THE COST OF OVERSEAS SHIPPING: WHO PAYS?

P. D. CHUDLEIGH

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SUMMARY

The overseas freight bill for New Zealand is estimated for the year ending 30 June 1980 to be $1.2 billion. The burden of this freight charge predominantly falls on New Zealand exporters and importers. Since a high portion of this charge is incurred in foreign exchange, the escalating sea freight bill contributes significantly to New Zealand's poor balance of payments position.

The paper addresses a number of questions:

Q1. Have shipping freight rates increased faster than other costs in our economy? The answer to this question is "yes".

Q2. What has led to such high freight rate increases? The answer to this question is associated with a high level of capital invested in cellular containerships over the past decade and the increasing cost of oil based fuels. There would appear to have been few productivity gains to compensate for such increased costs.

Q3. How do these freight rate increases affect farm gate returns? The answer to this question is that any increase in sea freight rates results in a corresponding drop in farm gate returns.

Q4. What are the arguments for and against sole use of the Conference Lines? Seven arguments used in support of sole use are detailed. Two arguments used by those opposed to exclusive use of the Conference Lines follow. In my opinion the balance of argument favours those opposed to sole use but more investigation is required before a specific policy change can be recommended.

Q5. What course of action should be pursued? Producer Boards and Government Departments must put New Zealand in a position of strength by investigating alternative shipping systems in a serious manner. Over the next year or so every support should be given to those who are probing the present shipping system.
CONCLUSIONS

1. The overseas freight bill for New Zealand in the year ending 30 June 1980 is estimated at $1.2 billion. Meaningful and accurate statistics are not collected on overseas freight with respect to:
   - the total sea freight bill
   - the proportion of the sea freight bill expended in foreign exchange and hence, the importance of the New Zealand cost component of overseas sea freight charges.
   These are important statistics and greater attention should be given to them in the future than has been the case in the past.

2. The burden of this sea freight bill falls largely on both New Zealand importers and exporters. Greater understanding of this important concept is desirable in the New Zealand community if the sea freight bill is to be viewed in its correct perspective.

3. Shipping freight rates in the New Zealand - Europe service have increased much faster than other costs and charges facing farmers in New Zealand. One could conclude that the new technologies adopted in the 1970's by the Conference Lines have been inappropriate, or have been introduced inefficiently, or that the Conference Lines have not been passing on savings due to the container revolution.

4. Sea freight rates for agricultural exports directly affect farm gate returns. Recognition of the relative magnitude
of farm gate prices and associated sea freight rates for various products is highly desirable.

5. Cross subsidisation of conference rates between products, between different forms of the same product, and between different ports/regions, may be influencing the type and amount of economic activity within New Zealand e.g. further processing. It would be more rational for freight rates to more accurately reflect the cost of carriage and for any cross subsidies to be determined by those responsible for economic policy within New Zealand.

6. There is no satisfactory check on Conference Lines technology, costs, and management. The argument that visible competition helps to hold Conference sea freight rates is supported by historical data and appears valid.

7. The possibility of a portion of the New Zealand - Europe trade to be shipped outside the Conference Lines should be thoroughly investigated. If such a policy were adopted, the freight rate on the remaining cargo would not necessarily have to rise. If such a dual shipping system were introduced slowly over a period of years, the Conference Lines would have time to adjust their service in terms of capacity. Guidelines for increasing/decreasing the share of independent carriers from year to year could be based on movements in differences in rates between Conference and independent Lines and in the quality of the service received.

8. Government and Producer Boards have been disinterested in researching alternative shipping systems in the past.
The large sums of money spent each year on agricultural production research appears out of balance with the meagre effort expended in attempting to increase productivity or decrease costs/charges in the shipping sector. Every support should be given over the next year to those who are probing the present system. Strong support for those pressing for a critical in-depth review of New Zealand's shipping policy should also be given. A cost to New Zealanders of over $1 billion per year cannot continue to be ignored when alternative systems appear to offer substantial savings.
1. **INTRODUCTION**

The reason for my interest in New Zealand's overseas shipping is largely a product of the disinterest of others and the lack of facts and reasoned argument that is apparent concerning this sector of New Zealand marketing. Overseas shipping must be considered critical to the New Zealand economy, as freight rates affect import prices and farm gate export product prices.

Before establishing the main thrust of this paper, two important areas in which substantial confusion appears to exist are considered. An understanding of these two areas is vital if overseas shipping is to be viewed in an appropriate context. The two areas are, firstly, the magnitude of New Zealand's overseas freight bill and, secondly, the question of who bears the freight burden, a burden which may be excessive.

The paper then concentrates on five questions which, in my opinion, New Zealanders should be asking. Whether satisfactory answers to all questions can be obtained at present is uncertain. Nevertheless, I have attempted to answer these questions in the following paragraphs. I conclude that there appears to be scope for change in our shipping policies and that we cannot continue to neglect this critical transport sector.
2. THE OVERSEAS SEA FREIGHT BILL

In 1976 I estimated the sea freight bill for New Zealand exports and imports to be around $700 million for the 1975/76 year; in 1978 I estimated the overseas freight bill for 1977/78 to be around $800-900 million. For the year ending 30 June 1980 I estimate the sea freight bill was $1.2 billion.

This latest estimate contrasts with figures published this year in articles in the New Zealand Shipping Gazette (issues of 19 April, 2 May, 24 May 1980). Mr Stuart Scott estimated the total freight bill at $765 million for the 1979 calendar year. The Overseas Shipowners' Committee Chairman, Mr R.C. Whyte criticised this figure and replied that the official Reserve Bank figure in respect of total freight costs expended in overseas exchange in the 1979 calendar year was less than $300 million.

Such variations in estimates require explanation, to say the least. The problem as I see it is, firstly, one of deciding whether we are discussing a total sea freight bill or a foreign exchange drain. The difference will be roughly equivalent to that portion of total freight payments received by shipping companies that is used to pay those shipping costs that are payable in New Zealand dollars (e.g. New Zealand port costs). Little useful information on this subject appears to be available and it would be a fruitful area to research.

Secondly, statistics currently published are inadequate to assess accurately the magnitude of the freight bill. The way in which I have estimated the $1.2 billion for the 1979/80 year was to start with the sea freight rates for a set of majcr
exports (beef and veal, lamb, mutton, butter and cheese, and wool). An estimate of the average sea freight rate for each export (to all markets) as of 1 January 1980 was made and was multiplied by the quantity of each cargo type shipped out in the year ending 30 June 1980. The total freight bill for the above products estimated in this way was just over $400 million; for these products, the sea freight bill made up about 16 percent of their f.o.b. (free on board) value.

Exports other than those products mentioned above could be assumed to carry a sea freight bill less than 16 percent of their value. This group would still include a range of bulky products (e.g. tallow, timber products) but would also include a range of manufactured goods where the proportion of sea freight to f.o.b. value would be less than 16 percent. If it is assumed that these other exports carry a freight bill of 12 percent of their f.o.b. value ($2,642 million), then they would be associated with a freight bill for the 1979/80 year of over $300 million. It is estimated, conservatively therefore, that the total freight bill for exports in the 1979/80 year was over $700 million ($400 + $300 million).

It is even more difficult to estimate freight on imports; some import freight payments are recorded in the "invisibles" statistics but since most imports to New Zealand are purchased c.i.f. (cost, insurance, freight), most freight payments are included in import payments. The c.i.f. value of imports in the year ending 30 June 1980 was $5,133 million. Applying a "rule of thumb" of freight accounting for 10 percent of c.i.f. price would give an import freight payment of over $500 million. The total sea freight bill is therefore estimated
conservatively at $700 + $500 million, or approximately $1.2 billion. Admittedly, this figure of $1.2 billion is only an estimate; I would welcome seeing a more refined calculation. Nevertheless, it is an astounding sum and most of it is a direct drain on foreign exchange.
3. THE SEA FREIGHT BURDEN

The second area that needs greater understanding is who bears the burden of the huge sea freight bill. The answer is simply that New Zealand exporters and importers bear most of the freight burden on our overseas trade. This is contrary to a belief that overseas customers for our exports bear the charges of sea freight and New Zealanders only bear the charges of freight on imports.

The reason for this state of affairs lies in the kinds of produce New Zealand exports and imports as well as our dependence on specific imports and exports. In general, the responsiveness of overseas importers to changes in prices of our exports is far higher than the responsiveness of our producers (in terms of production levels or alternative products) to changes in the prices our producers receive. Thus, overseas importers are "fickle" when it comes to the prices of our exports but we in New Zealand find it difficult to turn the tap on and off with respect to the quantities and kinds of produce we supply.

For example, if New Zealand and its export markets were very close together so that no transport was necessary and a similar trading pattern to the present was evident, and then New Zealand was suddenly pushed into the South Pacific, New Zealand exporters would get the same overseas prices as before. If exporters attempted to pass on the transport cost to overseas buyers, changes in demand for our goods would occur e.g. substitution of chicken for lamb. Hence, because our producers rely on products such as lamb or beef and cannot switch quickly to other products (or other markets), if
the product is to be sold, the burden of the transport charge will have to fall on our exporters. Hence, sea freight rates are subtracted from the overseas price to leave an f.o.b. price, which is then translated into a farm gate price. It does not matter whether the New Zealand exporter or the importer overseas actually pays the freight; both result in less foreign exchange earned.

With respect to imports we are probably in a similar situation - because of the nature of our imports. Most imports (e.g. oil, fertiliser, chemicals) are viewed as essential to our economy and our responsiveness to changes in their price is quite low. On the other hand the responsiveness of suppliers of our imports to changes in prices they can achieve in the New Zealand market is quite significant; that is, they do not have to sell to us and can sell easily to other markets.

The fact is, New Zealand has to keep exporting and importing, other countries have alternative markets for their imports and substitutes for our exports.

So let us be clear on this point; New Zealand bears the burden of the cost of sea freight in both directions of our overseas trade.
4. **QUESTIONS TO ASK**

The main issue addressed in this paper is that of Conference shipping. Attention is focussed on the New Zealand - Europe shipping service, which is responsible for carrying a high proportion of our overseas trade and which is one of the "tightest" and most controlled Conferences in today's shipping world.

There are a number of questions that farmers and others in New Zealand should be asking in order to more fully assess their own position with regards to advocating further investigation into the possibilities for change.

This paper attempts to pose what the author believes are the key questions. Some answers are attempted; others are implied; other answers are, in the opinion of the author, not available, and these questions require further investigation. The questions addressed are:

- **Q1** Have shipping freight rates increased faster than other costs in our economy?
- **Q2** What has led to such high freight rate increases?
- **Q3** How do these freight rates affect farm gate returns?
- **Q4** What are the arguments for and against the sole use of the Conference Lines?
- **Q5** What course of action should be pursued?

Table 1 shows that freight rates in the New Zealand - Europe service have increased much faster than other costs facing farmers and indeed, other transport costs (e.g. rural road transport).
TABLE 1

Sea Freight Indices Compared with Other Cost Indices

<table>
<thead>
<tr>
<th>Year</th>
<th>Sea Freight to Europe</th>
<th>Greasy Wool</th>
<th>Carcass Lamb</th>
<th>Butter</th>
<th>Rural Road Freight Index</th>
<th>Farm Input Price Index</th>
<th>Consumer Price Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>1971</td>
<td>112</td>
<td>134</td>
<td>134</td>
<td>114</td>
<td>106</td>
<td>109</td>
<td>109</td>
</tr>
<tr>
<td>1972</td>
<td>102</td>
<td>132</td>
<td>132</td>
<td>118</td>
<td>112</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>1973</td>
<td>111</td>
<td>127</td>
<td>127</td>
<td>124</td>
<td>127</td>
<td>142</td>
<td>142</td>
</tr>
<tr>
<td>1974</td>
<td>126</td>
<td>188</td>
<td>188</td>
<td>151</td>
<td>144</td>
<td>143</td>
<td>143</td>
</tr>
<tr>
<td>1975</td>
<td>195</td>
<td>238</td>
<td>232</td>
<td>162</td>
<td>157</td>
<td>165</td>
<td>165</td>
</tr>
<tr>
<td>1976</td>
<td>231</td>
<td>280</td>
<td>253</td>
<td>178</td>
<td>184</td>
<td>191</td>
<td>191</td>
</tr>
<tr>
<td>1977</td>
<td>259</td>
<td>361</td>
<td>308</td>
<td>208</td>
<td>209</td>
<td>220</td>
<td>220</td>
</tr>
<tr>
<td>1978</td>
<td>307</td>
<td>422</td>
<td>358</td>
<td>236</td>
<td>229</td>
<td>242</td>
<td>242</td>
</tr>
<tr>
<td>1979</td>
<td>365</td>
<td>531</td>
<td>449</td>
<td>276</td>
<td>275</td>
<td>282</td>
<td>282</td>
</tr>
</tbody>
</table>

Source: Derived from data from: Producer Boards, Road Transport Association, Department of Statistics

Q 2 What has led to such high freight rate increases?

Undoubtedly, the high level of capital invested in cellular containerships has been a major cause. Another major cause has been the increasing cost of oil based fuels. However, other industries such as the road transport industry have faced similarly high oil price increases but have been able to absorb many of the cost increases due to increasing productivity largely by use of trailers and larger vehicles. For example, over the 1968-1976 period, increases in costs facing road transport operators were in the order of 170-
200 percent but cartage rates only increased about 100 percent. Over the period 1975-1980 costs increased by about 116 percent and rates increased by only 101 percent. It is admitted that fuel costs make up a higher proportion of total costs in shipping than in road transport (say, 20 percent versus 15 percent). However, this would be in no way a significant explanation for the divergent trends shown in Table 1.

Where have been the productivity gains in the sea transport industry serving the New Zealand - Europe trade? One could conclude that the new technologies adopted in the 1970's have been inappropriate or have been introduced inefficiently, or that the Lines have not been passing on savings due to the container revolution.

Q 3 How do these freight rates affect farm gate returns?

Because of the way in which farm gate prices are formed, any increase in sea freight rates will be reflected in reductions in farm gate prices.

Examples of the approximate relative sizes of farm gate prices and sea freight rates are shown below for lamb over five recent seasons (Table 2).
TABLE 2

Sea Freight Rates for N.Z. Lamb Destined for U.K. in Relation to Farm Gate Prices ($NZ Per Carcass)

<table>
<thead>
<tr>
<th>Year</th>
<th>Overseas Market Price</th>
<th>Sea Freight Component of Farm Gate to Market Charge</th>
<th>Farm Gate Price (Residual)</th>
<th>Sea Freight Component as % of Farm Gate Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>20.00</td>
<td>3.00</td>
<td>7.25</td>
<td>41</td>
</tr>
<tr>
<td>1977</td>
<td>27.50</td>
<td>3.75</td>
<td>9.75</td>
<td>38</td>
</tr>
<tr>
<td>1978</td>
<td>27.25</td>
<td>4.50</td>
<td>8.75</td>
<td>51</td>
</tr>
<tr>
<td>1979</td>
<td>30.50</td>
<td>5.25</td>
<td>10.00</td>
<td>52</td>
</tr>
<tr>
<td>1980</td>
<td>32.00</td>
<td>6.75</td>
<td>11.75</td>
<td>57</td>
</tr>
</tbody>
</table>

Notes

1. Prices and rates as of 1 January for a 14.2 kg PM grade lamb.

Q 4 What are the arguments for and against sole use of the Conference Lines?

Seven Arguments Supporting Sole Use of Conference Lines

(i) The Conference Lines maintain they have served New Zealand well for many years, have provided a predictable and reliable service, and have experienced a long association and understanding with the Producer Boards.

Whilst all this may be true, it does not mean that services provided by other Lines could not perform equally or better. Neither New Zealand nor New Zealand exporters have a moral obligation to use the Conference Lines. Whilst there can be some room for sentiment in business relationships, such sentiment should not be allowed to dominate a large business within a small country struggling for its economic survival. It is the freight rates and the quality of the service that should be paramount in the eyes of New Zealand shippers.

The Conference Lines also argue that the security given to the Lines by New Zealand Producer Boards via exclusive contracts has allowed them to make substantial investment in specialised shipping suited to the New Zealand - Europe trade. It has been contended by the Lines that this has worked to the benefit of shippers but this is not supported by the freight rate increases in Table 1. Also, the supposed advantages of containerisation claimed by the Lines in the form of more hygienic carriage, and less damage and pilferage, have not been borne out in a recent survey of insurance claims by the Meat Research Institute of New Zealand. For the 1977/78 season, insurance claims on lamb carcasses shipped to the United Kingdom by container and by conventional ship were similar in
proportion to the numbers of shipments of each type and claims were similar as a percentage of insured value. This finding should not be used necessarily as an anti-container argument in itself; however, it is the kind of evidence required to question the usual picture painted of the container revolution.
(ii) The Conference Lines argue that no other shipping structure than a Conference can provide such a high frequency of service as well as take advantage of economies of ship size.

The Lines carry the majority of cargo to Europe and this is the reason for their high service frequency. The introduction of large cellular container ships by the Lines has been supported by the argument of economies of ship size. However, a closer look at the figures casts doubt upon the magnitude of such economies (Table 3). The economies of size do not appear large and may be more than offset by additional charges beyond dockgates such as those associated with assembly and distribution activities required for larger ships.

### Economies of Ship Size for Cellular Containerships

<table>
<thead>
<tr>
<th>No. of Containers Per Ship</th>
<th>Costs dockgate to dockgate (£st per ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>750</td>
<td>24.88</td>
</tr>
<tr>
<td>1000</td>
<td>24.18</td>
</tr>
<tr>
<td>1250</td>
<td>23.48</td>
</tr>
<tr>
<td>1750</td>
<td>22.99</td>
</tr>
<tr>
<td>2000</td>
<td>22.81</td>
</tr>
<tr>
<td>2500</td>
<td>22.43</td>
</tr>
<tr>
<td>3000</td>
<td>21.96</td>
</tr>
</tbody>
</table>


The real measure of the effectiveness of a change in technology to the user of the technology is whether the cost of carriage per unit of cargo as a result of the change is less than before. If economies of ship size are real, why have sea freight rates risen considerably faster than other costs in the economy during the past decade?
(iii) It is well known that Conferences cross subsidise the rates of freight between cargoes. There is a line of argument that suggests cross subsidisation of freight rates is in the overall interests of New Zealand on the grounds that without cross subsidisation, certain commodities may not be traded. Hence, this cross subsidisation will act to the advantage of some shippers, and to the disadvantage of others.

These cross subsidising procedures may be influencing the type and amount of economic activity in New Zealand. In this case it is questionable whether the Lines should be controlling such cross-subsidisation. It would be more rational for freight rates to more accurately reflect the cost of carriage and for any cross subsidies to be determined by those responsible for economic policy in New Zealand. Why should foreign shipping companies be allowed to influence the economic performance of different New Zealand industries?

In addition, changes of cargo form to less volume or weight per unit of value are not readily associated with a lowering of freight rates. In general the rating system is such that higher value (further processed) forms of the same product carry a higher freight rate per unit of weight or volume. This generalisation may have serious implications for New Zealand in the discouragement of further processing or packaging technology for primary products.

An example of how reluctant the Conference Lines are to make freight rate reductions due to a change in cargo form is the introduction of more densely dumped wool packages. The reluctance of the Lines throughout the past decade to grant concessions to shippers ended in only a 7 percent
reduction in freight rates, even though 20 tonne capacity containers could be filled with 10.5 tonnes of wool instead of 6.5 tonnes \(^1\) (an increase in container loadings of up to 85 percent).

My opinion is that any loss of freight revenue (by reducing freight rates for lower volume or lower weight forms of the same product) is not easily accommodated within a closed conference system. The logical solution of reducing total carrying capacity is not favoured as a decrease in capacity of, say, 10 percent in the total trade may mean a reduction in capacity of say, 50 percent for a specific Line.

\footnote{Shadwell, A.D., Address to Shipping Forum, June 1980.}
(iv) The Conference Lines argue that an alternative service could only compete if it only handled the most favoured part of the trade. This is a major problem as the cross subsidisation in Conference shipping that apparently exists between different ports/regions resulting in a common rate from/to different ports/regions precludes any accurate comparison between alternative shipping rates and Conference rates.

If the Conference Lines were to present data showing what mainstream rates in a trade would be with and without an outlying service to an unfavourable port or region, it may be possible to more accurately compare and assess independent shipping service proposals. In this case the initiative could be taken by the New Zealand Producer Boards in asking for rates from Conference Lines and independent operators on such a basis.
The Conference Lines argue that if some cargo were shipped with an independent Line, the freight rate on the remaining cargo would have to rise. This is not necessarily so and would depend on, among other things, the amount and destination of cargo shipped outside the Conference and the time of the year the independent Line operated.

For example, if an independent Line operated only during the peak shipping period, the amount of cargo carried by the Conference Lines in their own ships may not be altered. This is because additional tonnage usually has to be introduced to service the seasonal shipping peak anyway; Conference servicing of such peaks with outside tonnage could be expected to involve higher unit costs and hence parting with such services should lead to lower Conference freight rates.

If an independent Line operated all year round carrying a portion of the trade (say 10 percent), the capacity of the Conference Lines could be reduced by 10 percent without affecting freight rates provided that a 10 percent reduction in Conference capacity would not increase their unit costs. Also, if an independent service were introduced gradually over a period of years, the Conference Lines would have time to adjust their service in terms of shipping capacity as ships are continually being replaced. Guidelines for increasing/decreasing the share of independent carriers from year to year could be based on the differences in rates between Conference and independent Lines and the quality of service received from each.
(vi) Traditional liner interests usually allege that independent operators are unorganised, opportunistic and would be associated with variable rates aligned with the refrigerated tramp market.

This position overlooks recent trends in contract shipping whereby a shipowner contracts to provide a certain number of ships, or sailings, from specified ports to specified ports; also, the shipper may have to guarantee a certain minimum amount of cargo. The contractual shipping system is appearing to present a threat to the Conference domination of liner trades. For example, an extract from the Fairplay Shipping Magazine of 17 January 1980 reads:

"....... There now appears to be a growing trend towards the emergence of highly efficient large scale operators with considerable experience and financial stability prepared to make a long term committment to a trade able to offer lower rates and comparable service to the institutionalised Conference carriers. In the past such operators have tended to be rapidly assimilated into the Conference but the latest crop show every inclination of eschewing such blandishments. Essentially, the philosophical approach is sufficiently different to preclude any such marriage. Nowhere is this more marked than with the intrusion into the liner trades of bulk carrying methods".

The success of the New Zealand Apple and Pear Marketing Board in departing from the Conference Lines in 1971 and becoming involved in contract and charter shipping is an example of how alternative shipping arrangements can be made to work in favour of the shipper. For example, the following three quotes give an idea of the success of the change.  

"The first year of this entirely new mode of operation proved very successful ......

"The utilisation of this form of shipping not only achieves dramatic economics in freight cost but also ensures guaranteed arrival on to markets".

"An excellent rapport has been established with all contracted shipowners and this has been a major factor in enabling the Board to meet the rapidly changing marketing requirements which occur in every season".
Another argument heard frequently in defence of the Conference system is that a planned and co-ordinated service is an essential ingredient to the marketing strategy for New Zealand produce.

The integration of shipping into a marketing strategy is to be applauded. The legal powers of the Producer Boards give them absolute control over their shipping arrangements. Such powers would still exist under alternative shipping arrangements, and 'close associations' and 'integrated control' could still be practised. It is interesting to note that one of the reasons the New Zealand Apple and Pear Marketing Board opted out of the Conference system in 1971 in favour of contract shipping was to obtain greater marketing flexibility and control.
Two Arguments Against Sole Use of Conference Lines

(i) Those favouring the introduction of alternative services claim the current system of shipping is cost plus. The Conference Lines contend that the present rate setting procedures are not a cost plus system.

The main characteristic of a cost plus system is whether prices set are influenced by costs incurred. Cost information is presented by the Conference Lines at the annual freight negotiations with the Producer Boards. Also, return on capital forms the basis from which negotiations proceed. Both these activities suggest that prices (freight rates) are influenced by costs. The main issue is that the costs associated with management, as well as decisions such as cargo aggregation policies, choice of ship type and cargo handling arrangements will affect the freight rates set. If poor decisions are made on these key factors, the freight rates will reflect such decisions. Also, because the return on written down replacement capital is used as a basis for such negotiations, the incentive to seek out less capital intensive systems is decreased.

It is claimed by some that such procedures as the "London Agreement" (whereby an accounting check is made on the Conference Lines' revenues and costs by independent accountants) act as a "watchdog" for shippers. However, the fact is that a return on replacement capital in line with a return to capital obtained by U.K. industry is the basis from which negotiations proceed. What is the justification for using such a base when credit terms for ship building in other countries may be extremely favourable? For example, in Belgium, government 15 year loans of 90% have been available for ship building, at interest
rates of 1% p.a. for 80% of the value, and 10% per annum for 10% of the value; there is a 2 year moratorium on repayments, as well as an operating subsidy.

The "London Agreement" procedures would appear to be no check whatsoever on "efficiency", nor that the Conference Line service is the best and least cost available.

As there is no satisfactory check on Conference Line technology, costs, management etc, there is a need to take advantage of competition in sea carriage to ensure freight rates paid are the lowest possible, commensurate with a service satisfactory to shippers. If the Conference Lines are as efficient as they claim and are providing the range of services desired by shippers, then the Lines should have little grounds for fear.
The argument that visible competition helps to hold Conference freight rates appears valid. In the few instances where visible competition has become apparent in the New Zealand - Europe trade, the result has been a holding or lowering of Conference rates, a part of which becomes permanent.

For example, in the early 1970's visible competition from bulk carriers resulted in minimal rate increases for wool over a 3 year period. The lowered rates obtained for wool in 1972, 1973 and 1974 resulted in higher farm gate prices than would have resulted in the absence of competition (see Table 1).

Another significant feature regarding the effects of competition is that the Conference Lines do not revert to the former high rates when the visible competition disappears. This feature is supported by the Streamlining Committee Report 3 reference to the competition for wool cargoes in the 1960's (para 86):

"The competition for wool and other general cargo on the homeward trade has come mainly from Dutch shipowners serving the continent of Europe ............. The recent Conference Agreement entered into with Dutch and other shipowners for the carriage of wool and general cargo should put an end to the further erosion of the Shipping Lines' New Zealand trade. It has enabled the Lines to restore by 9 percent the reduction in the former rate which was introduced to combat the competition but the rate of freight is still well below what it was before the competition arose".

Zerby and Conlon\textsuperscript{4} have reported from an analysis of freight rates that although "...............conference rate setting is partly dependent upon cost considerations such as stowage factors, distance, and ease of loading, a substantial proportion of the difference in freight rates can be explained by factors such as the bargaining power of the shipper and his chartering potential".

Also, it is extremely difficult to believe that the ABC Containerline Service had no substantial effect on the N.Z. Meat Producers' Board's negotiations with the Conference Lines resulting in a freight rate increase of only 5 percent from 1 November 1979.

I believe the potential bargaining power of New Zealand Producer Boards is great but has not been exploited adequately. A world surplus of tonnage exists in liner shipping and the situation will probably worsen from the shipping company point of view over the next few years. In the meantime, depressed economies around the world suggest increasing trade volumes will not be available to fill the increasing tonnage. Careful thought needs to be given to whether, and how, this situation should be exploited from a New Zealand national viewpoint.

Q 5 What course of action should be pursued?

I do not believe anybody in New Zealand is in a position currently to confidently propose a specific alternative shipping system that is clearly superior to the Conference System. What I believe has been uncovered over the past year has been a realisation that we have inadequate knowledge of alternative shipping systems. We also have given insufficient thought to how to best organise our shipping strength (strength as a large shipper, not as a shipping operator). We need to carry out significantly more research at both the commercial and applied economic levels.

I believe that Government and Producer Boards have failed to follow a strategy of putting ourselves in a position of knowledge, knowledge gained independently of our traditional carriers. Such knowledge is strength. The large sums of money spent each year on agricultural production and processing research aimed at lowering production costs or increasing product yields would appear to be out of balance with the meagre effort expended in trying to increase productivity or decrease costs in the shipping sector. After all, the cost of producing a lamb carcass up to the farm gate should be lower than prices received ($11.75 for a 14.2 kg PM lamb in January 1980). Hence the sea freight charge on a lamb ($6.75) is probably approaching the level of production costs.

The three major Producer Boards would appear to have been disinterested in researching alternative shipping systems in any depth. This disinterest seems to have been

5. In the year ending 31 March 1980, the Government science budget expenditure on agricultural production and processing was $43 million.
shared by Government (Ministry of Transport) and by the New Zealand Shipping Corporation. I believe the lack of attention given to overseas shipping at other than an operational level by those responsible in New Zealand reflects a lack of business acumen. It is to be hoped that the decision made by the New Zealand Meat Producers' Board, and that recently made by New Zealand Wool Board, to review their exclusive contracts with the Conference Lines are not just 'window dressing' but reflect a genuine desire to thoroughly research alternative systems.

Over the next year or so, every support should be given to those who are probing the present shipping system and who have ideas and alternative suggestions. Furthermore, strong support for those pressing for a critical in-depth review of New Zealand's shipping policy should also be given. It is very important that serious, objective, and thorough studies and investigations are initiated soon by those in New Zealand responsible for overseas shipping. A cost to New Zealanders of $1.2 billion per annum cannot continue to be ignored when alternative systems appear to offer substantial savings.
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