

DEREGULATION : IMPACT ON THE  
CHRISTCHURCH MEAT INDUSTRY

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*THE AGRICULTURAL ECONOMICS RESEARCH UNIT*  
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The Agricultural Economics Research Unit (AERU) was established in 1962 at Lincoln College, University of Canterbury. The aims of the Unit are to assist by way of economic research those groups involved in the many aspects of New Zealand primary production and product processing, distribution and marketing.

Major sources of funding have been annual grants from the Department of Scientific and Industrial Research and the College. However, a substantial proportion of the Unit's budget is derived from specific project research under contract to government departments, producer boards, farmer organisations and to commercial and industrial groups.

The Unit is involved in a wide spectrum of agricultural economics and management research, with some concentration on production economics, natural resource economics, marketing, processing and transportation. The results of research projects are published as Research Reports or Discussion Papers. (For further information regarding the Unit's publications see the inside back cover). The Unit also sponsors periodic conferences and seminars on topics of regional and national interest, often in conjunction with other organisations.

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## PREFACE

The past few years can be described as an era of "partial deregulation" in New Zealand's economic history. In particular, the meat processing and transport industries have been the focus of much deregulatory activity. Futures of both lowered costs with increased efficiency and overcapacity, bankruptcies and lowered efficiency have been forecast.

The present paper describes events that have taken place in the Christchurch meat industry since deregulation. Documentation of real-world changes that actually occur as a result of changes in contentious economic policy is valuable if we are to learn from the past and place ourselves in an improved position regarding informed policy making in the future.

P.D. Chudleigh  
Director



## SECTION 1

### INTRODUCTION

It is now ten years since the report of the first Commission of Inquiry into the Meat Industry, led by the Honourable A.H. Nordmeyer, was tabled before Parliament. Many of the recommendations of the Nordmeyer Commission were incorporated into the Meat Act 1964, later consolidated into the Meat Act 1981. Not all of the Commission's recommendations have proven acceptable to the industry - notably the short-lived Meat Industry Authority which was set up in 1976 and dissolved five years later - but there can be no question that this Inquiry, the first public inquiry into the legislative underpinnings of New Zealand's largest export processing industry, has provided both a stimulus for change and a vehicle by which change can occur.

This Discussion Paper is intended to consider some of the changes that have followed on from the Nordmeyer Commission's report, up to the time when a second public inquiry into the Meat Industry was called in 1983. It is hoped that by using a case study approach, the consequences of changes in government policy regarding the meat industry can be considered with respect to the flow of costs and benefits to producers, processors and consumers in a given region. Insights thus achieved could be of value to industry participants and to policymakers alike.

The paper briefly reviews the legislative background to the meat processing industry, the activities of abattoirs and a meat exporter in the Canterbury region, and presents some data describing the Christchurch retail meat market.

Changes in the supply of meat to the Christchurch market as a consequence of "delicensing" the industry are considered, followed by a discussion of the implications of change in the export and domestic processing sectors.

A limitation exists in the static nature of some of the data presented. Considerable difficulty was experienced in gathering reliable data on the retail meat trade over time. It has therefore been necessary to comment less on the magnitude of change than on its nature. However, some topics for future research are suggested.

For example, benefits to New Zealand consumers from deregulating the abattoir system could be investigated in a longitudinal study of wholesale and retail margins. Secondly, a greater knowledge of the magnitude of change in the local supply industry towards further concentration of ownership at point of slaughter, and concentration at processing and retail levels, could assist industry participants to accommodate change with minimal social costs. Marketing studies of red meat and meat products could form a part of this work. Thirdly, an examination of combinations of livestock/product cartage from farm to retail could assist in future decisions regarding location of slaughter facilities.



## SECTION 2

### REVIEW OF LEGISLATIVE CHANGES 1908-1981

Since the passing of the Slaughtering and Inspection Act 1908, the establishment and operation of slaughterhouses for export and local kill has been closely regulated. The Slaughtering and Inspection Act 1908 was repealed and replaced in 1939 by the Meat Act, which was further consolidated in 1964; however the regulations relating to the establishment and licencing of slaughterhouses remained essentially the same until 1976. Until then, meat export slaughterhouses required a licence to operate, issued by the local authority in whose district the slaughterhouse was situated and renewable annually. Local authorities could also issue licences for new facilities, but only with the consent of the Minister of Agriculture (later, Minister of Agriculture and Fisheries) acting on the approval of the New Zealand Meat Producers' Board. Before granting consent, the Minister was to consider:

- "(a) Whether or not there is any economic need or justification for the proposed work;
- (b) The probable or possible effect of the proposed work ... on the ability of other licencees of export slaughterhouses to obtain regular supplies of stock sufficient for the reasonable requirements of their business;
- (c) All such other matters as the Minister thinks proper."

(S. 28(2) 1964 Act)

Borough and City councils were also required by these Acts to establish an abattoir for the purposes of their district, and to register it with the Director-General of Agriculture. The power to run the abattoir could be delegated, with Ministerial approval, to a company or group of people; however the instrument of delegation could not be further passed on. Each abattoir served an abattoir district, which was usually the same district as that of the local authority. The controlling authority was granted the right to pass by-laws prescribing fees payable on livestock slaughtered, where meat sold for consumption within an abattoir district was derived from stock slaughtered in another abattoir or export slaughterhouse. This "hanging fee" or Fee for Use of Abattoir was set by M.A.F. (or the Department of Agriculture, prior to 1972) at six-monthly intervals according to guidelines prescribed in the Act, and represented the fixed charges attributable to slaughtering an animal at each abattoir. Therefore, meat from stock slaughtered outside an abattoir district or at an export slaughterhouse was subject to charges for the fixed and variable cost of slaughter at the works at which the animal was killed, plus a "hanging fee" equivalent to the fixed cost of slaughter at the works in which district the meat was sold.

The report of the Commission of Inquiry into the Meat Industry which was submitted to Parliament in 1974 resulted in the passage in 1976 of a major amending Act, introducing or foreshadowing substantial changes to the regulations which determined the structure of the industry. This report reinforced the view taken by the New Zealand Meat Producers' Board and industry participants, that the efficiency of the industry would be enhanced by continuing a co-ordinated development and rationalisation of killing and processing facilities. In a submission to the Commission of Inquiry, the New Zealand Freezing Companies Association proposed the establishment of a meat industry authority, whose major function would be the consideration of applications for licences to establish, alter or add to meat slaughtering facilities. This concept was supported by the Ministry of Agriculture and Fisheries and a number of other organisations, but opposed by Federated Farmers and the New Zealand Meat Producers' Board.

The proposal was accepted by Government, and the Meat Amendment Act 1976 had as its central objective the creation of the Meat Industry Authority. The Authority was to comprise three members, appointed on the recommendation of the Minister of Agriculture and Fisheries, after consultation with the New Zealand Meat Producers' Board, the New Zealand Freezing Companies' Association and employee representatives.

Included among the functions of the Authority was the power, previously ascribed to the Minister of Agriculture, the New Zealand Meat Producers' Board and local authorities, to grant, approve or issue licences to operate as an export slaughterhouse. The criteria to be considered in granting licences were broadened slightly from the 1964 Act, in that "economic need or justification" was to be considered in the context of "the overall development on a national basis of economic and efficient stock slaughtering and meat processing, chilling, freezing and storage facilities".

The other principal functions of the Authority involved reviewing the justification and continued need for existing slaughter facilities, reporting to the Minister on the economics and efficiency of operation of slaughter facilities, and recommending changes in ownership, organisation and financing of the industry if necessary to improve its economic performance.

Other changes in the amending Act included the phasing out of abattoir districts and their eventual abolition, along with the "hanging fee", on 1 July 1981. At the same date, the obligation of local authorities to provide or ensure slaughter facilities for local kill was to be cancelled.

Up to 1976, licences for new export slaughterhouses were issued only rarely as the New Zealand Meat Producers' Board considered that the industry would be best served by the existing companies with large facilities which could achieve economies of scale where such economies were available.

The 1976 amending Act retained this considerable power to resist the development of any new, competitive enterprise within the industry, while vesting power in a different authority. However within a relatively short period it became apparent to policymakers that the

Authority had considerable potential to hinder the industry's development rather than assist it to respond to environmental changes. In economic terms, the restriction on new entrants to the industry could allow the development of supernormal profits and the continuation or development of significant inefficiencies in the operation of industry participants.

As a consequence of debate over the usefulness of the Meat Industry Authority, the Government passed a further amending Act in 1980, in which the functions of the Authority were reduced to that of acting as a licensing authority, with most of its investigative and discretionary powers being deleted or transferred to the Director-General of Agriculture and Fisheries. Among the powers of the Authority which were deleted, was the requirement to consider the economic development of the industry and effects on existing participants when granting new licences.

Finally the 1964 Meat Act was repealed and replaced by a consolidating Act in 1981. Where previously, abattoirs had had to hold a certificate of registration from the Ministry of Agriculture and Fisheries, and meat export houses a licence issued by the appropriate local authority (or later, the Meat Industry Authority), the 1981 Meat Act simply requires that all slaughter facilities, processing plants and stores should be licensed, with licences granted by the Director-General of Agriculture and Fisheries and continuing in force until cancelled or surrendered. The decision of the Director-General is based on the approval by Ministry of Agriculture and Fisheries of the plans and specifications of a proposed facility as submitted by the applicant. The Meat Industry Authority was dissolved in S.54 of the same Act.

The regulation of the export and domestic slaughtering industries up to 1980 and 1981 had hindered some adjustments to changes in the economic and market environment, the need for which had become evident. A recent study (Ross, Sheppard and Zwart, 1982) indicated that prior to the so-called "delicensing" of the industry, there had been an apparent build-up of pressure for access to existing and new killing facilities, originating chiefly from meat exporters who did not own slaughter facilities. In some cases these firms had entered into arrangements with processing plants to ensure a flow of product. The 1981 Meat Act allowed these exporters and others to consider buying into existing slaughter facilities or to establish new premises. This has been particularly evident in the central North Island, Canterbury and Otago/Southland.

The 1981 Act also caused changes to the legislative environment for local supply slaughterings. While there had been no major difference in the hygiene standards required for meat export houses and abattoirs since the passing of the 1969 Meat Regulations, these standards had been less rigorously applied to abattoirs. The 1981 Meat Act required complete compliance by abattoirs with this regulation. This imposed considerable expense on local authorities to bring abattoirs up to required standards, particularly where the premises were old. While privately owned abattoirs had access to "hygiene grants" and accelerated tax write-offs for the cost of meeting these requirements, those owned by local authorities did not. The protection

6.

afforded to abattoir operators by abattoir districts and "hanging fees" had created a situation in which renovation or replacement of facilities, and competitive pricing of killing fees, could be regarded with less urgency than would be the case in a less regulated industry. Where abattoirs were run by a local authority the operation was usually regarded as a form of public utility and was by design a non-profitmaking organisation. The lack of profits from which reserve funds for capital development could be built up was a further hindrance to development programmes. As a consequence of the cancellation of their obligation to provide for slaughter facilities, the abolition of abattoir districts and "hanging fees", and the discriminatory assistance offered by Government, selling premises rather than incurring the expense of upgrading or overhauling management along more competitive lines became an option which local authorities could consider.

## SECTION 3

### THE CHRISTCHURCH SITUATION

#### 3.1 Background

In Christchurch and Dunedin, an outcome of the deregulation of the export and domestic meat industries was the purchase of city abattoir facilities by companies intending to slaughter and process meat for export. Prior to 1981, both Otago Meat Export and Agency Co. Ltd. (OME) at Dunedin and C.S. Stevens and Co. Ltd. (through its subsidiary company, Ashley Meat Exports Ltd.) at Kaiapoi were engaged in exporting meat, but without formal access to a slaughtering facility. Both companies acquired ownership rights to the city abattoir and subsequently handled their own livestock through these facilities for further processing prior to export. (It should be noted that OME has ceased to trade since the acquisition of sheepmeats was undertaken by the New Zealand Meat Producers' Board).

The Christchurch City Abattoir was built in 1903 by the Christchurch City Council, and was leased under an instrument of delegation to Canterbury By-Products Co. Ltd. (CBPL), a company set up and substantially owned by the retail butchers of the Christchurch region. While the Christchurch City Council was initially involved in maintenance and engineering work on the abattoir, there was increasing administrative independence between the Council and CBPL from the 1960's onwards, and in October 1980 a decision was made to sell the abattoir outright to CBPL through a newly incorporated subsidiary, CBP Meat Processes Ltd., although still under the instrument of delegation.

Under CBPL management, both as lessee and owner, the abattoir had charged very high killing fees for the Christchurch abattoir compared with those of abattoirs in the Canterbury region. It can also be seen in Tables 1 and 2 that, when the fees of all thirty two abattoirs in New Zealand are ranked, Christchurch abattoir charged either the highest or second highest total fee for cattle or sheep from 1978 to 1981. The exceptions were the killing fees for sheep in 1978 and 1980, in which years Christchurch abattoir ranked third and fourth highest in New Zealand respectively. Other abattoirs in the Canterbury region charged considerably less, but the addition of the Christchurch hanging fee eliminated or substantially reduced the difference. Transport of product and/or livestock would in some cases further reduce the advantage of killing local supply stock outside of the Christchurch abattoir.

TABLE 1

Comparison of Abattoir Fees for Sheep  
(excluding inspection fees and levies)

As at:	Ashburton	Christchurch	Oamaru	Timaru
	\$	\$	\$	\$
Slaughter fee	1.47	3.07	2.08	1.69
Use of Abattoir fee <sup>c</sup>	0.97	0.93	1.89	0.97
31/7/78 Total	2.44	4.00	3.97	2.66
Range of Fees in NZ	5.39	to	1.43	
Rank Out of 32	28	3	4	25
Slaughter fee	1.68	3.77	2.08	1.77
Use of Abattoir fee	1.53	1.01	1.89	1.10
31/3/79 Total	3.21	4.78	3.97	2.87
Range of Fees in NZ	5.05	to	1.57	
Rank Out of 32	23	2	8	25
Slaughter fee	2.10	4.01	2.40	2.28
Use of Abattoir fee	2.30	1.25	2.15	1.40
31/3/80 Total	4.40 <sup>a</sup>	5.26 <sup>b</sup>	4.55	3.68
Range of Fees in NZ	6.01	to	1.95	
Rank Out of 32	15	4	10	22
Slaughter fee	2.00	5.34	2.60	2.28
Use of Abattoir fee	2.30	1.41	2.15	1.40
31/3/81 Total	4.30 <sup>a</sup>	6.75 <sup>b</sup>	4.75	3.68
Range of Fees in NZ	6.75	to	1.95	
Rank Out of 32	23	1	15	27
31/5/83 Total Killing Fee	5.30	5.87	5.85	5.00

a Excludes private killing fee of 50 cents

b Excludes private killing fee of 40 cents

c Note re application of Use of Abattoir or "hanging" fee:  
 Stock killed at, for example, Ashburton abattoir for sale in the  
 Christchurch district would be subject to the total fee at  
 Ashburton plus the Use of Abattoir fee at Christchurch.

SOURCE: MAF Meat Division, Abattoir Companies.

TABLE 2

Comparison of Abattoir Fees for Cattle (Average)  
(excluding inspection fees and levies)

As at:	Ashburton	Christchurch	Oamaru	Timaru
	\$	\$	\$	\$
Slaughter fee	6.72	19.20	9.92	7.61
Use of Abattoir fee <sup>c</sup>	4.04	10.25	9.87	1.75
31/7/78 Total	10.76	29.45	19.79	9.36
Range of Fees in NZ		29.45	to	7.76
Rank Out of 32	29	1	6	31
Slaughter fee	7.63	23.60	9.92	7.96
Use of Abattoir fee	6.35	11.11	9.87	1.97
31/3/79 Total	13.98	34.71	19.79	9.93
Range of Fees in NZ		38.31	to	7.76
Rank Out of 32	24	2	11	31
Slaughter fee	10.55	25.13	11.90	14.58
Use of Abattoir fee	12.00	13.05	11.90	3.22
31/3/80 Total	22.55 <sup>a</sup>	38.18 <sup>b</sup>	23.80	17.80
Range of Fees in NZ		48.96	to	12.32
Rank Out of 32	14	2	11	21
Slaughter fee	10.55	28.28	14.00	14.58
Use of Abattoir fee	12.00	14.68	12.33	3.22
31/3/81 Total	22.55 <sup>a</sup>	42.96 <sup>b</sup>	26.33	17.80
Range of Fees in NZ		48.96	to	13.33
Rank Out of 32	24	2	20	29
31/5/83 Total killing fee	30.46	35.40	34.80	28.50

a Excludes private killing fee of 50 cents

b Excludes private killing fee of 40 cents

c Note re application of Use of Abattoir or "hanging" fee:  
 Stock killed at, for example, Ashburton abattoir for sale in the  
 Christchurch district would be subject to the total fee at  
 Ashburton plus the Use of Abattoir fee at Christchurch.

SOURCE: MAF Meat Division, Abattoir Companies

With the abolition of hanging fees and abattoir districts, CBP Meat Processes Ltd. was at an immediate competitive disadvantage, and increasing volumes of livestock destined for the Christchurch market were slaughtered at abattoirs in South Canterbury. Although killing fees at the Christchurch abattoir were lowered slightly, the company

was unable to compete and in November 1981 was placed in receivership. C.S. Stevens Ltd. negotiated for the purchase of the abattoir complex and in March 1982 a subsidiary company, Ashley Meat Processors Ltd., of which C.S. Stevens Ltd. held 75% and CBPL held 25% of shares, took ownership of the abattoir. CBPL retained control of the by-product operation and the wholesale arm, Associated Meat Buyers Ltd., with the intention of trading out of receivership.

Following the abattoir purchase, C.S. Stevens and Co. Ltd. through Ashley Meat Processors Ltd. upgraded the facility to export standard and added a cutting and packing floor. As a consequence of the change in ownership, the intended destination of the majority of throughput has changed from local to export markets. All of the product intended for export was to be processed into cut form.

### 3.2 The Christchurch Retail Meat Market

Christchurch city and its environs has a population of 289,000 (March 1983 estimate, Department of Statistics). Information on meat available for consumption in the Department of Statistics Monthly Abstract of Statistics (February 1983) suggests an annual total consumption of 22,327 tonnes of red meats, comprising 13,628 tonnes of beef, and 8,699 tonnes of sheepmeats. The market is currently served by three slaughter facilities within the city, three facilities located in Canterbury and Otago, and one near Blenheim. Estimated throughput for the 1983 calendar year from these facilities is given in Table 3.

TABLE 3

#### Estimated Christchurch Market Throughput by Slaughter Facilities (1983 Calendar Year)

	Beef		Sheep	
	Carcases	% of Total	Carcases	% of Total
Christchurch Facilities <sup>a</sup>	36,400	75.4	227,200	73.5
Facilities Outside Christchurch <sup>b</sup>	11,900	24.6	81,800	26.5
Total	48,300	100.0	309,000	100.0

a C.S. Stevens, CFM (Belfast), Waitaki-NZR (Islington)

b Ashburton, Timaru, Oamaru, Blenheim

At the point of slaughter, 64.5 per cent of beef bodies and 62.9 per cent of sheep carcasses are owned by meat wholesalers, with the balance distributed between independent butchers, supermarkets and chains (Table 4). Most major wholesalers are directly associated, by ownership or by convention, with a slaughter facility; independent butchers and supermarket chains which kill on their own behalf are relatively flexible regarding the choice of slaughter facility for their product.

The significance of wholesalers in the meat distribution system has increased over the last half-decade, with fewer butchers buying stock at the saleyards. This is consistent with the decline in terminal markets in other produce sectors, and is influenced by the growth in importance of supermarkets in retailing meat. However the increasing role of wholesalers in the Christchurch market could also have been influenced by the fact that in order to take advantage of lower killing fees at South Canterbury abattoirs, Christchurch butchers had to forego making personal livestock purchase decisions and buy product on the hooks.

TABLE 4

Ownership of Stock at Point of Slaughter  
(1983)

	Beef		Sheep	
	Carcases	% of Total	Carcases	% of Total
OWNED BY:				
Independent Butchers	8,900	18.4	63,300	20.5
Supermarkets and Chains	5,800	12.0	36,100	11.7
Wholesalers, for resale predominantly as carcasses	24,800	51.3	149,100	48.3
Wholesalers, for resale predominantly as processed meat	6,800	14.1	45,300	14.6
Other (unknown)	2,000	4.2	15,200	4.9
	48,300	100.0	309,000	100.0

Most red meat is traded in carcase form, but supermarkets buy increasing volumes of specific cuts by the carton from processing plants. "Boxed beef" as yet occupies only a small market share; in Table 4, "processed meat" refers to smallgoods and sausages as well as meat cuts. Butcheries are unlikely to place heavy reliance on buying processed meats rather than carcasses, with the associated adjustments to plant and work force, until the processing industry is better

established and has a sufficient number of participants to encourage competitive pricing.

Estimated annual product flows by destination are presented in Table 5. Retail outlets in the city comprise 168 independent butchers, 30 butcheries associated with wholesalers or export companies, and butcheries attached to supermarkets and food markets.

TABLE 5  
Estimated Annual Product Flows by Destination  
(1983)

	Beef		Sheep	
	Carcases	% of Total	Carcases	% of Total
To Independent Butchers	21.0	43.5	131.7	42.6
To Supermarkets and Chain Butcheries	19.5	40.4	119.3	38.6
To Cutting and Processing Plants	7.4	15.3	45.3	14.7
Other (unknown)	0.4	0.8	12.7	4.1
	48.3	100.0	309.0	100.0

Of the livestock slaughtered for sale in Christchurch in 1983, nearly half the beef and over 60 per cent of the sheep are estimated to have been processed through the C.S. Stevens facility.

In spite of the transfer of local market slaughtering to Canterbury abattoirs, the desire by C.S. Stevens Ltd. to increase its export activities has led to pressure on killing capacity. The export kill has absorbed chain space which formerly contributed to the Christchurch market, and it is anticipated this will increase. While other facilities supply an increased volume to the local market, it is not likely to be sufficient to meet demand in the foreseeable future. The Christchurch abattoir is therefore still essential to the maintenance of the meat supplies. As a consequence, C.S. Stevens Ltd. has been able to resist some of the competitive pressure on killing charges, which in spite of a considerable downward shift since 1981 still remain higher than those of other market suppliers (See Tables 1 and 2).

In addition, C.S. Stevens provides a lower credit for hides or pelts than do other slaughter facilities, and does not return edible offals to the owner of the stock. This situation has resulted in a substantial demand for increased killing facilities to supply the Christchurch meat market.

### 3.3 Local Market Supply Changes

As a result of the increased demand, changes to killing capacity have occurred, or are planned to occur, in five areas. The existing facilities at Ashburton, Timaru and Oamaru now play a much more significant role in the supply of meat to Christchurch than in the past. The other two export works which contribute product to the retail meat market, Canterbury Frozen Meats Ltd. and Waitaki-NZR Ltd., have given no indication of an intent to increase their market share.

Following the deregulation in 1981 of slaughtering for local supply, both Ashburton Borough and Timaru City Councils sold their abattoirs to private concerns, with a Christchurch wholesaler and meat processor obtaining a major share in the Ashburton abattoir. Subsequently, the Ashburton abattoir has been expanded, with a large proportion of product being supplied directly to the Christchurch market.

At Timaru, expansion of the slaughter facility has also taken place. At present, a substantial proportion of the Timaru facility throughput is being sold in the Christchurch market. It is intended, with other developments in the area, that this throughput will be diverted to the Dunedin market, providing a guaranteed slaughter facility for a major retail chain in preference to the Dunedin export abattoir.

In early 1979, Oamaru Borough Council sold the borough's abattoir under an instrument of delegation to a private company which also acts as a wholesaler for the majority of its throughput. Since the abolition of hanging fees in 1981, the company has adopted an aggressive marketing stance which has led to a substantial increase in throughput, with a large proportion of the increase being taken up by the Christchurch market. In order to provide adequate facilities, the abattoir has been expanded as well. The appointment of a sales manager and an agent in the Christchurch area has contributed to the success of this company in the Christchurch market. The company intends to continue expanding its operation with the Christchurch market as the major target for increased sales.

It has recently been announced that the MMM chain of butcheries, in conjunction with Glasseys Butchery Ltd. intends to establish a plant at Burnham. It is intended that this plant will replace the rural slaughter house operated by Glasseys at Darfield and provide MMM with a guaranteed source of product. This arrangement is financially backed by R. & W. Hellaby Ltd.

Further facilities are also planned for introduction within the next 18 months by the Banks Peninsula Meat Co. Ltd. A relatively small

facility is planned with the intention of supplying meat to the Christchurch market.

Without exception, these facilities are able to kill stock for Christchurch butchers and wholesalers at a landed cost in Christchurch lower than the charges made by C.S. Stevens & Co. Ltd. or by CFM at Belfast. Tables 6 and 7 set out the killing fees charged by slaughter facilities contributing product to the Christchurch market. Although the range of killing fees for cattle is relatively small (\$6.90), differing hide and pelt prices, and policies regarding ownership of offals result in a range of \$34.40 between the highest and lowest effective net killing charge. Similarly, while sheep killing fees have a range of \$0.87 cents, the effective net killing charge can vary by up to \$5.72 between works.

For both sheep and cattle, the two works which have the highest effective net killing charge also kill for export. Export killing charges generally exceed local charges by a considerable margin; the New Zealand Meat Producer (Vol. 11(7), July/August 1983) gives representative killing costs for sheep and beef in New Zealand export works which are nearly double those of abattoir costs. In the same issue, it is contended that this difference is caused by higher labour costs and lower plant utilisation. Certainly, labour costs are less for abattoirs; works which kill for export as well as local supply require higher manning rates than those which kill for local supply only, to enable more stringent grading and inspection requirements to be met. It is therefore reasonable to suggest that where livestock is slaughtered for local supply at an export-oriented works, some of the costs associated with export slaughtering will be attached to the local kill.

Also, industrial stoppages, absenteeism and costly productivity agreements, which are a component of labour costs in export works, are less significant in local supply facilities. This may be partly attributable to the generally smaller plant and therefore workforce size, and to the constant rather than seasonal pattern of employment. Less seasonality also implies more efficient utilisation of killing capacity, with, *ceteris paribus*, an associated reduction in per capita fixed costs.

There is no evidence to suggest however that the Oamaru, Timaru and Ashburton abattoirs also have lower total fixed costs because, being old facilities, they have a low capital burden per chain space; most abattoirs in New Zealand were required to undertake costly upgrading programs to meet the hygiene standards specified in the 1981 Meat Act. In addition, all of the facilities contributing product to the Christchurch market have undertaken recent expansion programs, and some intend to expand further.

A further possible explanation of the difference in effective net killing charges between the works killing for export and local supply, and those killing for local supply only, is that there is less inducement to competitive pricing when local market kill is only a portion of total throughput. The lower hide and pelt credits offered by C.S. Stevens Ltd. suggest that maintaining a competitive position in the local market may have a relatively low priority for the company.

TABLE 6  
Beef Killing Charges (May 1983)

	C.S. Stevens Sockburn	CFM Belfast	Ashburton Abattoir	Timaru Abattoir	Oamaru Ab. Co.
	\$	\$	\$	\$	\$
Killing fee including N.Z. Meat Board levy	41.36	39.42	36.42	34.46	40.76
less:					
hide credit to butcher (av.)	18.50	26.50	29.50	29.50	29.50
edible offals returned to butcher	—	—	15.00	15.00	15.00
inedible offals credited to butcher	—	—	—	1.00	—
Effective net killing charge	22.86	12.92	-8.08	-11.54	-3.74

TABLE 7  
Sheep Killing Charges (May 1983)

	C.S. Stevens Sockburn	CFM Belfast	Ashburton Abattoir	Timaru Abattoir	Oamaru Ab. Co.
	\$	\$	\$	\$	\$
Killing fee including N.Z. Meat Board levy	6.17	5.70	5.80	5.30	6.15
less:					
pelt credited to butcher	3.25	3.96	4.60	4.60	4.60
edible offals returned to butcher	—	—	3.50	3.50	3.50
Effective net killing cost	2.92	1.74	-2.30	-2.80	-1.95

Note: pelt credits are for a 1.36 kg woolly pelt.

Supply to Christchurch from outlying facilities has increased over recent years resulting in a decline in the market share held by C.S. Stevens Ltd.

Other factors in favour of smaller, outlying facilities include their location close to the livestock procurement area rather than the consumption area. It is significantly cheaper to transport meat over long distances than it is to transport the equivalent live animals. Therefore, where stock are reared in South Canterbury and killed at one of the South Canterbury local supply facilities, the total saving on transport from farm gate to market, and the lower effective net killing charges mean that the landed cost of meat in Christchurch could be substantially less than for the same stock carted to C.S. Stevens Ltd. or CFM at Belfast for slaughter.



## SECTION 4

### IMPLICATIONS FOR THE DOMESTIC MARKET

The legislative amendments of 1980 and 1981 which enabled C.S. Stevens Ltd. to buy the Christchurch abattoir and thereby divert killing space from local to export kill, also allowed butchers and wholesalers to explore alternative slaughter facilities for their stock, and at the same time allowed price competition to operate more freely between abattoirs. Meat wholesalers have responded to pressure from both these sources, securing killing space for themselves by moving into ownership of smaller facilities outside Christchurch. Local authorities generally have less favourable access to Government financial assistance in upgrading works to export hygiene standards, and therefore have chosen to sell abattoirs to private concerns rather than upgrade them.

With the possibilities for buying into existing works exhausted, the next stage, that of adding to existing works or building new works, is already underway. The abolition of abattoir districts has also encouraged livestock procurement areas to be focussed on the slaughter facilities, and has provided an incentive for relocation of slaughter facilities over time, into prime producing areas. Further concentration in the retail market will encourage a shift from meat sales in carcase form to cartoned cuts, with further transport savings. Association of cutting plants with killing facilities, and further vertical integration by wholesalers, is therefore likely.

Christchurch, like other urban areas in New Zealand, has a considerable oversupply of suburban retail butcher shops, as a result of the large and increasing market share taken up by supermarkets. Competition between retail meat outlets is therefore fierce, and is exacerbated by supermarket chains selling large volumes of specific meat cuts as specials. When buying from wholesalers, butchers in the region exhibit little loyalty to specific wholesalers; price dominates purchase decisions, although the variation in price is small. Availability of offals and quality of meat supplied, while still important, are often considered secondary. Frequently, a butcher will buy from two or more wholesalers at the same time.

The increased volume of meat supplied from South Canterbury works with lower net killing costs has further fuelled price-cutting behaviour by wholesalers. This has to some extent contained increases in the cost structure of retail outlets, which would assist some independent retail butchers to remain in business where otherwise they may be unable to survive. Thus, the pressure for structural change arising from the entry of supermarkets into meat retailing has been dampened.



## SECTION 5

### IMPLICATIONS FOR THE EXPORT SECTOR

The allowance of a competitive environment in the meat slaughter sector of the industry, does appear to have resulted in the entry of a successful entrepreneur which can only be of benefit to the total industry.

The success of C.S. Stevens & Co. Ltd. in establishing a growing export market for processed meat products (mainly sheepmeat cuts) has resulted in the company taking steps to ensure flows of product by ownership of a slaughter facility. It is the apparent intention of the company to supply much of the capacity to the export sector. They are therefore not resisting the competitive attitude taken by other local market slaughter facilities in killing stock for the Christchurch market at costs lower than those charged by the C.S. Stevens facility. The deficit in slaughter capacity for local supply which resulted from C.S. Stevens Ltd.'s move, and the competitive behaviour encouraged by the removal of local supply regulations, have stimulated an expansion in capacity in these smaller, local supply plants, with a net increase in capacity overall. Buyers of stock for both export and local kill are therefore likely to encounter increasing competition for the available pool of animals in the Canterbury region, and possibly an increase in prices paid. This competition is likely to be stronger for beef where there is already a shortage in the region. It could therefore be suggested that the delicensing of the industry and the consequent ability of C.S. Stevens & Co. to establish their own slaughter facility has led to increased competition in the Canterbury meat processing industry which could lead to improved livestock prices to Canterbury farmers.

The evidence from the Canterbury area suggests that one effect of deregulation has been to allow local supply companies to invest in additional killing space which is exclusive of export works, to avoid the higher costs which appear to be a consequence of combined killing. The increase in efficiency of capital utilisation which benefits the local market as a result of this, may have a consequent cost to the export industry, by reducing the off-season utilisation of chain space in combined works. This hypothesis has not yet been tested, but the outcome would be of value to policymakers where future changes in the degree of legislative intervention in the industry are considered.

It has been suggested in an unpublished study that the location of facilities close to livestock procurement areas rather than to the market has a favourable effect on transport costs. Some published findings have indicated the possible reasons for this: Chudleigh (1983) in a study of rural transport in New Zealand demonstrated that livestock cartage has a relatively low load factor of 32%, although this tended to increase over longer distances. An equivalent study on load factors and costs for chilled products has not yet been carried

out, although Chudleigh (op. cit.) also reported that average load factors for urban goods transport, of which round-town meat delivery is an example, have been shown to be 40-42%. Long-distance cartage of chilled meat between population centres is likely to have an even higher load factor, particularly with the opportunities for backloading other product which do not in general exist where livestock and/or short haul chilled meat deliveries are concerned.

In spite of the fact that hygiene requirements are now almost the same for local as for export works, many of the factors which appear to allow a lower cost structure in local slaughter facilities may not be accessible to export works. Some elements of the higher labour costs in export works, such as higher manning rates to meet more stringent inspection and grading requirements, may not be reducible. Others, such as the cost of industrial conflict and lower productivity, may be affected by work force size and continuity of employment, but may be equally affected by management style and union leadership. Similarly, unless there is a very large shift in on-farm management practices, the increased efficiency in use of capital resources which is associated with a relatively constant throughput can only be exploited up to the available level of prime stock in winter. Nonetheless, a systematic comparison of the performance of export and local works could clarify the benefits from reducing some of the costlier components of the export industry structure, and could provide useful indicators to those areas which would be likely to show the greatest payoff if modifications were achieved.

It can therefore be suggested that deregulating the industry has the potential to result in a more efficient and competitive meat processing, wholesale and retail industry than existed in the past. The evidence from the Canterbury area would tend to indicate that some of the benefits are already being achieved.

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