fill rates on the market access quota are substantially less than 100%, and the volume of (subsidized) exports exceeds the imported volume. In panel b, the quantity of imports, which is added to domestic supply, enters Norway at the border price plus the in-quota tariff and the quota fee from the auction. It is assumed that foreign meat is sold at P_D , the price at which domestic beef and pork is also sold. The box formed by area 1234 is equal to the value of the export subsidy while the box enclosing area a relates to the amber box price support.

[Figures 1-3 about here]

In Figure 2, the cases of lamb and mutton and pork (for 1998 and 1999) are represented by the market situations depicted in panels a and b. Domestic production exceeds consumption, the fill rate on the quota is between 90 and 100 percent, and the volume of subsidized export exceeds the volume of imports (and even the MAQ). In the case of chicken, domestic production is almost exactly equal to consumption, the fill rates on the TRQ are zero or less than 3%, and exports of chicken were not subsidized. Hence, Figure 3 represents a closed market situation. Despite the increasing rates of growth in per capita consumption of chicken, the price is supported and protected by high tariffs at such a rate that imports were prohibitive.

Policy Implications for the Upcoming WTO Negotiations

The WTO Ministerial Declaration of 2001 from the ministerial conference in Doha (paragraph 13) calls for "fundamental reform encompassing strengthened rules and specific commitments on support and protection in order to correct and prevent restrictions and distortions in world agricultural markets... [Ministers agree to] ... substantial improvements in market access; reductions of, with a view to phasing out, all forms of export subsidies; and substantial reductions in trade-distorting domestic support... [Ministers also] ... confirm that non-trade concerns will be taken into account in the negotiations" (WTO_b).

A negotiator having studied the agricultural market situation of a country that simultaneously limits market access, provides domestic support and subsidizes exports must develop a negotiating position knowing that the principle counter-position will be related to protection of NTCs. The first argument is that eliminating export subsidies does not present any inconsistency with taking NTCs into consideration. Export subsidies are neither required to target some "socially desirable" level of agricultural production, nor an effective means of supporting rural activity, nor provides environmental/landscape protection, nor an appropriate tool to promote food security. It represents a volume of production that domestic consumers refuse to purchase at prevailing prices, a volume of food greater than under autarky.

Therefore, the resistance of countries to eliminate export subsidies, especially those that also enforce strict limitations on imports, can only be viewed as a violation of rules and spirit of the WTO. However, it is necessary to realize the importance of the export subsidy as a release value to support domestic prices. The elimination of the export subsidy implies that either market access limitations or price and/or income support will be required to maintain current levels of support. Semi-decoupled (blue box type) support whereby producers and production are supported at some "socially desired" level can permit additional market access (with the intention of actually meeting those commitments) and the elimination export of subsidies (in value and volume). This could be an interim strategy for those countries that are particularly sensitive to short-term changes in the structure of agriculture.

Second, the market access limitations under the TRQ involve two tariffs and the quota. However, only one of those policy instruments is effective at a time, implying the other two are redundant (Boughner, de Gorter and Sheldon). In the case of the beef market in Norway, the quota fill averaged 58% over the period and the quota was never binding. This implies that the binding constraint is the in-quota tariff (given that demand has not declined over time). Per capita consumption of beef decreased after 1997 but that is more likely a function of the 16.5% increase in meat prices after 1996.

For pork, the quota rate is effectively a binding constraint in 1998-99. If this continues to be the situation, then the negotiators should be inclined to expand the quota level in addition to push for reductions in both tariffs. Annual per capita consumption of pork is higher between 1996-2000 than in 1995 as are production levels. This should not represent a case where the amount of the public good is declining. The surplus pork production suggests that trade liberalization could reduce prices and production without a decline in the public good; however, income support would have to compensate for the loss in revenue to farmers.

In lamb and mutton, Norway is a net exporter, but the TRQ fill rate is above 90% throughout the period. Annual per capita consumption steadily declined after 1996 by about

one kg by 2000. The 26% increase in price, on average, after 1996 is likely to be a relevant factor. Production levels mirror the reduction in consumption. Nevertheless, the binding constraint in the TRQ for lamb and mutton is the quota. For chicken, there are hardly any imports given a situation where per capita consumption is increasing substantially and reaching record highs. The binding constraint is the in-quota tariff. Negotiators could be expected to press for much lower tariffs and substantially increased market access.

Semi-decoupled support could make the TRQ regime inconsequential by ensuring that producers' income and production levels remain stable at some desired level. Supporting income at a desired production level while allowing consumers to see a market-determined price would likely result in a significantly increased market access. Consider the Norwegian market situation for meat as represented in Figure 4. Supporting producers' income on a perunit basis at P_D would maintain the "socially desirable" level of production, Q_{SD} (and the current levels of other public goods associated with that level of production). Total imports would be equal the difference between the quantity demanded minus domestic production, or $Q_D - Q_{SD}$, at the border price, P_B . Export subsidies would be completely eliminated and market access could be completely liberalized.

[Figure 4 about here]

Green box support, it should be debated, can be used to make direct payments to achieve other well-defined environmental, landscape, and rural concerns. What would be left for Norway to determine is the "socially desirable" level of production in terms of satisfying their NTCs and the level of food security. Self-sufficiency production levels in meat will decline, by definition, with additional market access, but the absolute levels of production need not change significantly if society is willing to support production at or near current levels. The fact that Norwegians are increasingly traveling to Sweden to purchase meat (among other products) is evidence that ever-increasing price differentials will either cause more trade or movement of persons to exploit arbitrage opportunities.

Conclusions

Although the UR-GATT is credited with bringing market disciplines to international trade in agricultural products, it is evident that countries simultaneously using domestic support, market access limitations and export subsidies have been able to defer gains from trade liberalization to consumers in net importing countries and to producers in countries which have a comparative advantage. A more appropriate solution would have been to require countries requesting a TRQ to forgo the use of export subsidies altogether, which could have brought fill rates in line with market access commitments. However, it is apparent that the use of export subsidies also had the benefit of supporting the internal prices. There is circumstantial evidence that Norway negotiated the right to export subsidies with the intention to keep production at some targeted level while requiring the consumers to pay for higher meat prices and the taxpayer to transfer income directly to producers.

The interesting issue is that if the policy objective is to target some production level, keeping in mind the NTC objectives, then this might only have required semi-decoupled income support without the need for export subsidies or restrictive market access limitations. If society values the public goods provided by agriculture, then taxpayers would be willing to

pay for NTCs directly rather than in the form of higher meat prices and in export subsidies of meat. A more precise study would require an econometric analysis of the meat markets to determine the degree to which production is sensitive to support payments and prices and the degree to which the quantity demanded (and hence imports) is affected by changes in prices.

Product	1995	1996	1997	1998	1999	2000	2001
Beef quota	181	361	542	723	903	1,084	1,084
Actual imports	83	203	433	585	244	307	841
Fill rate, beef (%)	46	56	80	81	27	28	100 ^a
Quota rents (NOK)	-	161	1,319	2,748	5,357	212	-
Pork quota	230	460	691	921	1,151	1,381	1,381
Actual imports	34	0	75	878	1,150	1,135	213
Fill rate, pork (%)	15	0	11	95	100	82	17
Quota rents (NOK)	-	1	15	20	885	1,108	-
Lamb/mutton quota	34	69	103	137	172	206	206
Actual imports	34	63	103	127	166	206	170
Fill rate (%)	100	90	100	93	97	100	83
Quota rents (NOK)	-	200	206	55	1,068	1,344	-
Chicken quota	116	137	158	179	200	221	221
Actual imports	0	0	0	3	6	34	8
Fill rate (%)	0	0	0	2	3	15	4
Quota rents (NOK)	-	0	2	2	2	18	-

Table 1. Minimum Access Quotas, Imports and Fill Rates for Meat (metric tons)

Notes:- is not available; ^aBeef imports exceeded the quota because 2,392 tons of meat were imported in 2001 at a duty-free rate from LDCs.

Sources: Norway's WTO notifications, G/AG/N/NOR/ various documents; Sunnevåg, 1999.

Product	1995	1996	1997	1998	1999	2000
Beef:						
Border price	20.61	20.53	24.22	27.30	26.19	-
In-quota tariff	27.32	27.32	27.32	27.32	27.32	27.32
Quota fee	-	0.44	2.43	3.80	5.93	-
Domestic price	47.93	46.75	54.48	55.94	54.52	52.71
Target price	33.81	35.05	36.20	36.45	36.45	33.95
Export subsidy value	-	26.22	30.26	28.64	28.33	-
Pork:						
Border price	17.77	17.75	22.81	18.02	15.24	-
In-quota tariff	16.87	16.87	16.87	16.87	16.87	16.87
Quota fee	-	0.03	0.02	0.02	0.77	-
Domestic price	34.64	32.69	41.48	39.17	37.84	36.47
Target price	26.31	26.47	26.22	21.87	26.87	23.77
Export subsidy value	-	14.94	18.67	21.15	22.60	-
Lamb and Mutton:						
Border price	20.69	20.67	27.28	25.84	28.96	-
In-quota tariff	19.40	19.40	19.40	19.40	19.40	19.40
Quota fee	-	2.90	2.00	0.40	6.21	-
Domestic price	40.09	46.89	50.26	38.07	65.86	68.12
Target price	36.16	36.39	37.19	37.44	41.44	41.44
Export subsidy value	-	26.22	22.98	12.23	36.90	-
Chicken:						
Border price	15.91	16.32	12.49	13.41	15.17	-
In-quota tariff	9.68	9.68	9.68	9.68	9.68	9.68
Quota fee	-	0.001	0.010	0.010	0.010	-
Target price	29.90	29.65	29.80	30.55	30.55	27.25
Domestic price	25.79	26.00	22.18	23.10	24.86	24.80
Export subsidy value	0.00	0.00	0.00	0.00	0.00	0.00

Table 2. Price Data on the Meat Market (NOK per kilo)

Source: NILF, various issues; Central Bureau of Statistics of Norway; Sunnevåg, 1999.

Product	1995	1996	1997	1998	1999	2000	2001
Blue box							
Deficiency payment	506	512	516	523	512	473	539
Headage support	1,871	1,611	1,678	1,748	2,142	2,317	2.265
Amber box, product s	specific	support					
Beef	1,787	1,888	2,054	2,096	2,054	1,805	1,837
Pork	1,344	1,568	1,544	1,641	1,548	1,245	1,800
Lamb/mutton	957	897	858	827	899	887	900
Chicken	395	384	443	578	674	679	672

Table 3. Domestic Support Programs for Meat (million NOK)

Source: Norway's WTO notifications, G/AG/N/NOR/ various documents.

Table 4. Export Subsidy Commitments, Volume (metric tons) and Value (million NOK)							
Product	1995	1996	1997	1998	1999	2000	2001
Beef							
volume: bound rate	3,258	2,906	2,554	2,202	1,849	1,497	1,497
actual volume subsidized	638	351	1,633	2,301	7,876	1,119	441
value: bound rate	n/a	89	75	62	48	35	35
actual outlays	n/a	9	49	66	223	33	13
Pork							
volume: bound rate	4,631	4,463	4,295	4,127	3,959	3,791	3,791
actual volume subsidized	508	429	4,547	818	11,723	1,418	763
value: bound rate	n/a	119	111	103	95	87	87
actual outlays	n/a	6	85	17	265	26	13
Lamb and mutton							
volume: bound rate	831	801	771	741	711	681	681
actual volume subsidized	n/a	240	1,097	785	195	30	208
value: bound rate	n/a	24	23	21	19	18	18
actual outlays	n/a	6	25	10	7	1	5
Chicken							
volume: bound rate	27	26	25	24	23	22	22
actual volume subsidized	n/a	0	0	0	0	0	0
value: bound rate	n/a	0.7	0.6	0.6	0.5	0.5	0.5
actual outlays	n/a	0	0	0	0	0	0

Table 4. Export Subsidy Commitments, Volume (metric tons) and Value (million NOK)

Source: Norway's export subsidy notification to the WTO, WTO documents G/AG/N/NOR/, various numbers and dates.



Panel b. Domestic market and net trade flows

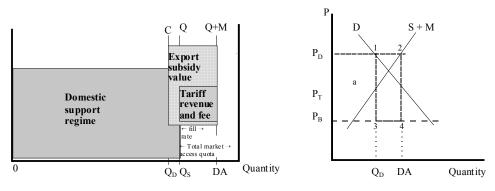


Figure 1. Market situation for beef (1995-99) and pork (1995-97)

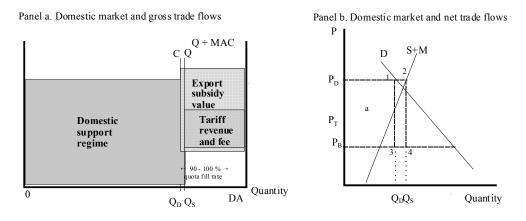
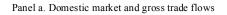
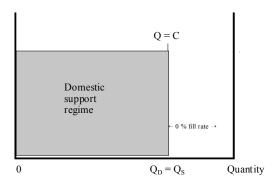


Figure 2. Market situation for pork (1998-99) and lamb (1995-99)





Panel b. Domestic market and net trade flows

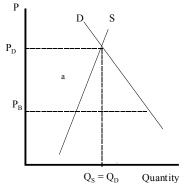


Figure 3. Market situation for chicken (1995-99)

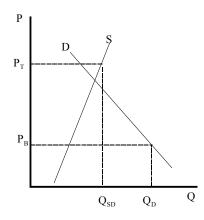


Figure 4. Market for meat under a semi-decoupled income support policy

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Year	Production (Q)	Production plus imports	Net imports (M - X)	Consumption $(Q + M - X)$	Consumption per capita (kg)
Beef:					
1995	85,482	87,198	1,697	87,179	20.05
1996	86,394	88,946	2,552	88,946	20.35
1997	89,416	89,619	-697	88,719	20.20
1998	90,800	90,862	-1,721	89,079	20.16
1999	95,580	95,748	-7,058	88,522	19.19
2000	90,870	91,038	-403	83,812	18.72
Pork:					
1995	95,824	98,901	3,076	98,900	22.75
1996	103,327	106,987	3,508	106,835	24.45
1997	105,381	105,697	-3,517	101,864	23.19
1998	106,400	107,454	625	107,025	24.22
1999	109,250	110,660	-7,445	101,805	22.90
2000	102,910	104,253	819	103,729	23.16
Lamb/m	nutton:				
1995	26,515	27,175	624	27,139	6.24
1996	27,161	27,417	238	27,399	6.27
1997	25,813	25,919	-1,025	24,788	5.64
1998	23,300	32,527	73	23,373	5.29
1999	22,950	23,421	-41	22,909	5.15
2000	23,510	24,383	859	23,469	5.24
Chicker	1				
1995	28,633	29,700	1,065	29,698	6.83
1996	32,425	32,539	113	32,538	7.45
1997	33,399	33,502	101	33,500	7.63
1998	24,900	24,985	11	24,911	5.64
1999	29,460	29,533	68	29,528	6.64
2000	34,650	34,739	48	34,698	7.75

Appendix . Table A1. Norwegian Meat Market Situation (metric tons), 1995-2000

Source: UN, FAO, Production and Trade Statistics, available at http://apps.fao.org/