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AN EXAMINATION OF SHIPPING COSTS AND THEIR EFFECTS

ON TASMANIAN EXPORTING INDUSTRIES.

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P R E F A C E

Concurrently with other investigations, the Department of Economics and Commerce in this University during 1937, 1938 and 1939 conducted research into the cost structure of Australian industry. The researcher, Mr. D. L. Anderson, B.Com., prefaced his monograph by pointing out that the utility of such an investigation was difficult to define before the results of the investigation were known. The same observation may be made of the present study, the results of which can only be said to be indeterminate. Nor can the work done be justified on the grounds that it constitutes, to quote Mr. Anderson, "a first step in a theoretical analysis which may finally result in some practical result, such as the improvement of economic or technical efficiency." For example, inductive confirmation of some of the currently held theories of industrial location were sought but little light has been thrown on the applicability of such theories. It was decided to conduct an examination of the effects of shipping costs on specific industries for two reasons. Firstly, the financial history of the State since Federation has emphasised the cost of Bass Strait to the Tasmanian community. Being wholly dependent on sea carriage for the transportation of imports and exports, every ship and every freight rate is a factor in the prosperity of the State. Secondly, the survey conducted last year of the gross and net labour absorptive capacity of Tasmanian secondary industries suggested that the ruling level of shipping freight rates was a determining factor so far as output policies and industrial expansion were concerned.⁽¹⁾ However, it may even be that, particularly where production economies are desired, output is expanded in spite of freight costs.

For a full understanding of the Tasmanian position it is necessary to realise that not only is Tasmania isolated from the other States, but it is divided into four sections each of which is economically isolated from the others. Although a very small State the climate and the quality of the soil vary considerably, with the result that each section specialises in a particular branch of primary production.

The West is an extensive mining field - its only port is Strahan. The North West Coast produces chiefly oats, peas, potatoes, timber and fat stock and its interstate ports are Stanley, Burnie, Devonport and Ulverstone. The North and North East produces chiefly wool, grain, hay and fruit, and is served almost wholly by the port of Launceston. The chief primary products of the South are fruit and timber for which the interstate port is Hobart. The exportable output of the secondary industries is also distributed among the four groups of ports.

In regard to secondary industry it is hardly necessary to stress the point that the tariff has not succeeded in promoting manufacturing industry in Tasmania. Owing to the absence of a home market, the limited supply of labour and the insular position of the State with the keen mainland competition, it is difficult to anticipate that manufacturing industries on a large scale are likely to locate in Tasmania. On the other hand, the present State Government's declared policy of post war industrial development is understood to be yielding results and already a number of new establishments have commenced production. The continuance and extension of this policy will largely depend on the relative bargaining power of Tasmania as against other States anxious to develop industrially. As will be noted in Chapter VIII it must be realised that the term "decentralisation of secondary industry" means one thing to such industrialised states as Victoria and New South Wales and another to the outlying states, particularly Tasmania and Western Australia.

Chapter I relates to the effects of the Coasting Trade provisions of the Navigation Act of 1912-43. Whether Tasmania is worse off than she would be under free competition in shipping is questionable. Tasmania needs regularity of service more than any other state, and, as she is off the main line of traffic Tasmanian trades are rather in the nature of a diversion and hence more expensive.

(1) "The Location of Industry and Distribution of Employment;" by C. P. Haddon-Cavo, (University of Tasmania).

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CHAPTER I

THE COASTING TRADE PROVISIONS OF THE NAVIGATION ACT, 1912-43

1. The Navigation Bill was originally drafted by the late Hon. C. C. Kingston in 1902, and was first introduced into the Senate in 1904, by the first Deakin administration. It was withdrawn for further consideration and redrafted by a Royal Commission, and re-submitted in 1906, but was again withdrawn pending the Navigation Conference in London in 1907. This conference concerned the United Kingdom, Australia and New Zealand and was held in London on the subject of "Merchant Shipping Legislation". The main principles of the Royal Commission's draft bill were considered. The conference recommended, inter alia:-

"That the coastal trade of the Commonwealth be reserved for ships on the Australian register, i.e. ships conforming to Australian conditions, and licensed to trade on the Australian coast".

2. This resolution was embodied in the draft bill, which after being submitted year by year to the Federal Parliament, was eventually passed in 1912 and proclaimed in 1913. In 1914 the operation of the Act was postponed at the request of the Imperial Government, and it did not actually come into force till 1st July, 1921, nineteen years after its original drafting.

3. The first group of sections - the Coasting Trade provisions - came into effect on 1st July 1921. Shortly after this portion of the Act became operative the owners of a number of interstate ships tested the validity of the application of the manning and accommodation provisions of the Act to their ships, and the High Court decided that these provisions did not apply to vessels solely engaged in the domestic trade of a State. In consequence of this judgement, the Commonwealth Government decided not to enforce the provisions of the Act then in force on any intra-state ships. Other sections of the Act came into operation in the following years.

4. The Navigation Act - Reasons for Enactment.

The Commonwealth having adopted a policy of protection for its industries through the Customs Tariff in order to maintain reasonable labour conditions and standards of living, it was obvious that, unless some form of protection was provided for the Australian industry of shipping, such industry could not be operated under the same standards of hours and wages as were imposed on the protected industries for it would be in competition with overseas vessels operating under lower standards. Again, the Commonwealth legislature realised the desirability of building up an Australian Mercantile Marine. The Act requires as a condition precedent to the issue of the three-yearly licences to engage in the Australian coastal trade, compliance with certain specific conditions as to manning and accommodation and also as to the payment of wages in accordance with Australian standards.

5. (a). The problem of protecting coastal shipping is not peculiar to Australia, other countries having adopted similar measures. In America the coastwise laws wholly exclude foreign vessels from coastwise commerce. The term "coastwise" as used in relation to these laws includes not only the coasts of continental America, but also Porto Rico and Hawaii. Under the Merchant Marine Act 1920 (Section 21), the President, when he is satisfied that adequate service is furnished by American vessels, may extend the operation of the "coastwise" laws to cover the trade between the United States and the Philippines. The coastal trade of Canada is reserved exclusively to British ships. In order to participate in the coastal trade, vessels must not only be British-owned, but also British built. Vessels British-owned but foreign-built can obtain a licence to trade on the coast only by paying a fee equal to 25% of the value of the ship. Section 75 (1) of the Shipping and Seamen

(ii)

In Chapter II special aspects of the financial history of Tasmania relative to Federation will be discussed. The Tasmanian "case" argues that the State suffers mainly because a policy is adopted by the Commonwealth which is dictated by the interests of the whole, but little attempt is made to meet her special needs. It will be maintained that it is extremely doubtful whether the calculations made by the Economic Case Committee were valid as a measure of the disability. In any case the real measure of the disability to Tasmania on account of the Navigation Act is the amount necessary to secure by subsidy a reasonably satisfactory and economical transport service.

Chapter III traces the history of shipping control in both the Great War 1914-18 and the recent World War 1939-45. So far as the latter is concerned special reference has been made to the question of wartime marine insurance (both hull and cargo) which has, to a certain extent, been responsible for the wartime inflation of freight rates. Reference is also made to the two ill-fated attempts at State enterprise in the shipping industry. The policy of the present Commonwealth Government appears to be in the direction of the control of freight and charter rates, fares, routes and sailings whilst leaving the function of ship operation to the private companies.

Chapter IV and V will discuss respectively the economics of port terminals and shipping freight rates with special reference to the Tasmanian trades. These chapters will prepare the ground for the survey in Chapter VII of the effects of shipping costs on the cost structure of Tasmanian exporting industries. Special reference will be made to the proportion which shipping costs bear to the total costs of production and selling price of the finished product. Chapter VI is devoted to an analysis of Tasmania's interstate and overseas trade as revealed by the published statistical data. Hence, the ground is prepared for the task of selecting the industries for which a cost analysis is attempted. (Vide Chapter VII).

Finally, in Chapter VIII we shall be concerned with the relation of shipping freight rates, or more correctly shipping costs to those factors which determine the location of industry with special reference to the empirical examination of Chapter VII. Of course, whatever the reader concludes regarding the factor of proximity to market must be interpreted, so far as industries already located are concerned, in static terms. The original reasons for so locating are bound to lose significance as new factors dictating production policies emerge and an industry, once established, is difficult to move for a complexity of economic and social reasons.

The study has been financed from the Commonwealth Social Science Research Grant to Universities, until recently known as the Reconstruction Research Grant. Grateful recognition is made of the co-operation and assistance in the collection of data - a task beset with difficulties - received from entrepreneurs, public servants and others too numerous to mention. The work was interrupted for three months of 1945 whilst the researcher was on loan to the Secondary Industries Division of the Ministry of Post-war Reconstruction, under the terms of the Social Science Research Grant.

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Act, 1908 of New Zealand reads, inter alia, as follows:-

"Notwithstanding anything in this Act, it is hereby declared that where the Master, Owner, or Agent of any ship -

- (a) engages seamen in New Zealand,
- (b) having engaged them abroad, employs them in New Zealand,

these seamen while so employed shall be paid and may recover the current rate of wages for the time being ruling in New Zealand."

(b) Other nations that reserve their coastal trade to national ships include France, Spain, Belgium, Japan, Russia, Portugal, Brazil and Argentine. It is interesting to note that the following types of shipping are reserved for French ships according to French law, viz:-

- (i) Coastal fishing in territorial waters.
- (ii) Coastal trading (decree of 21st September 1793)
- (iii) Navigation between France and Algeria (law of 2nd April 1885)
- (iv) Towing in French harbours.

(c) Except in the case of New Zealand, where the restrictions on coastal shipping are along the same lines as those existing in Australia, the conditions governing the coastal trade of Australia are less discriminating than those of other countries. On the Australian coast all nations are treated alike, and the conditions laid down apply to all.

6. Inquiries have been made from time to time as to the operation and effect of the Navigation Act and the matter was made the subject of an exhaustive investigation by a Royal Commission of seven members appointed on 7th September 1923. The result of the Commissioners' investigations is set out in three minority reports dated 7th August 1924 -

- (a) Two members recommended that Part VI (the Coastal Trade) of the Navigation Act be repealed.
- (b) Three other members recommended that the Navigation Act remain as it stood, that the official administration be changed and that the officer responsible for administration be placed directly under a Minister.
- (c) Finally, two members recommended -
 - (i) That the Coastal Trading provisions of the Navigation Act be repealed;
 - (ii) That there be substituted adequate duties under the Customs Tariff Act upon all foreign shipping with a lesser preferential rate upon British shipping, calculated in the case of cargoes upon the rates of freight charged per ton; and in the case of passengers, upon the fares charged;
 - (iii) All other sections of the Navigation Act to stand.

7. The first two Commissioners referred to above declared that an Australian-owned Mercantile Marine did not exist and, furthermore, that it was not likely to come into operation by reason of the Navigation Act. They were particularly impressed with the fact that the greater the distance from the industrial centres of New South Wales and Victoria the greater the outcry against the effects of the Navigation Act. The farther the population was removed from railway facilities and hence dependant on sea carriage⁽¹⁾, the stronger the demand for removal of restrictions placed on shipping services by the Act.

(1) Tasmania, of course, represents the extreme case.

8. It was found that New South Wales and Victoria are not affected by the operation of the Navigation Act to the same degree that trade and industry in other states are affected by it, for the following reasons:-

- (a) New South Wales and Victoria are well served by railways.
- (b) New South Wales and Victoria have extensive local markets, which absorbs the greater proportion of primary and secondary output.⁽²⁾ The high freight question therefore, is not so urgent.
- (c) The Navigation Act has tended to centralize shipping, trade and industry near the large centres of population. Hence the difficulties of the outlying States are aggravated.

9.(a) With regard to Tasmania the Commissioners pointed out that this state is in an entirely different position from any of the other states, in that it is solely dependent on sea carriage for the transportation of cargo to the mainland, and the island is off the route of ordinary coastal shipping.

(b) The Commissioners found that "of the Tasmanian ports Strahan has no service, the North West coast ports of Stanley, Devonport, Burnie and Ulverstone have a good service, Launceston has a direct cargo and passenger service with Melbourne, whilst Hobart's one regular interstate service is with Sydney".

(c) Before the Great War of 1914-18 Hobart had a direct weekly service with Melbourne, provided by large vessels of about 6,000 tons, which did the round trip - New Zealand, Melbourne, Hobart and then Melbourne, back to New Zealand. This was a regular passenger and cargo service. There was also,

- (i) a regular passenger and cargo service from Hobart to Melbourne, via Strahan, which provided direct communication to enable Hobart to trade with the mining districts of the West Coast;
- (ii) a weekly passenger and cargo service between Hobart, Sydney - Hobart, and Hobart - Sydney - New Zealand;
- (iii) a direct fortnightly service from England to Hobart provided by vessels of the New Zealand Shipping Company and the Shaw Savill and Albion Steamship Company. (Hence, Hobart was the transshipping port for a number of passengers for the other States.)

(d) The Commissioners investigated the question of interstate and overseas services to Hobart, and whether the curtailment was due to the operation of the Navigation Act. In regard to the P & O vessels, there was considerable evidence submitted that the Navigation Act prevented them from calling, unless under contract to lift cargoes of fruit. Again, the evidence seemed to indicate that the service between Hobart and New Zealand via Sydney and Melbourne ceased because calling at Hobart constituted "coastal trading" and the vessels calling would have to "license" under the Navigation Act, and incur all the conditions and expenses attendant thereto. The same applied to the discontinuance of the Hobart - Strahan - Melbourne service.

(e) The question then arose as to the effect on Tasmania of the cessation of the above services. Particular reference was made to the tourist traffic and it was noted that Tasmania caters for tourists to a greater extent than most of the other States and the value of the

(2) This is the essence of the freight rate problem for the outlying states of Tasmania and Western Australia. The main markets for the products are not located in the home state. See detailed discussion in Chapter VII.

tourist traffic is considerable. It was claimed that the fact that the mail boats were no longer permitted to carry passengers interstate prevented wealthy tourists visiting Tasmania. Prior to the Great War 1914-1918 the number of tourists who travelled via the "apple trip" was increasing, and this branch of the tourist traffic was being built up, when the war stopped it, and the Navigation Act prevented its revival.

(f) The Commissioners were of the opinion, in regard to the tourist traffic:-

(i) that the tourist traffic to Tasmania had suffered by reasons of the operation of the coastal trading sections of the Navigation Act; and

(ii) that the shipping facilities to Tasmania for passengers during the summer months of each year were inadequate for the tourist traffic.

(g) It was claimed during the hearing of evidence that many avenues of trade had been blocked as a result of the Navigation Act, that the pre-war trade routes had changed, and that Hobart was no longer a stepping place on the new routes. For example, a regular trade was from Hobart to Adelaide, and thence to Western Australia; since all the vessels on that route were overseas vessels the Act now prevented them carrying passengers and/or cargo between interstate ports.

(h) Prior to the Navigation Act there was an increasing trade between Tasmania and New Zealand, particularly in timber, jam, and dessert fruits. Under the Act transshipment⁽³⁾ in Sydney became necessary, involving extra handling charges and hence trade ceased. Direct shipments to New Zealand, Western Australia or North Queensland ports were possible only by chartering special boats, which would probably have to travel to Hobart in ballast.

10. (a) The three Commissioners who recommended that the Navigation Act remain as it stood, but that the official administration be changed and the officer responsible for administration be placed directly under a Minister, pointed out that the subject matter of the Commission was originally entrusted to a Select Committee of the House of Representatives. The Committee was appointed to investigate statements made against the Navigation Act - statements set forth and endorsed by the Tariff Board in its Annual Report dated 28th June 1923. The Chairman of the Tariff Board placed a memorandum before the Committee and gave evidence in support of the Board's claim that "...the Navigation Act is working very detrimentally against the best interests of the primary and secondary producers. In regard to competitive marketing the Board stated the Act placed producers in Queensland, Western Australia and Tasmania at a disadvantage when endeavouring to compete with imported goods shipped to other states".

(b) The three Commissioners found no evidence that the development of the states of New South Wales, Victoria and South Australia had been in any way retarded by the Act. These states "contain three-fourths of Australia's population, produce three-fourths of total primary and secondary output, and between their ports are interchanged four-fifths of Australia's interstate cargoes."⁽⁴⁾ The Commissioners were of the opinion that there had been no additional centralization in those States since the Navigation Act came into operation.

(c) It was alleged in evidence that Tasmania had "been placed at a serious disadvantage" due to the working of the Navigation Act. Against this the Commissioners maintained that Tasmanian exports, measured in actual tonnage, doubled from 1913 to 1923; again, that the export of fruit overseas in 1923 was a record of 1,562,000 cases, and that more boats went into Hobart in 1923 to ship fruit than ever before; that although only

(3) Transshipment charges will be discussed in detail in Chapter IV.

(4) Report of the Royal Commission on the Navigation Act (Printed 20th August 1924). Report by Three Commissioners p.37.

half the numbers of fast mail boats visited the capital port, this fact applied to every capital port in Australia because the oversea mail service was 50 per cent below pre war. Again, "the rates on fruit and the products of fruit between interstate ports on ships under the Commonwealth Navigation Act and the arbitration laws are 30 per cent above pre war rates. On oversea ships not affected by these laws the rates on fruit and the products of fruit are 60 to 250 per cent above pre war rates." (5) (It should also be noted that 1923 was Tasmania's record year in tourist traffic and that 98% of those who visited the state travelled on vessels manned by Australian seamen).

(d) As a result of their investigations the Commissioners concluded that, there was a 30 per cent increase in Australian coastal rates between the outbreak of war (August, 1914) and the advent of the Navigation Act (July 1st, 1921), but that coastal rates had not risen after the Act. On the other hand the increased freight rates imposed by the overseas companies upon the majority of Australian products for Europe, Asia, Africa and America were considerably higher than this 30 per cent. Again, the three Commissioners contended that Australian coastal rates were not in excess of rates charged between ports of territories with similar geographical circumstances. For example, Australian coastal rates were below the rates on the coasts of the United States, South America, and South Africa, although ships on such coasts have the advantage of lower running costs so far as wages are concerned.

11. In the third minority report the two Commissioners, in a preliminary note, pointed out that the whole investigation involved more than ordinary difficulty because conditions were not normal, and further that the shipping of the British Empire had been under government control for some time during and after the war. Moreover, after the war services were necessarily curtailed, freight rates increased, and in 1921, shortly after the cessation of control, the Navigation Act became operative. The shipping industry was confronted with many difficulties due to the sudden change over from war to peace, with all the attendant alteration of conditions, and this fact "made the task of determining the actual effect of the Act on Australian trade, industry and development a very difficult one". (The difficulty lay, of course, in separating the effects of the war from the effects of the Navigation Act, on shipping services and freight rates, and upon industrial development).

12. In 1928 the Prime Minister announced in his policy speech his Ministry's determination to repeal the coastal clauses of the Navigation Act. After referring to the "decreased facilities, notwithstanding the increased population and trade", Mr. Bruce said:-

"It is shown that these decreased facilities, combined with high fares and freights, have operated to the detriment of Australian industry as a whole. The Government feels that this condition of things cannot be allowed to continue. The coastal clauses have failed to achieve the objects for which they were introduced, but the Government does not consider that it follows that all endeavours to establish an Australian mercantile marine should be abandoned."

"It is, however, imperative that new methods should be adopted. The Government therefore proposes that the coastal clauses should be repealed and that, in lieu thereof, protection should be given through the tariff provisions to vessels complying with Australian standards of wages and living conditions."

"The Government believes that, if a rate of duty were imposed on passengers and cargo carried by oversea ships in competition with Australian shipping around our coast, sufficient to give protection to our shipping industry,

we would secure fair competition, which would result in a more efficient service and in reduced fares and freights. From the revenue which would be received from such duties, subsidies could be paid to Australian shipping services."

"This," Mr. Bruce further declared, "whilst assisting Australian shipping, would also serve to assist the development of the outlying or backward portions of the Commonwealth."

Following these declarations, the Bruce-Page Government was again returned to power by the Australian electorate. Hence under date 4th January 1929, the Minister for Trade and Customs referred to the Tariff Board the question of the practicability and desirability of encouraging the primary and secondary industries of the Commonwealth (including the industry of shipping) by substituting for the protection to Australian shipping against competition from overseas shipping in the Australian coastal trade, (afforded by the Coast-ing Trade provisions of the Navigation Act), protection by other means, for example:-

- (a) By the imposition of taxation on cargo and/or passengers carried interstate by overseas vessels; or
- (b) By the payment of subsidy or bounty to Australian shipping; or
- (c) By the licensing of overseas vessels to engage in Australian coastal trade subject to the payment of licence fees on a basis to be prescribed; or
- (d) By a combination of any of the above means.

The Board's investigation involved a comprehensive review of the financial position of the various shipping companies and organizations concerned.

13. The terms of reference of the Minister for Trade and Customs to the Tariff Board clearly indicated an intention that protection to Australian shipping against competition from overseas vessels should continue, the question referred to the Board being that of the substitution of some form of protection in lieu of that provided by the Navigation Act.

14. It has often been pointed out by the Board in annual reports and in reports on applications for tariff revision that those industries enjoying protection under the customs tariff are under an obligation to the community to provide satisfactory products at reasonable prices, having in view costs of production and other factors.⁽⁶⁾ This naturally applies, in no less degree, to industries protected or assisted by means other than the Customs Tariff and the Board has not been unmindful of this fact in dealing with the shipping industry.

15. This being so, although the Minister's reference called for inquiry only into the question of substituting some other form of protection, the Board endeavoured to ascertain to what extent those shipping companies which operate under the protection of the Navigation Act had succeeded or failed in fulfilling their obligations to the community by -

- (a) Providing reasonably satisfactory services.
- (b) Maintaining a reasonable standard of freight rates (and passenger fares) having regard to ship operating costs, the services called for, and the rates (and fares) obtaining in other parts of the world.

(6) Compare the recent announcement by the Prime Minister (Mr. Chifley) that the Tariff Board, in association with the Secondary Industries Commission, would, in future, investigate regularly the cost structure of protected industries.

16. The services rendered by the Australian shipping companies were, for the inquiry, divided into two main headings, namely, passengers and cargo, and these were further subdivided into -

(a) Passengers (i) Accommodation.
(ii) Fares.

(b) Cargo - (i) Freight rates.
(ii) Freight space.

Our concern in this study is with "b" above only.

17. Various evidence tendered to the Board indicated that, whether justified or not, there was a general feeling that high freight rates were a burden on manufacturer and primary producer alike, and the conviction was widespread that the conditions imposed by the Navigation Act constituted one of the main reasons for the reputedly high freight rates. This general opinion was apparently held by the members of the British Economic Mission, who stated in their report to the following effect:-

"These states (Western Australia, South Australia, Tasmania), and Tasmania probably most of all, are further handicapped by the high cost of freights in interstate trade, which result from the operation of the Navigation Act".

Two questions then arose, namely:-

- (a) Were the Australian coastal freights excessive?
- (b) Would the repeal of the coastal clauses of the Navigation Act tend materially to a reduction in these freight rates?

18. Section (a) above was considered by the Tariff Board under the two headings, viz:-

- (a) The movements in overseas and Australian coastal freight rates from 1913-1929.
- (b) A comparison between the rates ruling on the Australian coast and those on the coasts of other countries.

Such comparisons are difficult to draw, the Board's conclusions are summarised in paragraph 42(b).

19. During the course of the Board's inquiry reference was repeatedly made to the fact that the freight rates on the Australian coast had increased since the Navigation Act came into operation, from which it might be inferred that the Australian shipowners had taken advantage of the protection afforded by the legislation to charge unduly high rates. The figures quoted in the report and the comparisons made show that although there had been an increase in the Australian interstate freight rates since the Navigation Act was proclaimed, there has been a greater relative increase in the freight rates charged by overseas vessels. For example, the interstate rates current in 1929 represented an average increase of 59% over that of 1913, whereas in the case of the overseas trades the rate for 1929 represented an increase of 79% over that of 1913. During the 1914-19 war period the rates from Australia to the United Kingdom increased by 492% whilst over the same period the Australian coastal rates, which were under governmental control remained stable.

20. Although Australian coastal rates in 1929 appeared to be high in relation to overseas rates, they were comparable to the coastal rates of other countries. The Tariff Board was satisfied that Australian coastal rates were warranted under the circumstances.

21. With regard to freight space the evidence tendered to the Board indicated that, with the exception of refrigerated space and deck space for fish, the facilities offered by the Australian companies for the carriage of cargo were regarded by those concerned as sufficient to meet requirements. In regard to refrigerated space and space for fish, complaints were made of disabilities in certain directions. Complaints regarding lack of facilities for the shipment of fish were made by representatives of the industry in Tasmania. In 1929 the fish industry to Tasmania was worth about £37,000 p.a. Fish for Melbourne had to be shipped via Launceston from Hobart.

22. It was contended that the conditions imposed by the Navigation Act had been a heavy burden on industry and that the shelter from competition provided by the Act had resulted in a lack of incentive and efficiency on the part of the Australian shipping companies. It was claimed that this being so, the Navigation Act had failed in its object, namely, that of building up a mercantile marine. The whole matter was complicated by reason of the fact that the Navigation Act had come into operation before the recovery to normal after the unsettling effects of the war period. Hence, in considering the question the following dates were noted by the Board, viz:-

- 1914-18: The war period.
- 1917: The completion of the Trans-Australian Railway.
- 1918-21: The period of extreme shortage of tonnage in the world's shipping and the peak price in overseas freight rates.
- 1920: The release from Governmental control of the Australian interstate ships.
- 1921: The Navigation Act came into operation.
- 1921-24: The extension of the Queensland coastal railways.

23. The effect of the war in reducing the Australian coastal fleet was very material. During that period the Australian mercantile marine was under Governmental control, its services, fares, and freights being regulated. Ocean transport became of vital importance to Great Britain, many boats were lost through submarine attacks, and, as a result, freights rose sharply. A large number of Australian vessels were requisitioned for war service, and, in 1921 the total tonnage of passenger vessels was 93,037 tons. In 1929 the tonnage of the fleet had declined to 75,000 tons. The extremely high freight rates which obtained overseas during the post war period created an extraordinary demand for tonnage. Moreover, fluctuations in the cost of shipbuilding were very violent.

24. The Navigation Act was brought into force in 1921. The coastal fleet had been under control until 1920, and there was a shortage of cargo tonnage at the end of the control period. It was generally considered that the securing of boats to handle the cargo was more imperative and would prove more remunerative than the addition of boats for the passenger services, and for that reason all purchases to replace the older ships that were sold were cargo boats. Contemporaneously with the serious reduction of the services on the Australian coast by the withdrawal of oversea boats came the added facility for travel on land, both by railway and by road. This competition would have had a market effect under any condition, but the effect was more serious by reason of the fact that it partially coincided with the reduction in efficiency of the shipping facilities.

25. The Tariff Board was convinced that this reduction in tonnage of the Australian coastal fleet did not indicate neglect or indifference on the part of the Australian shipping companies. The reduction was also not to any considerable extent an effect of the Navigation Act. To substantiate this view the Board listed the more important factors which had contributed to the reduction in the Australian coastal fleet and the decreased number of persons travelling interstate by sea, viz:-

- (a) The exigencies of the war period.
- (b) The shortage of tonnage following on the war.
- (c) The extreme costliness of shipbuilding.
- (d) The growing competition of means of transport other than shipping.
- (e) The hold up of vessels due to industrial disputes.

26. Throughout its inquiry, the Board endeavoured to obtain data which would enable it to assess the likely result on the Australian interstate passenger and cargo services that would ensue if the coastal clauses were rescinded. The Board directed its attention to answering two questions, namely,

- (a) What proportion of the present trade of interstate shipping companies would be lost if the overseas vessels were permitted to enter the coastal trade?
- (b) What trades did overseas shipping companies ply on the Australian coast before the coastal clauses of the Navigation Act come into operation, and what trades would they operate if the Australian coast were again open to them?

The Tariff Board concluded that,

- (a) The amount of coastal trade done by overseas vessels prior to the 1st July 1921 was very small, being approximately 2% of the total trade.
- (b) Overseas vessels plying regularly around the Australian coast anticipated handling very little cargo even if the restrictions were removed. It was probable that considerable company space would often be available in these vessels, but the did not expect to enter seriously into the cargo trade.

Representatives of the interstate shipping companies expressed the fear that if the coastal provisions of the Navigation Act were withdrawn, spasmodic competition would arise from tramp vessels⁽⁷⁾ and other overseas vessels which would seek tonnage on the Australian coast when there was a shortage of tonnage elsewhere.

27. As pointed out above the Navigation Act imposes upon shipping engaged in the Australian coastal trade other than those specially exempted by permit, certain conditions, compliance with which has added considerably to the cost of the services. Part VI (Sections 284-293A) of the Act makes provision for the licensing of ships to engage in the coasting trade, and no ship, whether registered in Australia or otherwise, is permitted to engage in that trade without a licence.

28. The Tariff Board sought to ascertain the cost to the Australian shipping companies of complying with the conditions imposed by the Act. The position was (and, of course, still is) complicated

(7) It is the business of tramp vessels to wander unrestrainedly over the seven seas searching cargo in any port where it may be awaiting shipment. The tramp operator secures cargoes for his vessels through shipbrokers throughout the world who specialise in securing such cargoes. Tramp competition is on the basis of price. The rate quoted is the determining factor.

in that the Navigation Act and the Arbitration Court each have an influence and hence it was difficult to determine to what extent the added cost was due to each of the causes named.

29. The Navigation Act sets out the conditions of accommodation, manning and victualling. The Arbitration Court requires local ship owners to pay certain wages and observe certain hours. The whole aim is to bring the conditions of employment of the Australian seamen into line with the accepted Australian standard of living. The maintenance of these conditions has been very costly and has placed a heavy burden on those who engage in local shipping as compared with overseas shipping.

30 (a) The Tariff Board grouped these additional costs under two headings:-

- (A) The cost of altering vessels constructed prior to the Navigation Act in order to make them comply with the conditions of that Act.
- (B) The extra costs due to wages and conditions including,
 - (i) number of crew.
 - (ii) rate of wages.
 - (iii) victualling.
 - (iv) sick leave.
 - (v) overtime.
 - (vi) industrial troubles.
- (b) With respect to (i) and (ii) not only did the Tariff Board find that the Australian wage showed a substantial increase over those of other countries, but the number of officers and crew employed in manning a vessel on the Australian register was also in excess of the requirements of other nations, averaging about ten more than either the American or the British, and representing an increase in the manning of from 25% to 30%.
- (c) With respect to (iii) the cost of victualling was greater per head on the Australian coast than in any other part of the world, and the aggregate cost, was, of course, further increased by reason of the hands employed.
- (d) With respect to (iv) section 132 of the Navigation Act requires that a seaman or apprentice left on shore at any place in Australia by reason of illness or accident in the service of the ship incapacitating him from duty, shall be entitled to the continuance of full wages up to a certain stated limit during such incapacity. The Tariff Board calculated that the probable cost of this provision cost the industry approximately £25,000 per annum.
- (e) With respect to (v) the most serious additional charge borne by the Australian shipping companies is that incurred for overtime.⁽⁸⁾ Evidence submitted to the Tariff Board indicated increasing costs except for stores and water, and docking and repairs, and showed that the most serious increase was in relation to overtime, the 1926-7 figures for which were approximately 500% higher than those of 1913-14.
- (f) The Board drew attention to the very serious cumulative effect of the charges reviewed. "It is of vital importance that the cost of running vessels should be reduced wherever possible, particularly in view of the fact that investigation has shown that under existing conditions the profits made by the shipping

(8). The effect of overtime rates on the cost of ship operation should be noted, especially insofar as operational costs determine the ruling freight rates.

companies engaged in the Australian coastal trade have been negligible" (page 32). In this connection the Board pointed out that the Australian manning conditions call for a larger crew for vessels than is employed on vessels trading on the coasts of other countries, while at the same time the costs on Australian vessels for overtime and other similar items is much greater than elsewhere. (Ofcourse it is only reasonable that Australian seamen should receive wages and be subject to conditions consistent with those applying to other industries in Australia. As regards overtime, however, the men employed on a vessel are in a different position from those working on shore. The former live right on their job, while the latter have frequently to travel some distance to their work.) While it did not suggest that the longer hours which were worked at one time on Australian vessels should be reverted to, the Board felt that the existing conditions governing the payment of overtime should be capable of revision with a view to assisting the Australian shipping companies to reduce the cost of running their vessels. "It would seem reasonable to expect that where the manning conditions are on a more liberal scale, and the rates of wages higher, the overtime charge should not be greater to such an extent as the figures quoted herein show them to be" (page 33).

- (f) Another difficulty with which the local shipping companies have had to contend is the serious number of industrial disputes that have occurred with regard to either crews or waterside workers. In this respect the Board reported as follows:-

"The conditions of employment on the ships trading on the Australian coast are superior to those obtaining in most other countries, and the maintenance of such conditions calls for the cooperation of all parties concerned in an effort to make the cost of running vessels under such conditions as low as possible consistent with reasonable standards of living."

31. Reference will be made later to the several joint working arrangements under which the interstate shipping companies operate but here it should be noted that the Board found no evidence that the arrangements had been devised for the purpose of enabling the shipping companies to take undue advantage of shippers or that they had been operated to the detriment of those using the services.

32. The financial results of the Australian shipping companies from their interstate services were examined by the Board, for, obviously, if it could be shown that the companies protected by the coastal clauses of the Navigation Act had taken advantage of the protection by charging unduly high freights and fares, that might be regarded as a justification for substituting some other form of protection and taking the consequent risk of reducing the existing protection.

33. The greater proportion of the interstate cargo and passenger services (over 90 per cent) which would be affected by the opening of the coast to overseas shipping is owned and controlled by the Australian Steamship Owners' Federation. There is a considerable tonnage on the Australian coast owned by concerns outside the Federation, but it is engaged for the greater part in intra-state trade or in services unlikely to be effected to any appreciable extent by competition of overseas vessels. For this reason, the Board restricted its investigation into the financial position of the companies within the Federation.

34. Each of the companies has trading operations and/or investments outside interstate shipping, and, as the main concern of the Tariff Board in the investigation was to ascertain the financial results from interstate trading the figures relating to interstate shipping were separated out from those relating to the other interests. For the purpose of arriving at the position of interstate trading, the average capital employed in that side of the business was calculated, not on the basis of original valuation of the assets of the respective companies, less allowance for depreciation, but on the Federal Taxation Commissioners' written down value. The Board considered this to be the most equitable basis to work upon as the value of the vessels had been written down in the books of the companies to figures much below their market value.

35. For the years 1926, 1927 and 1928 to which the investigation referred total net profit from all services decreased progressively, and in ^{the} case of some of the companies, there was some inflation of capital in earlier years. These were investigated by the Board's accountant, the investigation going back as far as sixteen years. So far as the shipping business of the companies was concerned, the inflations were the result of charter moneys earned during the war period and immediately afterwards, when rates were abnormally high, and of the sale of vessels during the same period when ships were at a premium and extraordinarily high selling prices ruled. The Board found that, "the dividends paid in recent years out of the profits other than from interstate shipping have to a large extent been the result of moneys earned by chartering and the sale of ships together with the income derived from profits wisely invested". (page 36).

36. As regards the financial operations of the companies in interstate shipping, the Board found that on the basis of capital employed the result of trading for the years 1926, 1927 and 1928 was as under:-

<u>Year</u>	<u>Per cent</u>
1926	2.4 profit
1927	1.6 profit
1928	0.8 loss

These figures clearly indicate that the companies were dependent upon the return from their business interests outside interstate shipping for such profits as they earned.^(a)

37. Evidence indicated that the decline in the earnings from interstate shipping during these years was to a large extent, caused by industrial disputes between the companies and their employees, by interruption to services caused by labour troubles on the waterfront, and by dislocation of services due to disputes in industries on which shipping depends for a considerable proportion of its business (e.g. disputes on the coal fields resulting in diminution of output).

38. However, the Board could see no reason why the Australian interstate shipping companies "should not, in the future, be able to show a reasonable profit on capital invested provided there is a return to normal conditions and reasonable freedom from labour troubles" (p. 37)

39. Although the Board as a result of its investigation did not favour any alteration of the existing law relating to navigation, it gave consideration to the question of the practicability of substituting some other form of protection to Australian shipping other than that afforded by the coastal clauses of the Navigation Act. One such scheme considered was that passengers and/or cargo may be carried between ports in Australia by all ships, British or foreign, on compliance, at the option of the ship owner, with one or other of two conditions, namely:-

- (a) Full compliance with Australian conditions as to manning, wages and crew accommodation; or
- (b) Payment of a tax, at a proscribed rate, on the business done. In other words the existing provisions of the Navigation Act as to the granting of licenses to engage in the coasting trade to ships complying with Australian conditions should be retained as a simple and effective means of identifying ships that comply with Australian conditions, but on an optional basis. No tax would be payable by licensed ships.

- (i) Passenger Tax:- A fixed charge of so much per passenger, per 100 miles of distance covered, carried by an unlicensed ship between the ports of the Commonwealth.
- (ii) Cargo Tax:- A fixed charge of so much per ton of cargo (by measurement of weight, according to basis on which freight is charged) per 100 miles of distance covered carried by an unlicensed ship between ports in the Commonwealth.
- (iii) Passenger Bounty:- The proceeds of the above cargo tax (less a percentage deduction for administration) to be divided periodically among owners of general cargo or cargo and passenger steamers, over 1,000 tons gross register, licensed to engage in the coasting trade, in proportion to the cargo space vacant (computed on the basis of shipping ton of 40 cubic ft.) on those ships per 100 miles travelled on voyages between ports in the Commonwealth during the period covered.

The scheme provided that the bounty should be payable, in respect of any voyage between Commonwealth ports of call, only on that amount of passenger accommodation or space provided. The percentage was to be fixed, as nearly as could be arrived at, on the average normal space over a year, on all ships then trading on the coast.

40. The following comments on the above scheme were submitted to the Board by the Australian Steamship Owners' Federation, viz:-

- (a) The complexity of the scheme would throw much work on shipping companies and the navigation authorities.
- (b) Fares and freights are not based on distance only. The fixing of freights is a very complicated and highly technical matter and, as will be seen later, involves questions of volume of traffic, handling charges, ports of call, harbour dues etc. The fixation of a duty on distance would not, therefore be equitable.
- (c) No differentiation was made to compensate for subsidies, etc. granted by various nationalities to their shipping services. These vary enormously, and a flat rate of duty

(9). The 1924 Royal Commission also examined the financial results of the shipping companies. The inquiry covered one year before the 1914-18 war, one year just prior to the coming into force of the coastal provisions of the Navigation Act and one year under the Act. The years 1913, 1920-21, and 1922 were selected. The percentage increase of the earnings and expenses on those of 1913 for the years 1920-1 and 1922 respectively were as follows:-

1920-1 Earnings	- 95.58%	Expenses	- 93.82%
1922 Earnings	- 83.27%	Expenses	- 90.88%

- would, therefore, operate unfairly as between vessels of different nationalities.
- (d) The running costs on the coast fluctuate from week to week with the rise and fall in the cost of living, arbitration awards, new legislation and regulations. Any tax would, therefore, need to be continuously revised.
 - (e) Owing to the demand for frequent services even for small ports, the enormous variations in the volume of traffic, it would be impossible to arrive at the "normal" amount of vacant space for the purposes of the payment of the proposed bounty to the interstate shipping companies.
 - (f) As regards passengers, the only cost to the oversea vessel would be the victualling and laundry of the passengers as all other expenses would be incurred whether the passengers were carried or not.
 - (g) At times, owing to low freight and charter rates overseas, the Australia coast might be flooded with overseas tonnage, whilst at others, when overseas freights and charter rates were high, competition from overseas vessels might be negligible. The interstate companies would not be able to determine what cargo or passenger tonnage they could profitably employ all the year round. Should a large tonnage, including tramps, be on the coast, vessels would have to be laid up and these under the suggested scheme would not only be not entitled to the bounty, but would be incurring heavy port dues and suffer serious deterioration.
 - (h) It would be impossible to fix a scheme of taxation to meet competition from tramp vessels.
 - (i) The scheme contained no ^{provisions for} preventing outside competition from engaging in the payable portion of the trade and leaving the unpayable portion uncatered for, or to be catered for by local shipping.

41. The report of the Tariff Board concludes with a general review of the Minister's terms of reference, which suggested the existence of disabilities to Australian industries, primary and secondary, due to the operation of the coastal clauses of the Navigation Act, and indicated a desire on the part of the Commonwealth Government to remove or reduce such disabilities. The wording of the reference also conceded the necessity for continuing the protection of Australian interstate shipping. Hence, the Board's inquiry narrowed itself down to the question whether there were any disabilities and whether, if they do exist, the repeal of the coastal clauses of the Navigation Act and the substitution of another form of protection to interstate shipping would remove such disabilities without creating other equal or greater disabilities.

42. The scope of the Tariff Board's inquiry resolved itself into investigating the following:-

(a) The Efficiency and Adequacy of Existing Services.

- (i) As to this question a number of complaints of a general nature were made against the existing services. They included statements that the Navigation Act had failed in its purpose in that, whereas an increase in the interstate fleet should have been expected, the number of vessels and the aggregate tonnage had decreased. It was claimed by some witnesses that since overseas vessels were debarred from entering the coastal trade, certain shipping routes that previously were well catered for were inadequately served.
- (ii) The defence of the shipping companies was that the fleet engaged in the coastal trade was reasonably sufficient for the business offering and that the difficulties of providing adequate services under

It will be seen from the foregoing that, whereas earnings decreased by 12.31% in 1922 expenditure only decreased by 2.94% and this notwithstanding that the gross tonnage increased by 18.12% as compared with that of 1920-1, and that the fleet ran 15,822 days in 1922, as compared with 12,826 in 1920-1.

under the conditions obtaining in the Australian interstate trade had not been appreciated by those by whom the complaints were made. Regarding the reduction in the fleet, it was advanced that the altered methods of transportation which have come into use (for example, motor vehicles and air services), together with railway extensions, had had the effect of seriously curtailing the passenger and freight traffic interstate by sea.

- (iii) Evidence was tendered as to the proportion of vacant space - both cargo and passenger - over long periods in vessels trading on the main interstate routes. This evidence indicated that, except on rare occasions and in special circumstances, the vessels employed in the coastal services were more than adequate.
- (iv) Apart from evidence of a general nature, statements of a more or less specific character were made regarding the existence of disabilities to Australian primary and secondary industries arising from the incidence of the Navigation Act. It was evident that at times disabilities had been experienced by shippers owing to lack of freight space, but these were in the main due to special circumstances or abnormal conditions rather than to any lack of enterprise or efficiency on the part of the Australian shipping companies.
- (v) Taking all the facts and circumstances into consideration, and having regard to the financial results of the trading operations of the principal companies, the Tariff Board concluded that the existing interstate cargo and passenger services were all that could reasonably be called for from any concern expecting to run such services on a commercial basis. As a matter of fact, as regards cargo, the Board was of the opinion that on the evidence the Australian shipping companies had no case to answer. Respecting individual complaints the Board considered that they were capable of rectification without any alteration in the existing system of protection.

(b) Have the Australian Shipping Companies Taken undue Advantage of the Protection Afforded them?

- (i) With a view to determining this question, the Board made special efforts to obtain information as to freights and fares obtaining in comparable services on the coasts of other countries. Steps were also taken to ascertain how the increase, which took place in the overseas freight rates as between 1913 (the last normal year before the war) and 1929, compared with the increase in the Australian coastal freight rates over the same period.
- (ii) The comparisons, were wholly favourable to the Australian companies. This, coupled with the financial results obtained by the Australian companies from interstate shipping on the basis of existing freight rates and fares, as disclosed by the investigation made by the Board, led the Board to the conclusion that the comparatively high rates and fares obtaining on the Australian coast were not due to overcharging or inefficiency on the part of the shipping companies, but rather to the immense distances between the ports and, in the case of many of the interstate routes, the small volume of business offering.
- (iii) The standard of wages and working conditions generally

in the Australian shipping industry are high, and the fact that the industry had been able to carry on under such conditions was, in the opinion of the Board, due entirely to the rationalisation of the services, made possible by the agreement under which six of the principal Australian companies operate their vessels.

- (iv) In view of statements made before the Board from time to time as to the effect of freight rates on Australian industries it was fully anticipated that representatives of the industries would appear at the inquiry in order to present evidence of any disabilities in this connexion. A possible explanation of the absence of any representations on behalf of the chambers is that it was realised that what were described as "the high freights on the Australian coast" are not unduly high considering the circumstances under which the services are carried on, or that if there were cause for complaint, the position was not remediable by any action which might have resulted from the Board's inquiry.

(c) What would be the Effect on the existing services if Overseas Vessels were permitted to enter the Australian Coastal Trade?

- (i) There appeared little doubt but that if overseas shipping were enabled to engage in the Australian coastal trade, the result at the outset would be improved services. The question arose, however, as to whether any action taken in the direction indicated would not so prejudicially affect the existing interstate services that they would of necessity be reduced with consequent financial loss to some or all of those engaged, with the ultimate result that the services would be no more efficient or even less efficient, than those at present provided.

- (ii) Any reply to this question involves consideration of the following:-

- (1) The volume of traffic that would be lost to the interstate shipping if competition from overseas vessels were permitted;
- (2) The likely effect of the loss of such trade by interstate companies; and
- (3) The financial results of the principal interstate shipping companies.

- (iii) In regard to (1), the Tariff Board considered that the effect on the volume of business done by interstate companies would, of course, depend on the terms under which overseas vessels were permitted to engage in the coastal trade. If a heavy tax were imposed on the overseas shipping, in order to equalise competition, or if some compensation were made to interstate companies, then the losses of such companies might not be material. On the other hand, if the tax imposed on the overseas ships were not sufficient to prevent competition, and the added facilities at the outset would be considerable, but the losses sustained by the interstate companies would certainly be material. The Tariff Board found it virtually impossible to estimate the amount of cargo which would be carried by overseas vessels on the Australian coast. Witnesses representing overseas mail boats services said that their ships would not be likely to engage in cargo carrying interstate as the picking up and discharge of cargo would interfere with their time schedules. As to other than mail services the Board endeavoured to obtain evidence on which to base an estimate, but without success. The representative of the Associated Interstate Services put forward

the view that overseas ships would naturally select the more profitable cargo, that is, they would pick the eyes out of the cargo offering.

(iv) In regard to (2), the likely effect of loss of trade on interstate services would also depend upon the conditions under which overseas vessels were permitted to trade interstate. As to cargo, the interstate ships would lose considerable freights and the Board concluded that the companies would have to adopt either one of the following courses:-

(1) To maintain existing services with reduced revenue owing to increased vacant space and with little or no reduction in expenditure. This would naturally prejudicially affect the companies' financial results.

(2) To reduce services.

(v) Respecting (3), in order to inform itself as to the financial results of recent interstate trading, the Board obtained from all the shipping companies, who appeared in defence of existing conditions, balance-sheets, and trading profit and loss accounts, for the years 1926, 1927 and 1928. These statements were closely examined, and, in addition, an exhaustive investigation was made on behalf of the Board by its accountant. Five of the seven principal companies were visited by the accountant, who made a close study of the financial results of each company's business over the previous three years and a general review of the position for earlier years. (The results of the investigation were referred to above).

43. Summing up the position generally, the Board was convinced that the opening of the Australian coastal trade to overseas ships under any system of protection that would not be virtually prohibitive would necessarily result in considerable reduction in the earning capacity of the interstate companies, even to a degree that would seriously affect their ability to continue operations. Hence, in view of all the circumstances, the Board was convinced that it would not be desirable to substitute for the coastal clauses of the Navigation Act any other form of protection.

44. Having dealt with the question of the desirability of substituting for the protection then afforded by the Navigation Act some other form of protection to interstate shipping, there remained the question of the practicability of such substitution. It is obvious there would be considerable difficulties in any attempt to fix an adequate tax on the carriage of cargo and passengers. The degree of protection necessary to enable Australian manufacturers to produce goods in competition with imported goods is capable of reasonably accurate calculation. In such cases, the Board is always in a position to obtain on the one hand, the cost of production of the Australian goods, and, on the other the landed duty paid costs of similar imported goods. With this information, it is possible to determine the margin of protection necessary to equalise the prices at which the Australian and imported goods can be delivered at a given point.

45. In regard to shipping, however, the Board found it practically impossible to determine for taxation purposes the difference between the costs of carrying interstate cargo and passengers on overseas vessels and the costs on Australian vessels. Assuming that the coastal clauses of the Navigation Act were repealed, there would then be two competing services, with standards of accommodation for crews, rates of pay, hours of labour and running costs generally different from the other. The overseas ships - more particularly in the case of "tramp" vessels - would arrive in Australia, discharge the whole or part of their cargo

at one port, and, if calling at another Australian port, would, in order to avoid taking in ballast, pick up the available cargo for the Australian port to which it was proceeding.

46. The question of subsidies also arises. Many overseas shipping services are subsidized and the extent of the subsidy varies considerably. Other vessels are not subsidized at all. Clearly a rate of tax which would meet the case of a vessel that was not subsidized would not meet the case of a subsidized vessel. Similarly, a tax fixed for a ship receiving a low subsidy would not be sufficient for one receiving a higher subsidy. There is, too, the possibility that the overseas companies, or some of them, might elect to pay the tax themselves, that is, they might not add it on to freight rates or passenger fares which would otherwise obtain. Clearly the Commonwealth Government could not enter into a compact with all the overseas shipping companies which might trade on the Australian coast.

47. It was obvious to the Tariff Board that if overseas shipping were to engage in the coastal trade, the position of Australian shipping would become increasingly difficult, in that the overseas vessels would naturally take the trade that was most profitable and the Australian companies would be left with the less profitable. The Australian companies would then probably find it necessary to curtail their services and increase freights and fares. The incursion of "tramp" vessels into the Australian trade would result in unstable rates which are undesirable from the viewpoint of shippers. (A difficulty might also arise in connexion with the entry of the overseas vessels into the intrastate trade, the regulation of which is in the hands of the State Governments)

48. The objectives, namely, on the one hand to extend shipping facilities on the Australian coast by permitting overseas vessels to enter the coastal trade, and on the other hand to effectively protect the existing coastal services, are incompatible. The Board, therefore, reported that, in its opinion, "it is not practicable or desirable to substitute for the existing protection provided by the coastal clauses of the Navigation Act any other scheme of protection for the Australian interstate shipping industry" (page 44)

49. The Board further found that, "with the exception of the disabilities suffered by Tasmania, no complaint lodged was of sufficient national importance to justify the repeal of the coastal clauses with the consequent risks of the extinction, or at any rate the serious reduction, of the existing interstate services". So far as Tasmania was concerned, the evidence tendered indicated that, "apart from one or two comparatively minor complaints regarding cargo, the burden of complaint is in regard to passenger services" (page 44).⁽¹⁰⁾

50. As a result of its investigation the Tariff Board found that, "excepting only as to the lack of facilities for passenger services between the eastern ports of the mainland and Hobart, no disability was brought under the notice of the Board which could be deemed to be of national importance" (p. 46). In regard to the main question referred, the Tariff Board was strongly of opinion that the substitution of any other form of protection for that provided by the coastal clauses of the Navigation Act was neither practicable nor desirable.

(10). It is evident that the repeal of the coastal clauses would only assist Tasmania to the extent of permitting the carriage of passengers between this State and the mainland by overseas vessels calling at Tasmanian ports and continuing their voyage to mainland ports, or which include Tasmanian ports in their voyage from mainland ports overseas.

CHAPTER IIINTERSTATE SHIPPING FREIGHT RATES AND SERVICES AND FINANCIALRELATIONS BETWEEN THE COMMONWEALTH AND THE STATE OFTASMANIA.

51. "When States enter into a federation a new central government is created to perform specific functions held to be common to the combined communities, while the original States retain all other powers of government and are constitutionally independent so far as these powers are concerned."⁽¹⁾ In general "where communities federate they have in view certain national purposes which the central authority is intended to serve. These functions must be allocated to that authority regardless of cost."⁽²⁾ During the period before the Financial Agreement of 1927 the provisions of Section 86 of the Constitution of the Commonwealth of Australia to grant assistance to States assumed great importance. Tasmania and Western Australia, indeed, had been beneficiaries under Section 86 for many years.⁽³⁾

52. In the period before the Financial Agreement, the Commonwealth Government made repeated efforts to terminate the system of contributions to States. The main features of these proposals were that the Commonwealth should vacate an area of direct taxation which the States would then occupy, and that the per capita payments should cease. All proposals made by the Commonwealth were considered iniquitable by the States and were rejected by them. For as long as the Commonwealth did not entirely vacate the field of direct taxation and did not undertake to stay out, the States had no security whatever against a re-imposition of direct taxation; but the Commonwealth was not bound to continue the per capita payments, and it repealed the Surplus Revenue Act. The States were then faced with the total loss of per capita payments and this led to the conclusion of the Financial Agreement 1927.

53. Up to 1936 the claimant States in submitting their claim to the various authorities appointed by the Commonwealth Government to recommend the necessary grant under Section 86 continued to assert that their disabilities could be attributed to Commonwealth policy.

54. The claims for financial assistance were made by three outlying states with little industrial development, and with areas of very sparsely settled country. These difficulties arise, in some measure at any rate, from the physical characteristics of these States and constitute an essential phase in the problem of Australian development. The claimant States are what may be called marginal states. Each contains a relatively large area on the fringe of that part of the continent which can be cultivated. This fringe presents peculiar difficulties from the point of view of development.

55. The states contended that the main cause of their disabilities was the policy of protection. The demand for a substantial tariff to ensure the manufacture of a considerable proportion of the requirements of the people was practically certain to be accepted by a progressive community. The Tariff Committee of 1928 came to the conclusion that this policy had enabled an increase of population to take place. This method of development involved

(1) Commonwealth Grants Commission, 3rd Report (1936) para. 19.

(2) Ibid. para. 22.

(3) 1st Grant paid to Tasmania, 1911-13.

costs for other production and the main burden settled upon export industry. It follows that, insofar as the establishment of secondary industry involves a subsidy from the community, which falls with especial severity on the export industry (wheat and wool in particular) there is a clash of interest between secondary industry and the interests which depend upon primary industry. Moreover, the secondary industries tend to be established in the eastern states. These are nearer the coal fields, and have the larger populations, and, as they had an early start, the modern tendency towards concentration tends to make these industries even larger. The more sparsely settled outer States could never establish these industries except at great cost to themselves. As a result the clash between the interests of primary and secondary industries tends to grow into a conflict between the more closely populated Eastern States of Victoria and New South Wales and the sparsely settled marginal States of South Australia and Western Australia and Tasmania.

56. All early Tasmanian claims for grants from the Commonwealth were based on (1) defective working of the Constitution, (2) effects of Commonwealth policy, (3) poverty of resources and economic inequalities and (4) financial needs.

57. In 1925 the Hon. J. A. Lyons, then Premier of Tasmania, appointed a Committee to inquire into and report on the disabilities of Tasmania under Federation. So far as "direct" financial relations were concerned the Committee concluded that Tasmania received more from the Commonwealth than was paid in taxes. "It is therefore, in the direction of the effects of Federation on Tasmanian production that disabilities are to be sought".⁽⁴⁾ The Navigation Act was subjected to some criticism.⁽⁵⁾

58. The Committee pointed out that Tasmania is dependent on shipping facilities very much more than any other State. But, according to the Committee's Report, "there are two circumstances which enforce strongly Tasmania's peculiar dependence on shipping", viz:-

(a) Importance of Interstate Trade.

Interstate trade is relatively much more important to Tasmania than to any other State, because climate leads to specialisation in the production of certain commodities. (Queensland, with the virtual monopoly of sugar-production is to a lesser degree in the same position).

(b) The Tourist Traffic.

The second circumstance which makes Tasmania peculiarly dependent on communication with other States is the importance of the tourist traffic. Even before the war the tourist trade was claimed to be an "invisible export" equal in value to the state's visible exports, such as fruit or potatoes. The continued prosperity and steady expansion of this traffic is as essential to the economic welfare of the State as any branch of material production". (page 11)

59. The Committee presented certain data relative to the post-war decline in shipping services available. The table below would appear to substantiate the view that "practically every service gave fewer facilities in 1925 than it did twelve years earlier", through less frequent sailings or the use of smaller boats, or both, while some services had been discontinued altogether.

- (4) Report of the Committee to inquire into Tasmanian Disabilities (1925) p. 9.
 (5) As well as the activities of the Arbitration Court, the Tariff and interstate free trade.
 (6) This is obvious from the mere fact of being an island, which confines all traffic to sea transport, whereas passenger traffic at least between other states is generally by rail.

TABLE I

TASMANIAN SHIPPING SERVICES 1913 AND 1925.

Route	1913 service	1925 service
1. Hobart-Sydney	Weekly	7-14 days: inferior boats.
2. Hobart-Melbourne	Weekly: large passenger boat.	Small cargo boats; irregular.
3. Hobart-Bluff-Dunedin-Lyttleton-Wellington	Weekly	Nil.
4. Hobart-Auckland, etc. via Sydney.	Weekly	7 - 14 days.
5. Hobart-West Coast - Melbourne	10 - 12 days	Nil.
6. Hobart from London & South Africa (N.Z.S.S. Co., & S.S. & A.Co.	14 days	28 days : cargo only.
7. Hobart-British ports (all oversea companies calling)	Every few days from Feb. to May	No interstate passengers or cargo.
8. Hobart-Continental port (N.D.L.Co. and German-Australian Line).	Monthly	Nil.
9. Launceston-Sydney.	Passenger and cargo.	Cargo only.

60. Moreover, the Committee maintained that even when a shipping service continued, the rise in freight rates had put a severe handicap on Tasmanian trade. It was denied that the rise in freights was world wide, and therefore not a special hardship on Tasmania, for the rise.

since 1913 was a comparatively modest one. in overseas freights "It is in interstate rates that the greatest rise has occurred, and, Tasmania's interest in interstate trade is so much greater than that of any other State that the burden falls on her in a very special degree."

TABLE II

TASMANIAN SHIPPING FREIGHT RATES.1913 and 1925

Service	Cargo	Freight pre-war	Freight. 1925	Increase
INTERSTATE - Melbourne and all Tasmanian ports.	General cargo	13. 6	20. 0	47
	Apples.	0. 7½	0.11	47
	General cargo	13. 6	20. 0	47
	Apples.	0. 7½	0.11	47
Brisbane and Tasmanian ports	General cargo	31. 6	40. 0	27
	Apples.	1. 7½	2. 6	54
Adelaide and Tasmanian ports.	General Cargo.	28. 0	46. 0	64
Fromantle and Tasmanian ports	General Cargo.	38. 0	61. 0	60
OVERSEA - United Kingdom and Hobart & Launceston	General Cargo.	60s.to 65s.	70. 0	12
	Wheat charter (Apr. May June)	31.3 to 32.6 (1913)	30s.to 36s. (1925)	4

It was admitted that some oversea freights had risen considerably more than those for wheat and general cargo. Refrigerated space for fruit in particular was 50 per cent higher than 1913 rates. Unfortunately, "this is the oversea freight which most vitally affects Tasmanian interests, as the high rates jeopardise the whole apple-growing industry, and are an effective bar to its expansion. There has been no increase in the acreage of Tasmanian orchards for the last three years" (p. 12).

61. The Committee referred to the conclusion of the Navigation Commissioners that there had been no increase in freight rates between Australian ports since the Navigation Act came into force. But, "they have not come down while in oversea freights there has been a great reduction".

62. The Committee found that Tasmania, was suffering from serious loss of shipping facilities both for cargo and passengers, from an excessive rise in interstate freights, and that her geographical position and trade (including the tourist traffic) made her susceptible to injury on these accounts to a very much greater degree than any other State. It was not suggested that all these disabilities were due directly or indirectly to the Navigation Act. But, "the Navigation Act and the policy which it embodies are undoubtedly a serious aggravation of the trouble". Services have been cut down or discontinued, and interstate charges have been greatly increased in most cases as the direct consequence of the increase in shipping costs - an increase very much greater than in the case of oversea shipping. The Committee pointed out that the Navigation Act was accepted as Commonwealth policy to protect and encourage Australian shipping. Hence, such protection and encouragement "should be at the expense of Australia generally, but as the only shipping that it is possible to encourage is shipping within Commonwealth waters, and as Tasmania is in proportion to population much more interested in such shipping than any other State, it follows that the cost falls very much more heavily on Tasmania and offers the most serious threat to her present and future solvency" (page 13).

63. In 1925 the Commonwealth Government appointed Sir Nicholas Lockyer as its special representative to inquire into the financial position of Tasmania. "The Case" was prepared by the Hon. A. G. Ogilvie and the Hon. Tasman Shields. After explaining the position of the State as a separate unit, the main causes (said to be external to Tasmania) of her financial disabilities were discussed under two headings, namely:-

- (a) Direct financial disabilities;
- (b) General economic disabilities which had "reduced the State's capacity to maintain itself".

64. Of course, it is inevitable that any Federation covering so wide an area as Australia, and including States so very different in geographical circumstances, should have different effects within different States. "When Federal policy becomes directed to the fostering of special forms of production and of services, an unequal incidence of cost and benefit is also to be expected. When geographical conditions are markedly unequal, such inequalities are bound to be accentuated".

65. So far as the general economic causes external to Tasmania as a State were concerned, the case concentrated upon one aspect of national policy only, that of protection, and proceeded to show how its application through the tariff and the Navigation Act operated against Tasmania. However, the "Case" stated little that was new and less that was specific and documented. It was

(7) Freight rates were abnormally high in 1921.

contended that the several "costs" of isolation could not be passed on, the reasons being the relative bargaining power of Tasmanian producers with mainland competitors. Hence, all freight charges remain with the exporter.⁽⁹⁾

66. Sir Nicholas Lockyer presented his report to the Prime Minister on 25th March 1926.⁽¹⁰⁾ He referred to the importance to Tasmania of adequate and economical sea transport services. In Chapter VII of this survey we shall be concerned with an analysis of the cost structures of Tasmanian exporting industries, with particular reference to the proportion which shipping costs bear to total costs of production. Since a section is to be devoted to the textile industry it is interesting to note the observations of three Launceston manufacturers who, inter alia, stated to the Commissioner as follows:-⁽¹¹⁾

"Increased freight: the bulk of the raw wool has to be purchased on the mainland, and heavy freight paid on it to Tasmania. Prior to the Navigation Act, freight was 2/6d. and is now 7/6d. per bale, and as the main market for the finished product is also on the mainland, the manufactured goods are also subject to freight back to the mainland. The city of Launceston, and the existing woollen manufacturers in Launceston, have been endeavouring to attract other woollen manufacturers to Launceston, with the idea of making a woollen manufacturing centre, and so getting the advantage of the increased labour market, and as far as the city is concerned, an increased population, and the natural advantage of climate, water and the hydro-electric power scheme have been boomed, but the advantages of these are so slight compared with the disadvantages enumerated above that there is no inducement for any company to start a new woollen mill in Tasmania at the present time".

67. The Lockyer Report admits the difficulty of computing the cost to Tasmania of the Navigation Act and refused to comment on the generalisations made by the Tasmanian Committee responsible for preparing the "Case".⁽¹²⁾ Sir Nicholas conveniently shelved the question by concluding that,

"In practice, Tasmania, by reason of her isolated position, her dependence upon interstate trade and interstate tourist traffic, and the fact that her interstate trade is more than double that of any other State, undoubtedly carries more than a fair and proper share of the national burden."

68. The Commonwealth Joint Committee on Public Accounts

(8) "The Case for Tasmania" presented to Sir Nicholas Lockyer on behalf of the Government of Tasmania (Government Printer) 1926 p. 4.

(9) In the case of most Tasmanian products sold on Mainland markets competition is on the basis of price components and not on the basis of a changing price (Due to price fixing agreements among producers) (Vide Chapter VII).

(10) Report on the Financial Position of Tasmania as Affected by Federation, by Sir Nicholas Lockyer. Presented to the Prime Minister (The Right Hon. S. M. Bruce) on 25th March, 1926.

(11) The Three firms concerned were:-

Paton's and Baldwin's Ltd. owners of the largest spinning mills in the British Empire.

Kelsall and Kemp (Tas) Ltd. company formed by Kelsall & Kemp Ltd. of Rochdale, England, and the largest flannel manufacturers in the British Islands.

Robert Hogarth and Sons Pty. Ltd. the oldest firm of woollen manufacturers in Tasmania.

(appointed on 22nd January 1926) was instructed to inquire into and report upon communications between Tasmania and the Mainland, and the subsequent report was ordered to be printed on 9th November 1927. With regard to the amendment of the Navigation Act it was indicated in evidence that when the coasting trade provisions of the Navigation Act came into operation on 1st July 1921, over-sea ships, with the exception of the Commonwealth Government line, while continuing to call at Tasmania ceased to carry passengers or cargo between Australian ports. Under Section 286 of the Navigation Act however, permits could be issued for over-sea vessels to engage in interstate trade if it could be shown that no licensed ship was available or that the services were inadequate. An amendment of that section of the Act provides that during certain periods of the year British ships of 10,000 tons gross and over having a speed of at least 15 knots may be permitted to carry passengers between Hobart and the ports of Brisbane, Sydney and Melbourne, without having to be licensed under the coasting trade provisions of the Act. Although these facilities were granted in 1926 and 1927 during the apple export season, no advantage of the exemptions was taken by the shipping companies in either year. Yet, other evidence placed before the Committee was emphatic and unanimous that the Navigation Act had had a detrimental effect on Tasmania by imposing restraint on the free movement of passengers and cargo.

69. Only brief reference was made to the question of fares and freight rates. The opinion of the 1920 Select Committee on Sea Carriage and the 1923 Royal Commission on the Navigation Act that the freights charged were justified was quoted. It was claimed that as Tasmania has to bear its share of any losses incurred by the Commonwealth Line, the vessels under that flag should call regularly at Hobart throughout the year, instead of, as at present, only during the apple season.

70. Tasmania, as well as other States of the Commonwealth though perhaps to a greater degree, had, in the opinion of the Committee, suffered as a result of the Navigation Act; its industries had been handicapped; the establishment of new enterprises had been prevented, and, generally, the development of the State had been hindered. Not only had the Act failed in its purpose to create an Australian Mercantile Marine and to improve transport facilities, but "it has, in effect, created two monopolies" - the interstate companies on the one hand, and the seamen on the other. The Committee, therefore, recommended that "the coasting trade sections of the Navigation Act be repealed".⁽¹³⁾

71. A minority report stated that "the repeal of the coasting trade sections of the Navigation Act would not prove a remedy for Tasmania's disabilities or lead to the improved services desired by the State. According to this report the unsatisfactory nature of the Bass Strait service was due in no small measure to the absence of competition, as the interstate companies "have divided the Australian coastal trade among themselves and will not invade each other's domain." The difficulty, it was maintained, could be overcome by the extension of the shipping activities of the Commonwealth to provide a direct service between Tasmanian and the Mainland."⁽¹⁴⁾

72. Under date the 6th December, 1929, the Honourable the Prime Minister (J. H. Scullin) asked the Parliamentary Joint Committee of Public Accounts to inquire into and report on the general question of Tasmania's disabilities. The main points of the evidence placed

The difficulty in this and all other official investigations has arisen, in the opinion of the researcher, from the particular approach adopted. The cost to Tasmania of "Bass Strait" should be considered in terms of costs of production, defined as all costs incurred in the manufacturing process plus all transport and other charges of marketing.

The British Economic Mission in its Report of 1929 recommended that effect be given to the Committee's suggestions.

Vide Chapter III

before this Committee concerning the disabilities suffered by Tasmania in consequence of inadequate shipping services and high freight rates may be stated thus:-

- (a) Owing to Tasmania's severance from the Mainland she is almost entirely dependent on shipping facilities for the prosecution of her trade.
- (b) Interstate trade was relatively more important to Tasmania than to any other State. For the year 1928-29 the interstate tonnage of cargo from Tasmania was 4.54 tons per head of population compared with 1.67 tons per head of population for all other States. Thus the interstate trade of Tasmania was over two and a half times as great as the average of the other States.
- (c) While the encouragement of an Australian Mercantile Marine through the protection of the Navigation Act was considered a worthy object, it was contended that Tasmania owing to her geographical position, her predominant interest in interstate trade and her partial dependence on the tourist traffic, had to bear a disproportionate share of the increased costs and curtailment of services involved in the maintenance of an Australian shipping industry.

73. As the Commonwealth Government had spent millions of pounds on the provision of railways in other States, it was contended that the obligation rested on the Commonwealth to find adequate means of communication by sea for Tasmania. To overcome existing difficulties it was suggested in evidence that:-

- (a) Passenger communication between Melbourne and Hobart be restored;
- (b) Provision be made for the continuity of the Sydney-Hobart passenger service throughout the year with lower fares;
- (c) Consideration be given to a policy designed to give Tasmania lower rates of freight and passenger fares generally;
- (d) A condition be inserted in the mail contract with the Orient Company that its steamers should carry interstate passengers when voyaging between capital ports in pursuit of overseas trade.

74. It was further stated in evidence that unless adequate regular, and continuous means of communication were provided to enable the products of Tasmania to be readily and cheaply marketed, the efforts of the Commonwealth to assist the State financially to overcome its difficulties, to retain its population, and to increase production, would be largely wasted. There was a difference of opinion as to the best method of improving shipping services for Tasmania. Some witnesses favoured increased subsidies to the shipping companies; other favoured the establishment of a Commonwealth line. The majority of witnesses however, favoured a subsidized service.

75. While the Navigation Act was accepted as the expression of the policy of Australia to protect and encourage Australian shipping, it was claimed that Tasmania, because of her special conditions, her geographical position, her predominant interest in interstate trade, and her partial dependence on the tourist traffic, bore a totally disproportionate share of the costs which the maintenance of an Australian Mercantile Marine involved. It was admitted that it was impossible to separate the effects of Federation and Federal policy from the economic changes and the general progress of industry and production. It was also recognized that the rise in coastal freights and curtailment of services might have been largely an inevitable

consequence of world shipping conditions in which the Navigation Act played but a small part.

76. Having regard to the fact that the Commonwealth has provided railway communications in mainland States at very considerable cost, and that Tasmania is seriously handicapped by reason of her geographical position, the Committee felt that an obligation rests upon the Commonwealth to assist the State in the provision of suitable shipping facilities and was of the opinion that an improved service should be provided between Melbourne and Launceston and the northern ports of Tasmania, and that freight rates and fares should be reduced.

77. With regard to the Hobart-Sydney service the Committee considered that a regular service should be maintained. It was thought, however, that the retention of a large vessel like the Zealandia could be justified throughout the year, and that during the winter months at least a vessel of the Riverina type should be sufficient to cope with the traffic offering.⁽¹⁵⁾

78. In connection with the application made in 1933 by Tasmania for financial assistance from the Commonwealth under Section 96 of the Constitution, a special memorandum was submitted to the Grants Commission dated 26th January 1934 and it was strongly urged that Tasmania suffered definite disabilities through the operations of the Act, which resulted in:-

- (i) Curtailment of services.
- (ii) Increased fares and freights.
- (iii) Unequal opportunities for competitive trade.
- (iv) Hindered development of the tourist and other industries.
- (v) Losses through maritime disputes, which, in all probability, would not have occurred but for the ban on British ships.
- (vi) The aftermath of such disputes - the fear of again being marooned whilst travel by British ships was prohibited.
- (vii) The stagnating effect upon Tasmanian trade generally through diminishing tourist traffic occasioned by the Act.
- (viii) Repercussions on overseas trade.

79 (a) The Committee was first concerned to show that the increases in freight charges so far as Tasmania was concerned were not imposed to meet falling trade. The data presented showed that Tasmania's total trade increased from 641,383 tons in 1919-20 to 1,088,965 tons in 1923-24, an advance of 447,582 tons, equal to 69.8 per cent. In the next two years (1924-25 and 1925-26) the totals were 991,931 tons and 936,281 tons respectively, increasing in 1926-27 to 1,088,582 tons, with a fluctuation to 1,045,393 tons in 1927-28 and to 979,999 tons in 1928-29.

(b) Comparing the figures for the commencement of the ten-year period (641,383 tons) with the year 1926-28 (1,085,582 tons) the increase was 444,199 tons, or 69.2 per cent; and compared with the last year quoted by the Public Accounts Committee, 1928-29, the increase was 338,616 tons, or 52.8 per cent; so that "the increase in freight rates could not be supported by an argument of falling trade".

80. In computing the annual loss to the Tasmanian national income due to increased sea freight rates the Committee maintained that in the case of the State's export products the freight cost was not paid by the consuming country or state. In

(15) Prior to the recent war the Zealandia ran a weekly service during the summer months and fortnightly during the winter season.

general, of course, the final consumer does pay imposts such as customs duty, freight etc. (16)

81. The disability suffered by the State due to the Navigation Act was expressed by the Committee in money terms as follows:-

Freight rates, above the cost of mainland states	276,689
Passenger rates above the cost of mainland states	54,636
Total annual extra costs imposed	£331,325
Loss on tourist traffic (Plus transit traffic pass.)	84,600 + £5000.
Minimum annual extra costs and losses imposed by Navigation Act	£420,925

82. The following method was adopted in the calculation of the annual loss to Tasmania arising from the differential freight rates compared with those charged between mainland ports. The figure of .130d. per ton mile was obtained by taking the difference between -

- (a) The average rate paid on Tasmanian cargo according to the nearest obtainable direction and extent of the traffic; and
- (b) The average of rates between mainland ports.

83. The figure for (a) above was obtained as follows:-

(a) Direction and Extent.

Total value of trade interstate imports and exports of Tasmania in 1931-32 was £10,959,089 made up as follows:-

To and from N.S.W.	-	£3,949,624	(36%)	
"	Victoria	-	£5,757,201	(53%)
"	Other States	-	£1,252,264	(11%)
		£10,959,089	100%	

More than half of the freight therefore, was carried the shorter distance of 470 miles (Hobart to Melbourne); a little over one-third was carried 638 miles (Hobart to Sydney); and practically all the balance of 11% was carried between Hobart and Adelaide (771 miles).

To be more exact:-

53% of the freight was carried 470 miles
36% of the freight was carried 638 miles
11% of the freight was carried 771 miles

That is:-

$\frac{53 \times 470}{100}$	=	249.10 miles
$\frac{36 \times 638}{100}$	=	228.68 miles
$\frac{11 \times 771}{100}$	=	84.81 miles
		563.59 miles

The average distance the Tasmanian freight was carried, therefore, was 563.59 miles.

(b) Average Ton Rate on Tasmanian Cargo.

53% of the Tasmanian cargo was carried between Hobart and

(16) Principal products exported are potatoes, jam and apples and as these have to compete on the open market in the country of consumption, the incidence of the freight is on the home producers. Again, the inward freight on most manufactured goods, against which there is no similar competition, falls on the consumer of this State also.

In this connection the Tariff Board reported in 1929 as follows: "Experience has shown that the manufacturer in, say, Melbourne can produce many articles for his local market at prices that can compete successfully with imported goods. However, when it comes to competition in other States, W.A. for example, it has been found that the addition of freight and handling charges had frequently made the local products non-competitive with those from overseas."

Melbourne at the rate of .511d. per ton per mile. 36% of it was carried between Hobart and Sydney at the rate of .444d. per ton mile.

That is:-

$$\begin{array}{rcl} \frac{53 \times .511d.}{100} & = & .27083d. \\ \frac{36 \times .376d.}{100} & = & .13536d. \\ \frac{11 \times .444d.}{100} & = & .0488d. \\ & & .45503d. \end{array}$$

The average rate paid on Tasmanian cargo was, therefore, .455d. per ton per mile. Average rate per ton mile on cargo carried between mainland ports:-

Melbourne to Adelaide	...	.466
" Sydney	...	.348
" Brisbane	...	.283
" Fremantle	...	.245
Sydney to Melbourne	...	.347
" Adelaide	...	.307
" Brisbane	...	.416
" Fremantle	...	.222
Brisbane to Melbourne	...	.283
" Adelaide	...	.314
" Sydney	...	.416
" Fremantle	...	.257
		3.904 ÷ 12
		= .325d per ton per mile.

(c) Now, the average rate on Tasmanian cargo according to the nearest obtainable direction and extent of the traffic = .455d. per ton per mile. The average of all the rates between mainland ports = .325d. per ton per mile. Therefore difference = .130d. per ton per mile.

The average number of tons carried to and from Tasmania during the five years ended 1931-32 was 905,693 tons.

Hence, 905,693 tons x 56¢ @ .130d. = £276,689.

84. The last report prepared by the Economic Case for Tasmania Committee dealt with the cost of protecting and assisting Australian industries. (17) In the report on "The Effects upon Tasmania of the Navigation Act, 1912 and its Amendments" (11th October 1933) just dealt with it was stated that a great deal of additional research would be required to enable the Committee to set out in detail the full effects of the Act upon Tasmania as a result of -

- (a) Curtailment of services.
- (b) Increased fares and freights.
- (c) Unequal opportunities for competitive trade.
- (d) Hindered development of the tourist and other industries.
- (e) Losses through maritime disputes which, in all probability, would not have occurred but for the ban on British ships.
- (f) The aftermath of such disputes - the fear of again being marooned (as occurred to passengers on more than one occasion) whilst travel by British ships was prohibited.
- (g) The stagnating effect upon Tasmanian trade generally through diminishing tourist traffic occasioned by the Act.
- (h) Repercussions on overseas trade.

(17) "Report on the Cost of Protecting and Assisting Australian Industries" (7th December 1935).

85. In Section 19 (page 21) of "The Case for Tasmania, 1935," the following paragraphs occur:

"The Committee is convinced that among the disabilities suffered by Tasmania as the result of Federal policy and enactments the effects of the Tariff cannot be ignored...It has been recognised by previous investigators that the price paid by Tasmania for the protective policy of the Commonwealth by far outweighs any benefits derived by the State from that policy. It is likely that the subsidy to protected production in Tasmania is £2 per head of population less than the Australian average".⁽¹⁸⁾

"The cost to Tasmania of the Navigation Act is shown in the Committee's report, published on 26th January, 1934, to be £420,000 per annum (not including certain unascertainable costs). The disabilities suffered by Tasmania under the policy of protection and the Navigation Act are thus costing not less than £800,000 per annum."

86. The Report referred to above aimed to show that the burden imposed upon Tasmania in protecting Australian industries by tariffs and bounties is higher than that estimated in Appendix W to "The Australian Tariff". The table below summarises the conclusions of the report and shows that the cost of the Navigation Act was alleged to represent about 36% of the total burden due to the protective policy of the Commonwealth:-

TABLE III.

Net Burdens upon Tasmania during 1931-32 of Bounties Paid from Commonwealth Revenue, the Butter Stabilisation Scheme, the Sugar Embargo and Agreement (after allowing for Sugar Concessions) and Tariff Protection of Primary and Manufactured Products, together with the Adverse Effect of the Navigation Act.

Act of Policy	Total Adverse Eff- £	Per Head of Population. s. d.
(a) Bounties, the Butter Stabilisation Scheme, the Sugar Embargo & Agreement, & Tariff Protection of Primary and Manufactured Products.	798,000	69. 11
(b) The Navigation Act	421,000	37. 3
	1,210,000	107. 2
(c) Less Sugar Concessions.	39,000	3. 5
Total Minimum Tasmanian Burden:	£1,171,000	103. 9

87. The Report in question was issued by the Economic Case for Tasmanian Committee on 7th December, 1935, and was one of the documents submitted by the Treasurer to the Grants Commission along with the Statement prepared by the State Finance Committee, of Tasmania's Claim for a Special Grant in 1936-37. At the public sitting of the Commission in Hobart on 30th and 31st January 1936, certain of the methods used and the conclusions reached in the Report were the subject of criticism by members of the Commission. Most of the criticism was voiced by Professor L. F. Giblin. He pointed out that the non-acceptability of the conclusions in the Report arose from difficulty over matters of assumption. He did not attempt to traverse the Report in all its details, but confined himself to the summaries, more particularly to that on page 35 giving estimates of the cost of protecting and assisting industries in Australia as a whole. The total cost of the five items included in this

(18) This is the estimate made in Appendix W of "The Australian Tariff" (prepared by a panel of economists in 1929 for the Prime Minister).

summary is shown as £41,977,000. Doubts were thrown by the Professor on the correctness of the figures for four out of the five items. He summarises his criticism on page 42 of the transcript of evidence. "Putting these things together, you will see why we do not feel able to accept your total of practically £42 million for the year 1931-32, but would cut it down by about £9 million or £10 million, so that the figure of 69/11d. per head would be reduced to 54/- approx." That is, Professor Giblin assumed that the per capita net burden for Tasmania (69/11d) worked out by the Economic Case Committee should be reduced by 9/4d. or 10/4d. He did not attempt any examination of the method employed by the Committee in arriving at the distribution of net burdens among the States as set out in Table 15, page. 35.

88. In addition, the figure of £421,000 shown in the summary of Community Burdens on page vii of the Report, with respect to the Navigation Act was rejected by the Commission on the ground that they were "not satisfied that the data (from which the estimate was made) are correct". The cross-examination of Tasmanian witnesses in this connection indicated also the Commission's unwillingness to accept assumptions, methods and inferences in the Economic Case Committee's Special Report for measuring the Incidence of Exchange upon Tasmania for 1932-33.

89. Accordingly, the State Treasurer instructed Professor F. R. E. Mauldon and Mr. D. L. Anderson to prepare a memorandum on the Commission's criticisms. Regarding the attempted measurement of the burdens upon Tasmania imposed by the Navigation Act the memorandum discussed the method used and the criticisms levelled at some length.

90. The Mauldon-Anderson memorandum first concerned itself with the methods used by the Economic Case Committee, viz:-

Burden due to increased Freight Charges. Average figures for ton-mile charges on general cargo moving between Tasmania and the three principal states with which she trades were weighted according to the value of trade on the three freight routes, but not according to the different mileages, and the resultant average figures referred to were the "average ton rate on Tasmanian cargo". From this was subtracted a simple average of a set of twelve ton-mile charges between pairs of Mainland ports, and the difference was multiplied by the average length of carriage between Hobart and the three ports of Melbourne, Sydney and Adelaide. The latter average was weighted according to the relative value of trade between Hobart and the three ports. The resultant product was multiplied by the average number of tons carried to and from Tasmania during the five years ended 1931-32, which was stated to be 905,693 tons. This gives a figure of £276,689 which was used as the extra expense or amount of freight rates due to the Navigation Act (for computations see para. 83 above).

91. The Commission's Objections.

(a) The Chairman of the Commission had questioned the soundness of the assumption that if the freight in Tasmania was greater than between a (presumably equal) given distance on the mainland that was an "injury" due to the Navigation Act. The Secretary of the Economic Case Committee (Mr. L. R. Norman) attributed the higher Tasmanian freight to the lack of competition in comparison with the mainland states where shipping was subject to rail competition. It does seem probable that rail competition on the mainland should have some effect upon marine freight rates along the coast. (It is certain that several State railways

particularly Queensland⁽¹⁹⁾ have established freighting systems particularly designed to meet port to port competition.⁽²⁰⁾

(b) The next point raised by the Commission was the question of the heavier freight burdens carried between Mainland ports, the suggestion being that this would allow freights to be lower. Mr. Norman admitted that no account had been taken of this fact, but thought that the many sources of loss to Tasmania for which no allowance had been made would make up for any over-statement here. Regarding this point it was stated in the Memorandum under review that it was probable that "the smaller and less regular demand for transport from Tasmanian ports compared with that between Mainland ports would definitely make the cost of carriage higher when a Tasmanian port was involved".⁽²¹⁾ (Note also the fact that Tasmania is right off the regular traffic routes). It would be a matter of policy for the shipping companies whether this higher cost was passed on in higher freights, but as freights are higher than those between Mainland ports, a small volume of cargo must be considered as part of the reason.

(c) The next objection raised by the Commission was connected with the effect of the length of journey. Owing to the central position of Tasmania in relation to the other state capitals, and the fact that figures were only taken for freights from Hobart to Melbourne, Sydney and Adelaide, "the average distance of carriage applying to the Tasmanian figures must be considerably less than that for the journeys between other Australian ports for which figures are taken". To gauge the effects of length of journey upon ton-mile freights, it is only necessary to glance at some of the tables produced by the Committee, which show clearly that goods are carried for long distances at a much lower figure per mile than for short distances. According to Mauldon and Anderson this should supply part of the reason for the excess of Tasmanian freight rates over those applying exclusively to the rest of Australia.

(d) The Chairman then suggested that regularity and security of service as under the present arrangement might be preferable to the results of casual and irregular competition from outside. Mr. Norman thought that the earnings of the regular trading companies would be protected by the development of a new class of traffic. He instanced the results of the relaxation of the Act, when the regular traders were doing even better than before. Professor Giblin thought that this was due to a general increase in the habit of travelling which would have happened anyway. The Mauldon-Anderson memorandum found it rather difficult to be sure about this question. It seemed unlikely that, if competition shipping gave any considerable service, regular liners would be able to avoid a certain loss in returns. At the same time it seems probable that some arrangement might be made between the lines concerned by which the severest effects of competition might be avoided. The Commission made no particular criticism of the measures made by the Committee of losses other than those on freight charges.

92. Other Objections.

(i) Measurement of the Average Ton Rate on Tasmanian Cargo

Considering the principal objections to the various measures besides those which the Commission voiced, the Memorandum commenced with the measure of freight loss. The measure of the "average ton rate on Tasmanian cargo" was made by weighting the ton mile rates for general cargo moved between Hobart and Melbourne, Adelaide and Sydney with the relative importance of these three runs. One small objection made applied to the method of weighting which was in proportion to value of cargo shipped to and from the three ports, although presumably there were no better figures available.

A more serious objection lay in the fact that the weighted average of the three charges was taken without reference to the various mileages. Naturally, a low ton-mile rate on a very long run would tend to reduce the real average rate paid more than a similarly low rate on a short

(19) See Report upon the Enquiry into Railway Competition with Ports by J.B. Bridden, 31st August, 1931. (Government Printer)

(20) Whether the degree of freight reduction caused by this competition is commensurate with a possible reduction in Tasmania due to the withdrawal of the Navigation Act is another question.

(21) Tonnage available is, of course, an important factor to be considered in rate making.

run. The figures produced for ton mile rates in the three cases were weighted according to the lengths of carriage, and the figure of .45503d. per ton mile for the average of the three was slightly modified as shown below.

The requisite addition to the Navigation Act Report was applied by calculating the average distance of carriage and multiplying each of the components of the apparent average ton mile rate (see "The Case for Tasmania 1935," p.24) by the ratio of the appropriate length of carriage to this average distance. The following calculations were made in the Memorandum:-

$$\begin{aligned} \text{Average distance of carriage} \\ \text{in miles} &= \frac{(470 \times 53) + (636 \times 36) + (771 \times 11)}{100} \end{aligned}$$

$$= \frac{56359}{100} = 563.59$$

$$\therefore \text{Average ton mile rate} = \frac{(.271 \times 470) + (.135 \times 638) + (.049 \times 771)}{563.6} \text{ d.}$$

$$= \frac{251.28 \text{ d.}}{563.6} = .446 \text{ d.}$$

It will be seen that this alteration changes the difference between the average Tasmanian freight charge and the figure produced for the average Mainland charge from .130d. to .121d., reducing the former by about 7%.

Other minor objections raised by Mauldon and Anderson relating to the method used in the computation of the average Tasmanian freight includes the doubtful assumption that all Tasmanian interstate trade was between Hobart and Sydney, Melbourne or Adelaide. This assumption is open to doubt from two sources - a good deal of trade must take place through the ports on the North Tasmanian coast, and there may well be an appreciable traffic with other Mainland ports apart from those given. It may be reasonable to accept the trade with these three ports as typical of the whole, but this assumption should have been stated, and, if possible, justified.

(ii) Measurement of the Average Rate per ton per Mile on Cargo carried between Mainland Ports. The objections to this process, were, firstly, the fact that there was no allowance for the various lengths of journey. This omission might have caused the figure for the average rate to be inflated above the real figure, and hence have cancelled out in part the corresponding error in the measurement of the Tasmanian rate. With the second measure, however, there are several more items of inaccuracy. There was no allowance for differences in volume of freight on the various journeys. The presumption here should have been that, as in the Tasmanian case, the shorter journeys, i.e. Melbourne - Sydney, Sydney - Brisbane etc. were more important than the longer journeys, i.e. Brisbane - Fremantle, Sydney - Fremantle, etc. The inclusion of weights here would certainly have increased the figure probably substantially.

For an unexplained reason some of the journeys were duplicated. Thus, Melbourne - Sydney appears as well as Sydney - Melbourne. This may have been a crude device for attaching the extra weight referred to above to the more important journeys, but, if so, the obvious inaccuracy is too great for a reasonable measure.

(iii) General. Figures for ton mile charges were based on rates obtaining in 1933-34 and the value of Tasmanian trade on 1932-33 figures. The total tonnage of Tasmanian trade by which the freight difference was multiplied was for the five years ended 1931-32. Mauldon and Anderson describe this mixing of years as "a bad fault", particularly in view of the fact that "the selection of the average figure for tonnage of trade (905,693) makes the burden appear much bigger than if the 1931-32 figure (804,032 tons) had been applied."

The assumption inherent in the use of this figure of extra freights paid as a definite burden upon Tasmania was that these rates increased on both imports and exports, and, therefore were paid entirely by Tasmanians.

Let us consider the effects of an imposition of extra freight, assuming for the moment that it is due to the Navigation Act. This imposition will, first of all, tend either to increase the price of Tasmanian commodities such as wool in the countries to which the State exports or to decrease the return to the local grower, or both. Since Tasmanian production forms such a low proportion of the supply in importing countries overseas, it is unlikely that much of the burden could be passed on to the overseas buyer in the form of higher prices, and to this extent the assumption seems substantially justified. At the same time, most of the State's interstate exports would not be of these staple commodities but of certain metals and foodstuffs. There are many cases in which the Tasmanian production provides a large enough proportion of the supply to enable the exporter to gain a higher price on account of higher freight charges. With regard to imports, most of the extra freight is probably passed on to Tasmanian buyers, but there are many cases in which the seller chooses to offer goods at a slightly lower net price in order to avoid a shrinkage in the market which is, again, an offsetting advantage to Tasmanian consumers as a whole. Arguing along these lines the Memorandum concluded that the inclusion of all the extra freight as a burden upon the Tasmanian community involved some exaggeration.

(iv) Measurement of Annual Loss Due to Increased Passenger

Fare.

The method used was similar to that applied to increased freight rates. The Economic Case Committee found that the extra rate this State had to pay, over and above that paid between the principal Mainland ports, is .4d per mile. This figure multiplied by the total number of miles travelled in an "average" year, gave a total cost of £54,636.

No details were given of these calculations and "it seems probable that the method is as open to criticism as the method applied to freight increases". The assumption that the entire increase in fares to and from Tasmania is a charge on this State is much more unwarranted than the similar assumption in the case of freight. The majority of persons travelling to and from Tasmania are almost certainly Mainland residents. They may sometimes make up for extra fares by spending less in Tasmania, but far the greatest loss caused this State through the Mainland visitors must be the decrease in number of visits. This is allowed for elsewhere. There must be many cases in which Tasmanians travelling to the Mainland on holiday spend less there owing to fares being higher. Hence, "it would appear that half the extra fares would be a much more likely figure as a burden on this State".

(v) Measurement of the Loss on Tourist Traffic

The Committee here arrived at a decrease of 20% in tourist traffic to Tasmania, based on the increase due to the recent relaxation. No further data were given. The number of tourists visiting the State as a yearly average for the five years 1927-31 was derived from the total number of arrivals and departures by assuming that one-third of the travellers were tourists. Twenty percent of the number of tourists was taken as a measure of the resultant increase were the Navigation Act removed, and the loss to Tasmania was worked out by assuming that each tourist would spend £30 while staying in the State. (The £30 came from "evidence submitted to the Committee"). The product of this £30 and the total number of tourists "lost" namely, £84,600, was taken as the loss to Tasmania.

So much of the data used in this calculation were completely unbacked that the Memorandum found it hard to take the measure as a definite piece of evidence and also hard to select specific faults. Something, however, was said about the general validity of the process. "Even assuming that the amount arrived at is a measure of the reduction in tourist spendings due to the Navigation Act, the use of the figure as a net loss to Tasmania is doubtful. Such a method should not be confused with the type of measurement used for the benefit of the protective tariff, by which producers in various States are allowed to charge so much extra for the same production". The effect of the spending of an extra £84,600 here would be partly (1) to give Tasmanians a greater monetary return for the same services (e.g. that portion of the increased return of a hotel keeper which is not covered by extra services supplied by him and his staff), partly (2) to give Tasmanians a greater return for an increased quantity of services (e.g. that

portion of the increased return of the hotel keeper which is covered by extra services supplied), partly (3) to give Tasmanians a greater return for the sale of extra commodities imported from other States and from abroad (e.g. that portion of the hotel keeper's increased return which is covered by foods etc., purchased outside the State, and wear and tear on appliances etc., similarly purchased).

It is obvious that "every unit of commodities sold to extra tourists which was produced with imported machinery, raw material, or capital would mean that a portion of the money spent upon it would be a benefit to those outside the State", (as in the third alternative above). Obviously that portion of the £84,000 which had effect (1) above would be a net benefit to Tasmanians. It would probably be allowable to count that portion having effect (2) as a net benefit as well, but that portion having effect (3) would directly benefit only those outside the State.

(vi) Measurement of Loss on Transit Traffic Passengers.

The only other items included is one of £5,000 for the loss of expenditure in Tasmania by tourists passing through upon overseas liners. Calculations are based on a number of "apple trips" during the 1933 season but the details were not given.

93. The defects in the method by which the measurement of loss from increased freights and fares is made, are obvious. As will be seen in Chapter V so many factors affect fares and freight rates such as scale of operation, size of ship, length of journey, regularity and type of cargo, that it is obviously unwarranted to attribute the entire difference between Tasmanian and Mainland freight rates and fares to one cause, particularly as so many of the other differentiating factors also appear to suggest a difference in the same direction⁽²²⁾. The method has one advantage over any method which would have taken the increase in freight rates and fares over the period of application of the Act, namely, that the effects of general changes in costs and methods due to time are eliminated. Also, since a measure of the extra effect of the Act upon Tasmania was sought, the method involved the assumption of responsibility by this State for her fair share of the costs of the Act. In this respect the method could have been made sounder still if the average charges for Tasmanian journeys had been compared, not with the averages for journeys in the rest of Australia, but with the average for all Australia, that is, including Tasmania. Yet another correction is suggested by the fact that, even if the effect of the Act was to inflate charges equally in all States, Tasmania would still bear more than her per capita burden owing to the larger per capita use of sea transport.

94. As a conclusion, it appears that the Committee was greatly handicapped by the lack of data. Had the Committee had access to, and made use of, figures for the fluctuations in freight rates and fares, both to and from Tasmania, between the other States, and overseas, before and after the application of the Act, a much more reliable figure might have been arrived at. Such a comparison between points in time is a sine qua non of any measurement. Moreover, the conclusions in the Report were bound to be unconvincing in the absence of the data referred to as "evidence" but not submitted for actual check and appraisal. As a piece of evidence, the Report indicates, rather than proves, that Tasmania would benefit considerably if the Navigation Act were removed. The figures given do no more than give an impression of the possible scale of the benefit. As a quantitative measure they are unconvincing and may be highly misleading⁽²³⁾.

(22) We have here a clear example of the extreme difficulty of using the logical method of difference in tracing not effects to a single cause.

(23) It would appear that at least one conclusion may be drawn from this and the previous chapter, namely, that the possibility of arriving at any quantitative measure of the differential cost to Tasmania of the Navigation Act as a single factor in the cost of sea-borne transport is highly doubtful.

95. In its report the Grants Commission admits the dependence of Tasmania upon sea traffic and that in this respect "her position as an island is very different from that of any other State" (24). It will be recalled that the Economic Case Committee based its report on the Navigation Act on the assumption that because the freight rates to a Tasmanian port from a given port on the mainland were greater than for voyages of the same distance along the main coast the difference must be ascribed to the Navigation Act. The Commission denied the validity of this assumption and pointed out that the freight rates for a voyage are dependent mainly on the quantity of traffic offering, and not merely on distance. Tasmania having a small population and small quantity of goods could not expect the same rate to a given point as could be secured on a voyage from, say, Melbourne to Sydney or Adelaide to Melbourne, though in fact, there is very little difference. Tasmania cannot afford its own shipping. It must use the shipping doing the bulk of the Australian trade. Their main traffic routes are between and hence the larger capitals the voyage to Tasmania is an expensive diversion and rates must be higher. If the business is as a whole profitable the diversions can be carried out at a lower cost than an entirely independent service to Tasmania. (25) In other words, high freight rates to Tasmania are a consequence of its geographical position, and are on the same plane as the natural inferiority of the State's resources. This conclusion is the basic assumption underlying the remaining chapters of this study (26).

(24) Third Report, Commonwealth Grants Commission, para. 148.

(25) A case of "positive" discriminatory monopoly.

(26) An assumption which seems to be suggested by the inconclusiveness of every one of the documents herein reviewed.

CHAPTER III

SOME ASPECTS OF THE AUSTRALIAN SHIPPING INDUSTRY, 1914-194596. The First World War, 1914-1918.

The position of the shipping industry during the years immediately following the Great War of 1914-18 can only be adequately described by referring to the history of shipping control during the war period. When war broke out and the demand for the despatch of Australian troops arose, the duty of finding transports and equipping them for the conveyance of troops devolved upon the Department of the Navy, in accordance with the past practice of the British Government. As the transports had also to lift Australian produce and manufactures for overseas markets, the Navy Department had to provide and make the necessary arrangements for the utilization of transports for this purpose. Arrangements also had to be made for the employment of ex-enemy ships which had been interned in Australian waters, and eventually about 75 percent of the overseas trade was controlled by the Naval authorities.

97. In 1917 the Commonwealth Shipping Board, under the Chairmanship of Rear-Admiral Sir William Clarkson, was formed to deal with difficulties which had arisen regarding the quantities of primary produce and manufactured goods which were to be despatched overseas in the respective steamers. This Board sat until January 1919 and acted in an advisory capacity to the Government in all matters pertaining to shipping, both overseas and interstate.

98. Early in 1918 the British Government pressed the Australian Government as "an extremely urgent matter", to release more ships from the Australian coastal fleets in order to engage in war service. In April, 1918, the interstate vessels belonging to the principal Australian steamship companies were requisitioned and the Interstate Central Committee was formed with the primary object of running the vessels as one fleet, and by regulating their employment in the most efficient manner, to make available the largest number possible to the Allied war effort.

99. The requisitioned vessels were taken over by the Commonwealth Government on a standard charter party, as provided by the regulations, the owners receiving the Blue Book charter rates.⁽¹⁾ The Interstate Central Committee was purely an advisory body, comprising the managers of the principal interstate shipping companies of Australia under the Chairmanship of Rear-Admiral Sir William Clarkson, in whom was reserved full power to veto any decisions of the Committee.

100. As a direct result of their work a number of the largest passenger and cargo vessels were released for war service, in addition to other interstate vessels which had already been sent overseas under Imperial and Australian requisition. Interstate vessels were also despatched by the Controller of Shipping to India for wool packs; to America with Australian jams for military purposes; and to Canada for paper. During the war approximately 45 percent of the interstate tonnage was withdrawn from the coast for overseas purposes. At the same time, the Australian coastal trade, which had doubled since the pre-war period owing to the growth of local secondary industry, was more or less satisfactorily catered for, until the influenza restrictions and industrial disputes with seamen and engineers interrupted the services, caused delays and resulted in large accumulations of cargoes at the various ports.

101. The interstate vessels were kept under requisition until April 1920 when they were released by the Government on the condition that they were operated on the Australian coast and that freight rates and fares were not to be increased beyond a mean of 20 percent above the rates then ruling. The principal interstate shipowners agreed to these conditions up to the end of 1920. The interstate steamship owners agreed to continue running their steamers as one fleet in order to obtain the greatest efficiency.

(1) Which had been adopted by the British Admiralty after careful consideration.

102. On the 15th April 1920, the Federal Parliament appointed a Select Committee⁽²⁾ to inquire into and report upon:-

- (a) The organisation and control of Interstate shipping;
- (b) Overseas shipping in relation to Australian products for overseas markets and imports generally;
- (c) Methods to improve mail, cargo and passenger services with overseas countries.

103. The Committee, at the outset, investigated the insufficiency of shipping facilities on the Australian coast to cope with the cargo offering. As a result of its recommendations eight Commonwealth vessels were temporarily placed in the coastal trade and others carried coastal cargoes while proceeding from one port to another in prosecuting their overseas voyages, and the post-war congestion of general cargo was relieved. The Committee further submitted that adequate tonnage had not been available for some time past for the carriage of the constantly increasing quantities of bulk cargoes such as coal, coke, ore, timber, sugar and fruit.

104. Admiral Sir William Clarkson stated, in his evidence, that the two increases in freight rates allowed⁽³⁾ were imperative in order to make the revenue of the ships balance the increased expenses. The Controller showed that the total yearly revenue of the steamers was £3,600,000 whilst the estimated expenses of running the ships for the twelve months ended 31st March 1921 was £4,752,000. In order to defray the latter increased expenditure the sum of £1,155,000 was required and after investigation the 10 percent and 20 percent increases were authorised in order to yield this amount. The total cost of running interstate steamers during the six months ended 30th April 1920, compared with the six months ended 31st December 1918, showed an increase in the latter period computed at 26.7 percent.

105. The Controller of Shipping later in his evidence stated that efforts by him to charge additional tonnage for the coastal trade during the war had elicited the information that British shipowners required a charter rate of 35/- per ton deadweight per month, as compared with the rate of 12/6 per ton deadweight which was paid for the interstate companies' requisitioned vessels of the same type. Again, British requisitioned ships on completing an outward voyage on Imperial Government Account, were often released from requisitions for the homeward voyage and were allowed to take cargoes at market rates on the owner's account.

106. The Committee recommended that the coasting clauses of the Navigation Act (with an exception in the case of the North West of Western Australia) should be put into operation as early as possible.⁽⁴⁾ The Committee also recommended that the Commonwealth Government should "confer with interstate shipping companies with a view to a comprehensive arrangement being arrived at to ensure the provision by the interstate companies of a fleet that would be capable of carrying out all requirements".

107. The Second World War, 1939-45

On 30th January 1941, sixteen months after the outbreak of war, a Commonwealth Shipping Control Board was established under National Security (Shipping Control) Regulations.⁽⁵⁾ The board is the instrument by which the Commonwealth Government exercises a control of Australian coastal merchant shipping with a view to "the more effectual use thereof in connection with the prosecution of total war".

108. In view of the limitations of the Australian Merchant Marine it was necessary as the war developed to organise shipping so that tonnage could be used most effectively and at the same time cater for urgent and fluctuating service demands. Accordingly, regulations were drafted giving authority to the Minister for Supply and Shipping to requisition on the recommendation of the Shipping Control Board any Australian vessel and the charter arrangements place the vessel so requisitioned at the disposal of the Board. The

(2) Known as "The Select Committee on Sea Carriage". Interim Reports were tabled in the House of Representatives on 13th May 1920, 19th August, 1920 and 1st October 1920. The final report was presented 29th October, 1920.

(3) One of 10 percent in October 1919, and one of 20 percent in April 1920.

(4) Compare the discussion in Chapter I.

Board is empowered to decide how and where the vessels are to be employed. The Board may require the owner of any ship requisitioned to act as agent for that ship and in practice shipowners concerned act as agents of the Board for their own vessels. Agents are paid fair remuneration for their services.

109. Heavy services demands and shipping losses have compelled, during the war, rigid rationalisation, and interstate cargoes are limited to essential goods. However, the Australian Merchant Fleet has been supplemented by overseas vessels which are operating on the coast. These include vessels sub-chartered from the British Ministry of War Transport on time charter basis, and British and American ships used for coastal traffic whilst temporarily in Australian waters, and also vessels under the control of the Commonwealth ships chartering Committee.⁽⁶⁾ Generally, the overseas vessels have been used to carry bulk cargoes.⁽⁷⁾

110. The Board is composed of the following members, viz:-

F. Bridgman - Chairman.
 J.F.Brame - Deputy Chairman.
 J.L.Webb - Huddart Parker Limited.
 A.H.Gaze - Commonwealth Ships Chartering Committee.
 E.A.Cole - Secretary, Aust.Inst.of Marine and Power Engineers.
 A.E.Warburton - Commonwealth Treasury.
 H.Sullivan - Secretary.

111. The Shipping Control Board determines the appropriate use of ships for the carriage of coal and ironstone. The competing claims of cargo require constant attention which must be determined upon main lines of policy, and many questions arising from the requisitioning and operation of vessels must be referred to the Board for decision. The Board maintains continuous contact with the Director of Shipping on all shipping problems and through him keeps in touch with other organisations associated with shipping matters, including British and American shipping authorities. In spite of the requisition of vessels by the Allied Services, shipping losses and the handicap of war conditions in respect of the movement of vessels, the cargo position in Australia remains reasonably satisfactory. However, it has been found difficult to increase reserve stocks.

112. For the purpose of advising in the management of the shipping services, a Shipping Management Committee, composed of representatives of principal shipping companies whose ships have been requisitioned, meets periodically to deal with questions arising in the conduct of the shipping services. Decisions of the Shipping Management Committee are subject to confirmation by the Shipping Control Board. The Chairman of the Board is Chairman of the Shipping Management Committee.

113. The Board also works through a Central Traffic Committee. This Committee consists of traffic officers of the Board and considers tonnage fixtures and reports to the Central Tonnage Committee. There are Branch Committees at the main ports and small sub-committees at various State ports. These committees work in close association with the Central Traffic Committee.

114. The functions of the Commonwealth Government Ships Chartering Committee as defined in Part IV of the National Security (Shipping Co-ordination) Regulations are,

"To charter or arrange for the chartering of ships on behalf of the Commonwealth and to manage and operate or arrange for the management or operation of ships so chartered and ships placed under the control of the Committee".

The activities of the Ships Chartering Committee actually arose out of the chartering activities of the Australian Wheat Board. Under war conditions there was great difficulty in linking up sales of wheat with ships for the destination and shipment date required and it was suggested to the Australian Wheat Board that ships should be time chartered. Time chartered vessels had

⁽⁵⁾National Security (Shipping Control) Regulations have since been embodied in National Security (Shipping Co-ordination) Regulations. Note that this chapter was written before the cessation of hostilities. However, shipping control is likely to last many months yet.

⁽⁶⁾Vide paras. 114 et seq.

a twofold advantage, viz:-

- (a) Sales could be covered immediately with the knowledge that before the wheat had to be loaded there would be a possibility of securing another vessel on ordinary charter having the time chartered vessel free for other business.
- (b) To carry wheat and flour sold by the Board for which no ordinary charter could be obtained.

115. As a result the vessels not only carried large quantities of wheat and flour overseas but enabled a much greater sale of wheat and flour to be negotiated and subsequently lifted by other vessels. The Wheat Board also agreed to carry any essential goods for the Government when space was available in the Wheat Board's ships. The Board further agreed that the ships should be used for the transport of essential goods on their return voyages to Australia. In February 1940, prior to the formation of the Ships Chartering Committee, a Cabinet Committee authorised the Department of Commerce and the Australian Wheat Board to charter up to six vessels on behalf of the Commonwealth Government. It was soon found that this number was inadequate for the work to be done and permission was obtained to secure all the vessels possible. As the charter of ships was assuming considerable magnitude, it was suggested that a formal Committee should be set up to control these shipping activities; this was in July, 1941, when the Committee was under the control of the Department of Commerce. In November, 1942, the Committee came under the control of the newly formed Department of Supply and Shipping and in June, 1944, regulations defining the powers and functions of the Committee were included in the National Security (Shipping Co-ordination) Regulations.

116. The original object of the Chartering Committee was to deal purely with overseas trade and it was not expected that the ships would be used for more than occasional assistance on the coast. With the entry of Japan into the war, however, the increased demands of the defence authorities occasioned greater assistance from the overseas vessels to meet essential coastal needs, particularly for coal and ironstone. The time chartered fleet was therefore gradually built up and at the end of December, 1944, the Committee controlled 28 vessels with a total deadweight tonnage of approximately 235,000 tons. In addition to these vessels, the Committee also controls all tonnage built to the order of the Commonwealth Government. At the present time, seven River class vessels of 9,000 tons deadweight are in commission and a further six are building. It is anticipated that these vessels will all be in commission by April 1946.

117. It is convenient to make brief reference here to post-war decontrol of shipping, which is covered by an International Agreement signed in August 1944, providing that up to six months after the end of the war with Japan, the powers accept as a common responsibility the provision of shipping for all military and other tasks necessary for the completion of the war and the supplying of liberated areas. The Governments undertake to maintain control over ships registered in their territory so as to enable their employment to be directed in accordance with this undertaking. The entire shipping resources of the United Nations in effect form a common pool from which the needs of the various nations are met. Ships are not to be released from control or employed for non-essential services or cargoes unless the overall tonnage is in excess of total requirements and then only in accordance with a mutually acceptable formula which extends to all contracting Governments an equitable opportunity to engage in commercial trades. The vessels under the control of the Chartering Committee, therefore, come under the terms of the agreement and form part of the United Nations pool of shipping and their de-control when this takes place will be in the terms provided under the United Maritime Agreement.

118. It became apparent during the early months of the war that one of the most important factors in increasing shipping costs on the Australian coast was the cost of insuring hulls against war risks. This type of insurance was placed with overseas underwriters and thus Australian interests had no control over the rate of premium charged. Furthermore, there was every possibility of rates for the insurance of Australian vessels fluctuating

(7) Chiefly coal, coke and ironstone.

geographically according to the varying conditions in the different waters around Australia. By February, 1941, it was evident that some action was necessary because by that time existing premium rates were considered to be excessive and there seemed to be every possibility that they would soon increase further. It was, moreover, considered desirable that freight rates already loaded with the cost of war insurance should be stabilised. A further consideration was the payment of considerable sums to overseas insurance companies, involving a serious drain on sterling funds.

119. On the 27th February 1941, the National Security (Marine War Risk Insurance) Regulations were gazetted. They provided for the insurance against war risk of ships registered in Australia and trading solely between ports in Australia. Insurance was not made compulsory, but insurance except through the Board was forbidden. The Board was empowered to consent to the insurance of vessels with outside interests but, in general, this consent was not granted. Numerous changes were made to the regulations applicable to the insurance of vessels. There is no need to list in detail the various changes, but by 1943 the main conditions regarding the insurance of hulls applied to:-

- (a) Any Australian ship,
- (b) Any unregistered ship the owner of which resides or carried on business in Australia,
- (c) Any British or Allied ship trading in Australian waters or from an Australian port.

A definition of the war risks covered is given in Appendix A of this Chapter. The list comprises the whole of the war risks against which the Board was empowered to insure, but it always reserved the right, sometimes on the request of the insured, for some of the risks to be excluded with corresponding adjustments in premiums.

120. Membership of the Commonwealth Marine War Risks Insurance Board is as follows:-

Chairman: Mr. Justice Clyde.

Members: W. C. Balmford, Commonwealth Actuary.
Professor D. B. Copland, Commonwealth Prices Commissioner
T. S. Douglas, President of the Council of the Marine Underwriters Association of Australia.

121. As the Commonwealth Government had no insurance office of its own and in order to avoid setting up a new organisation, it was agreed between the Commonwealth Government and the State Government of N.S.W. that the business of insuring vessels under the Commonwealth scheme should be carried out by the Government Insurance Office of N.S.W. This arrangement continued in operation for about 20 months until the establishment by the Commonwealth of its own office to handle the extra volume of work involved by the subsequent introduction of the cargo insurance scheme.

122. The hull insurance scheme was operated on much the same lines as those adopted by private insurance, and special policy forms were issued in respect of each of the insured vessels. At the outset all the larger vessels trading around the Australian coast became insured with the Board, and with a gradual worsening of the war situation many of the smaller vessels took the opportunity for the first time to insure against war risks.

123. In February 1941, however, the Shipping Control Board had not requisitioned any ships and when this action eventually took place in September 1941, the requisitioned vessels were taken outside the scheme and special arrangements covering the owners against losses for war risk were made by the Shipping Control Board itself. This arrangement did not, however, remain in force for more than 12 months because, with the clarification of the Government's own attitude towards insurance of property for which the Commonwealth was temporarily liable, as explained later, the vessels were subsequently brought back into the insurance scheme. At the commencement, the number of vessels insured was as

follows:-

	No. of Vessels	Approximate Value
£100,000 - £200,000	138	£5,100,000
£200,000 - £300,000	5	1,300,000
£300,000 - £350,000	7	2,600,000
£350,000 - £400,000	15	9,000,000

124. At the time of the introduction of the scheme the majority of the policies held by the shipowners were due to expire, and in order to remove any doubts which might exist in the minds of the owners they were given the assurance that for the ensuing 3 months the Commonwealth scheme would insure their vessels at the same premium and for the same risks as those contained in the existing policies. This enabled the Board to overcome the initial difficulties involved in the introduction of the scheme at short notice, and allowed sufficient time for the conditions attaching to existing policies to be examined. As might be expected these were subject to numerous variations and although the gross premiums payable were generally the same, they were subject to varying amounts of discount. As a result of these initial investigations of the Board, it was able to prepare its own standard form of policy and to determine the basis on which premiums should be charged. Because of the uncertainties attending war risk insurance, the Board for some six months after its inception issued policies for one month only.

125. With further experience in the field, the Board decided,

- (a) that its premiums should be stabilised at the figure of 12/6% per month, which premium corresponded with those previously paid by the owners, apart from discounts,
- (b) that policies should be effected for 3 months, and
- (c) that further increases of premium should be as far as possible avoided.

This decision in effect meant that the Board, by virtue of the guarantee given by the Commonwealth Government, was prepared to suffer losses to a limited extent without requiring immediate recoupment from the owners by way of extra premiums. As events turned out this decision proved to be justified because although the fund carried a deficiency for some time on the hull account, the position was rectified during the last few months of the war. The premium rate of 12/6% per month was in fact considerably reduced during the later years of the war, and before the initial deficiency was extinguished. Particulars of the various changes are given in Appendix B.

126. Another question of some interest was the power given to the Board to enter into contracts of re-insurance in respect of the insurances which it effected. This question of re-insurance arose because,

- (a) An early sinking of one of the large vessels worth £300,000 might be a source of temporary, if not permanent, embarrassment to the insurance fund.
- (b) The whole of the shortage between premium and outgo for losses was a Commonwealth liability.
- (c) A private insurer would necessarily effect re-insurance under a scheme involving such a small number of ships having in certain cases such high individual values.

127. The following were the many considerations which it was necessary to bear in mind:-

- (a) There appeared to be a fair chance that the Commonwealth would not make a loss without re-insurance, assuming the risks to remain unaltered.
- (b) Re-insurance premiums would be probably greater than the insurance premiums which the Board fixed in the initial months.

- (c) Re-insurance might become unduly expensive if the risks became very heavy, with profit to private enterprise at the Government's expense.
- (d) The Commonwealth had instituted the scheme in order to minimise the cost of freights, and should therefore be prepared to face possible loss.
- (e) The maintenance of coastal shipping is a Commonwealth responsibility in war time.
- (f) The Commonwealth's liability in the insurance scheme was not large in relation to its war time commitments.
- (g) Since many of the companies that would be interested in re-insurance were off-shoots of overseas companies, re-insurance would involve the transmission of overseas moneys. This was one of the features which the insurance scheme was designed to avoid.

128. With the gradual worsening of the war situation in the early months of 1942, it was decided that some form of insurance for cargoes against war risks should be introduced. In the first instance this scheme was confined to essential imports for which difficulty in effecting insurance had been experienced. The regulations were amended enabling the Treasurer to prescribe certain specific essential cargoes, which included cotton, hemp, jute, rubber, sisal, tea, coffee, coiryarn, tinsplate, cork, nitrate.

129. Many difficult problems arose in connection with the insurance of imported cargoes, particularly as the Board had no effective supervision over these contracts. Goods in India frequently had to be insured in a warehouse in India and covered for the whole time until they reached an Australian port.

130. By July, 1942, there was every indication that the premiums charged by the private insurers would have to be increased and concern had been continually expressed about the differential rates applied to various parts of the Australian coast. It was essential that, as far as possible, any increases, which by adding to the level of freight rates would react on the price structure, should be avoided.

131. In examining the proposals it was agreed that the Australian Government scheme should not be designed to embarrass shippers outside Australian waters. The reasons for this view were:-

- (a) Imports to Australia would, in many instances, be insured in London from the country of export. Some would be under open policies in London covering the particular country's activities in different parts of the world.
- (b) The Australian insurance market could not expect to take away from the London market the insurance of cargo shipped from Australia to the United Kingdom, as these were principally the primary products in which the British Government was interested.

132. For these reasons the scheme was confined to cargoes shipped between ports in Australia including the territories of the Commonwealth, and applied whether the goods were carried in Australian or overseas ships. Other matters which were taken into consideration before the scheme was introduced were as follows:-

- (a) Under a system of price control, insurance companies entered into an arrangement not to increase rates for marine underwriting on the Australian coast without first consulting the Prices Commissioner. Furthermore, the services of marine insurance could always be "declared" at any time, thus ensuring that rates would not rise above existing levels without justification.
- (b) If the Prices Commissioner considered that rates were too high and should be revised, he could negotiate with the Insurance Companies and Lloyd's Brokers to ascertain whether current rates were justifiable on the basis of experience.

- (c) There thus seemed to be adequate means of controlling war risk insurance premiums under the existing machinery without going to the extent of setting up a new scheme involving considerable organisation which would be bound to cause a certain amount of disturbance in the marine insurance field.
- (d) If the insurance companies were to state at any time that they could not carry on under existing conditions without an increase in rates, it would always be open to the Government to introduce some form of more direct control and supervision.
- (e) Should it become necessary for a direct form of price control to be set up, it might be preferable to retain the existing insurance structure as near as possible intact and supplement it with some form of Government guarantee of risk in return for a share in the premium income.

133. Subsequent discussions took place between the Insurance Board and the Council of Marine Underwriters and the two main alternatives discussed were:-

- (a) A scheme under which rates would be controlled by the Prices Commissioner on a uniform basis and which might include some Government re-insurance scheme if the Companies so wished, or
- (b) An arrangement under which insurance of cargoes against war risk would be taken over by the Commonwealth Marine War Risks Insurance Board. The Board would appoint insurance companies as agents to carry out the detailed work of insurance on a commission basis. The Marine Underwriters chose the second alternative.

134. When the Government opened its own office to carry out the cargo insurance scheme the various insurance companies were appointed as agents. They issued the Board's policies (both "open" policies and policies for specific risks) and collected premiums. Some of the principles decided upon were:-

- (a) The premium rates should be uniform for the whole Australian trade.
- (b) The premiums previously charged by the Companies should be retained, unless there was a marked change in the war situation.
- (c) The premiums should remain fixed notwithstanding variations in the amount of risk involved on account of the fluctuating fortunes of war until there was some marked change in the war situation.
- (d) Premiums should be kept as low as possible so as not to impose too heavy a burden on Australian cargoes.
- (e) Insurance of cargoes against war risk should not be allowed unless the goods had been insured against ordinary marine risks (this was of particular importance if the insurance companies were to act as the Board's agents).
- (f) The rate of commission payable to the agents should be 5 percent of premiums, subject to revision.
- (g) The Commonwealth Marine War risks Insurance Board to issue, through its agents, its own policies.

135. One matter which concerned the Board during the early period of its operations was the need for an effective system of receiving information regarding marine war risks. This was considered most important since experience had shown that the London Insurance Market obtained information much more readily than was done in Australia. Again, it was necessary to clarify the

Commonwealth's own position in regard to insurance. It has been the established practice of the Commonwealth Government not to insure its own property, but it found that during war time it was often the temporary owner of goods which were bought for subsequent re-sale to distributors. This applied particularly to tea and coffee and other essential imports. It was obviously necessary for the Commonwealth to pass on the cost of this insurance cover and hence arrangements were made for the various Commonwealth authorities concerned to insure those goods for which they were responsible with the Commonwealth Marine War Risks Insurance Board. This was found to be more satisfactory than allowing each individual authority to deal with the matter entirely by bookkeeping arrangements.

136. The values for which ships should be insured presented some difficulty. For the most part the Board insured vessels for the same values for which they had been insured before the war. Some owners pressed strongly for the right to insure on the basis of "increased values" but this was resisted. Some consideration was given to the setting up of a valuation authority, but it has not been necessary up to date.

137. This present review of the shipping industry in wartime would be incomplete without some reference to the factors leading to the establishment of the Stevedoring Industry Commission. Prior to the introduction of the Commission in April, 1942, the method of engaging labour at practically all ports throughout the Commonwealth was on a free selection basis. Hence, was reserved to employers the right to select their own labour and the right to men to select their own jobs. This method frequently resulted in ships, which were urgently required for operational purposes, being unable to obtain labour as more attractive jobs were offering to the men. Again, with free selection it was not known how many men were following the industry or claiming to follow the industry, nor how many men would be required to work the port. It was generally known that far more men were periodically offering for work on the various waterfronts than were actually required, and the manpower authorities were anxious to tap this surplus labour supply.

137. Early in 1942 the waterfront position was such that those in authority realised that if the maximum use was to be made of ships by giving them the speediest possible turn-round, some system of regulating employment and control of waterside labour would have to be introduced. A Conference was convened in Canberra by the Prime Minister for the purpose of meeting representatives of the shipping companies. Arising out of this Conference the Prime Minister convened a further conference at which Sir Owen Dixon, Sir Thomas Gordon, Mr. Charles E. Brown, M.S.A. and Mr. J. Healy, Secretary, Waterside Workers' Federation attended. At this Conference the Prime Minister outlined the war position and stressed the serious situation the country was facing, particularly in regard to shipping and asked for the co-operation of all parties to ensure that ships were given the quickest possible despatch.

138. Arising out of this Conference, a Sub-Committee consisting of Sir Owen Dixon, Sir Thomas Gordon and Mr. J. Healy were appointed to examine the various problems and report to the Government as to what method should be adopted to deal with the unsatisfactory state of affairs that existed and to make recommendations to ensure the expeditious moving of ships. This Sub-Committee met in Melbourne on March 5th and 6th 1942, and subsequently submitted a report to the Prime Minister, in which it recommended that a Board be established for the supervision of stevedoring waterside labour and its uses. Regulations were brought out (vide Statutory Rules 159) to give effect to the Sub-Committee's recommendations and the Stevedoring Commission was appointed on the 2nd April, 1942, to give effect to the provisions of the regulations.

139. The functions of the Commission as provided for in the regulations were:-

- (a) to co-ordinate labour in stevedoring operations;
- (b) generally to control and regulate waterside work and stevedoring operations; and
- (c) to ensure that adequate provision is made for the protection of waterside workers against injury,

and wharves against damage from, or in connection with attacks by an enemy, with a view to expediting the loading and unloading of ships.

140. The Commission comprised representatives of oversea, interstate shipping and stevedoring interests together with representatives of the Waterside Workers' Federation, operating under the Chairmanship of the Chief Judge of the Commonwealth Court of Conciliation and Arbitration. A senior officer of the Public Service was also a member of the Commission, without the right to vote.

141. As a first step towards carrying out the provisions of the regulations the Commission set up Waterside Employment Committees at all ports. These Committees comprised representatives of employers and employees and were presided over by an independent Chairman. The next step was to determine the numbers of men (port quota) required to work each port and at the same time form a register of such waterside workers at each port, as were required to make up the quota. As a result, all surplus labour at the various ports was redrafted to other occupations by the manpower authorities. It should here be noted that throughout close co-operation has been maintained as between the Commission and the Manpower Directorate, the latter having agreed that whilst waterside work was not a protected industry, it would be regarded as such provided that the Commission ensured that only the minimum number of men consistent with the need for expeditious handling of cargo was retained in the industry. The foregoing steps did not, in themselves, entirely remove the disabilities under which work was being carried out, inasmuch as men retained the right to withhold their services from any particular job urgently requiring labour. At this particular time vessels were sailing in convoys and it became absolutely essential that vessels be worked in some order of priority which would ensure their departure and arrival according to schedule. This position was met by the Commission making orders in respect of all main ports. These orders provided, amongst other things, for the allocation of labour by an officer of the Commission and further provided that a refusal on the part of any man to go to work for which he had been allocated, would expose him to disciplinary action by the Waterside Employment Committee. Conversely, the obligation was placed on employers to accept any labour allocated to them. These orders resulted in a revolutionary change in the waterfront industry, for, whereas men had previously been free to decide when and where they would work, they were now obliged to present themselves for employment each day and undertake whatever work was required of them. By this means, the best possible use of labour was obtained and, whereas, immediately prior to the introduction of the Commission it is estimated that some 26,000 men were claiming to follow the waterfront industry at all ports throughout the Commonwealth, that number has now been reduced to approximately 19,000.

142. Much could be written concerning the waste of manpower and abuses existing before the war but suffice it to say that prior to the introduction of the Stevedoring Industry Commission only a very blurred picture of the industrial situation at each port could be obtained. Even after registering all waterside workers at the various ports, it was found that some were using the waterfront as a 'blind' and steps have been taken to eliminate such men; now every registered waterside worker throughout the Commonwealth is following the industry as a waterside worker.

143. In furtherance of its obligation to keep the numbers of men in the industry to the barest possible minimum, the Commission has, in a number of cases, been faced with the problem of keeping the average weekly hours worked by waterside workers below fifty-six. However, in a number of cases these hours have had to be exceeded and when it is realised that the average age of waterside workers in some ports exceeds 50 years we may appraise more accurately the complaints regarding poor work in some instances.

144. By gradual stages, the Commission has evolved to a position where ships are worked in an order of priority and, where "round-the-clock" working is required to give a ship urgent despatch, labour is forthcoming for this. There are, of course, exceptions at certain ports where the labour supply is insufficient to meet peak requirements and a scheme of registering reserve waterside workers has been introduced, which has proved of great assistance in meeting sudden rushes of shipping.

145. From time to time, the Commission has transferred labour from one port, where there is temporary inactivity, to another port where the local labour supply was insufficient. In addition to legislating for the greatest use and mobility of labour, the Commission has prescribed conditions of employment to meet the needs brought about by the war situation and, by the exercise of strict discipline, has ensured that work proceeded with the minimum amount of friction.⁽⁸⁾

146. To compare the present waterfront position with conditions obtaining in other industries where men are employed on a regular weekly basis would not give a true picture, but, to compare it against the background of the industry as it was prior to the introduction of the Commission will show that hold-ups today are less frequent and the introduction of schemes for the allocation of labour has eliminated much of the wastage that characterised the industry in pre-war years.

147. State Enterprise in the Shipping Industry.

The Commonwealth Government Line of Steamers was inaugurated by the Hughes Government in June 1916,⁽⁹⁾ the Head Office being established in London and at the outset the business was conducted on an agency basis. Subsequently, branches were opened in the principal ports in Australia and also in London. Soon after the cessation of hostilities the initial fleet of fifteen vessels was increased by the addition of twenty six new ships.

148. At first, as the result of its operations the Line showed a substantial profit. This was due in some measure to the high freight rates then ruling. However, the subsequent decline in these rates due to the world surplus of tonnage soon converted the Line's profits into substantial losses. The history of the Canadian Government Mercantile Marine Limited is very similar. When the exceptional circumstances arising out of the war, and immediate post-war, period ceased to be profits faded into deficits. The following table shows the financial results of the Australian venture up to August 31, 1923, viz:-

To June 30, 1917	profit	-----	£426,394
To June 30, 1918	profit	-----	£905,879
To June 30, 1919	profit	-----	£1,284,598
To June 30, 1920	profit	-----	£365,385
To June 30, 1921	profit	-----	£530,930
To June 30, 1922	loss	-----	£521,037
To August 31, 1923	loss	-----	£1,051,997

The above figures, it should be noted, do not take into account an allowance for depreciation.

149. As early as 1921, there had been considerable criticism throughout the country in respect of the operation of the Line; and in November of that year the Government's shipping and shipbuilding programmes were subject to debate in the House of Representatives. In closing the debate the Government announced

- (a) that it would retain the Line but that it would re-cast the whole system of management and control; and
- (b) that when its commitments for shipbuilding were exhausted no more keels would be laid down.

The House had voiced a clear opinion that after the completion of the ships then in the course of construction shipbuilding should be left to private enterprise.⁽¹⁰⁾

(8) Note that the functions of the Maritime Industry Commission (as set out in Statutory Rules 1942, No.2 as amended) are largely of an industrial character and include among other matters, the application to the maritime industry of the 44-hour week, accommodation and catering for employees on ships, manning of ships, war risk bonus, maintenance of discipline and similar matters.

(9) For an account of the circumstances in which the first fifteen vessels of the Commonwealth Shipping Fleet were purchased in the London market, see G. de R. Foenander, "The Shipping Enterprise of the Australian Commonwealth Government", *American Economic Review*, Vol.XIX, No.4, pp.656-666.

(10) Compare the post-war shipbuilding policy of the present Government.

150. It was not until July 1923 that the Government introduced into Parliament legislation to re-organise the scheme of management of the Line. The Commonwealth Shipping Board, as passed, provided for the establishment of the shipping line itself and vested control in a Board of Directors, entitled the Australian Commonwealth Shipping Board. The Board adopted the broad policy as outlined below; viz:-

- (a) To administer the affairs of the Line with the greatest possible economy.
- (b) To take all possible steps to grade down the level of fares and freight rates.
- (c) When fares and freight rates had been reduced to use all possible means to maintain them below the level ruling in the open market.

151. To carry out (a) above the Board aimed to reduce the total tonnage of the fleet despite the difficulty of selling at a time when the shipping industry throughout the world was experiencing a surplus of tonnage. The Board, on its constitution, took over from the Government fifty four vessels with a transfer value of £4,718,150; for this sum the Board gave the Commonwealth Treasury a debenture bearing interest at the rate of £5 per centum per annum. The Board disposed of all its vessels except the modern ships known as the "Dales" and the "Bays". However, the operation of the Line under the Shipping Board regime showed a loss for each year as follows:-

Sept. 1, 1923 to March 31, 1924, loss	.....	£245,474.
April 1, 1924, to March 31, 1925, loss	.....	593,879.
April 1, 1925, to March 31, 1926, loss	.....	503,076.
April 1, 1926, to March 31, 1927, loss	.....	595,833.
April 1, 1927, to March 31, 1928, loss	.....	593,075.

It should be noted that the above figures make allowance for administrative expenses, depreciation costs, and interest charges.

152. The Joint Committee of Parliament of Public Accounts was deputed to examine the activities of the Shipping Board and presented its report on September 28th, 1927, in which it recorded its recommendation that "having regard to all the circumstances..... the Australian Commonwealth Line of Steamers should not be retained as a direct Governmental activity". Accordingly, the Government announced its willingness to dispose of the ships with certain reservations with respect to services and freight rates.

153. With regard to (b) and (c), the Board recognized, as its only source of revenue was from fares and freight rates, that the expectation of Parliament that profits would be earned could be met only by a material increase in fares and freight rates. But the very purposes for which the Line existed precluded any increases being made. Turning now to the reasons for the financial failure of the "Bays" and the "Dales", they may be summarised as follows:-

- (a) Operating costs. Under Australian articles Australian vessels were more expensive to operate than those of overseas competitors. It was estimated late in 1927 that on the basis of Australian wages at £100 in respect of a vessel of 6,000 tons gross British wages would be £32.41, American £42.41, Swedish £24.51, and Danish £15.44.
- (b) Administrative expenses. Including rent, these totaled, for the year 1926-27 the sum of £90,145.
- (c) Dissension and disagreement in the management. There appears to be little doubt (and the researcher has consulted all available sources) that the several members of the Board hold varying views on matters of policy. Such a lack of a sympathetic relationship would tend to be both expensive and inefficient.
- (d) Difficulties in obtaining cargo. Because of the number of vessels plying the United Kingdom/Australia trades the Board's ships often ran in ballast with a consequent increase in overhead costs per sea mile run.

- (e) Industrial unrest on the waterfront. The Line was singularly unfortunate in its experiences with the maritime unions which greatly accentuated the Line's difficulties.

154. The advantages which accrued to the Australian economy as a whole as a result of the Line's operations may be considered from three distinct angles, viz:-

- (a) As a national safeguard and as an aid to the Mercantile Marine.
- (b) As a commercial proposition. The data presented in paragraph 151 above show that the losses of the Line steadily increased from the establishment of the Shipping Board. But during this period the shipping industry was passing through a phase of depression and hence these figures cannot entirely justify the subsequent sale of the ships.
- (c) As a safeguard against increased fares and freight rates, and the fostering of the Australian shipping industry. It may be maintained that the financial losses were partly offset by the advantages which accrued to the Australian exporter of primary products. As will be pointed out in Chapter VIII of this study, financial losses incurred by any of the various sections of the transport industry through the maintenance of low rates and frequent services may be regarded as a convenient and flexible method of subsidization of specific industries. On the other hand, the cost of the venture as expressed in the huge losses incurred appears to be exorbitant if interpreted as a tariff duty to protect the shipping industry.

155. It would appear that the losses incurred in running the Line could have been reduced in one or more of the following ways:-

- (a) By assigning to it the contract for the carriage of Australian mails outward. This contract is now held by the Orient Royal Mail Company, and is worth £150,000 per annum.
- (b) By the Commonwealth Shipping Board entering the interstate coastal trades.

But the fleet was too small in numbers to conduct a regular mail service to Great Britain, and the Shipping Board, upon investigation, found it inadvisable to participate in the interstate traffic because it would have seriously interfered with the overseas itineraries of the vessels.

156. It is probable that few Governments could have resisted the pressure of public opinion, shortly after the Great War 1914-1918, to test by actual experiment whether the high freight rates then ruling were justifiable or not. The experiment was made by the Tasmanian Government with somewhat disastrous results. Between June, 1920, and December, 1921, four steamships were purchased at a total capital cost, including alterations, of £174,330 (value as at 30/6/1925). By June 30, 1925 the total annual losses incurred by the Government as a result of the shipping services (1921-22 - 1924-25) amounted to £231,902. This sum represented £61,389 in excess of the total capital cost. It is not possible to say whether the vessels purchased were suitable for the purpose and/or whether the management was efficient. Two of the vessels were sold in April, 1925 for £26,000; the amount to the credit of the depreciation fund on account of the two vessels sold was £30,546; the cost of these vessels was £127,648; hence, the net loss on realisation was £71,102. The two remaining vessels, although they called at the port of Melbourne, were kept in commission to maintain regular communication with King and Flinders Islands, which are, of course, politically attached to the State of Tasmania.⁽¹⁾

(1) This service was subsequently taken over by the ship operating company of William Holyman and Sons Pty.Ltd.

APPENDIX ACOMMONWEALTH MARINE WAR RISKS INSURANCE REGULATIONDEFINITION OF "WAR RISKS"

"war risks" means -

- (a) the risks excluded from the Standard Form of English Marine Policy by the following clause:-

"Warranted free of capture, seizure, arrest, restraint or detention, and the consequences thereof or of any attempt thereat; also from the consequences of hostilities or warlike operations, whether there be a declaration of war or not; but this warranty shall not exclude collision, contact with any fixed or floating object (other than a mine or torpedo), stranding, heavy weather or fire unless caused directly (and independently of the nature of the voyage or service which the vessel involved therein, is performing) by a hostile act by or against a belligerent power; and for the purpose of this warranty 'power' includes any Authority maintaining Naval, Military or Air Forces in association with a power. Further warranted free from the consequences of civil war, revolution, rebellion, insurrection, or civil strife arising therefrom, or piracy.";

- (b) loss or damage caused by -

(i) hostilities, warlike operations, civil war, revolution, rebellion or insurrection, or by civil strife arising therefrom; or

(ii) mines, torpedoes, bombs or other engines of war;

- (c) loss or damage caused by strikers, locked-out workmen or persons taking part in labour disturbances, riots or civil commotions;

- (d) destruction of, or damage to, property caused by persons acting maliciously;

- (e) liabilities of shipowners in respect of ships for -

(i) loss of life or personal injury to masters, officers, crew and pilots, and hospital, medical and funeral expenses resulting therefrom;

(ii) repatriating masters, officers and crew;

(iii) loss or damage to the clothes or effects of masters, officers and crew;

(iv) wages of masters, officers and crew during unemployment consequent on shipwreck; and

(v) the cost of removal of wreck,

when any such liability arises from any of the risks specified in the preceding paragraphs of this definition.

- (f) liabilities of shipowners arising out of the capture or detention by the enemy of masters, officers and crew; and

- (g) expenses incurred by shipowners during the detention of ships in consequence of the existence of a State of war between His Majesty and any other power, or under the instructions or advice of any Commonwealth Department or Commonwealth Authority issued or given in expectation or in consequence of any such event,

and includes such other risks as the Treasurer, by order published in the Gazette, declares to be war risks for the purposes of these Regulations.

APPENDIX BCOMMONWEALTH MARINE WAR RISKS INSURANCE.PREMIUM RATES.AUSTRALIAN COASTAL CARGOES

<u>Date</u>	<u>Rate %</u>
Up to 30/11/43	15/ d.
From 1/12/43	12/6d.
" 1/ 6/44	10/-d.
" 30/ 9/44	4/-d.
" 31/ 3/45	2/6d.

HULLS ACCOUNT - AUSTRALIAN COAST AND MANDATED TERRITORIES

<u>Date</u>	<u>Rate %</u>
Up to 14/ 3/44	12/6d. per month
From 15/ 3/44	10/-d. "
" 30/ 6/44	7/6d. "
" 30/ 9/44	3/-d. "
" 31/ 3/45	1/8d. "

CHAPTER IV

THE ECONOMICS OF PORT TERMINALS

157. Ports are the medium or clearing houses between sea and land transport and on their proper location and efficiency the success of the transport system as a whole depends. Often ports are established at great cost in unsuitable localities (because land settlement first took place in that neighbourhood) regardless of the fact that perhaps a few miles away there existed a fine natural harbour. It must be borne in mind that the shipowner, with vessels in which he has invested his capital and with constant current expenses for running and maintenance, desires above all things good despatch; and further, in considering the requirements of competitive ports, it must be realised that the element of greatest influence in the competition for ocean shipping between ports is the so-called load factor or possibility of a ship bringing cargo to a port, and at the same time taking another cargo out.

158. From the shipowners' point of view a number of small ports is undesirable. The ideal would be an adequate number of well-equipped and well laid out large ports, each possessing a natural harbour, a natural hinterland, and adequate railway facilities. At this "ideal" port it should be possible to discharge whole cargoes, and to take in whole cargoes, without removing a vessel from her berth. It would be in the interests of "liner" owners to limit the number of ports as far as possible. "Tramp" owners would prefer to have one ship in six ports rather than six ships at one port, provided the above facilities exist. It is a fact that as the distribution of cargo amongst a number of small ports increases, especially where centralization at a few large ports is practicable, freight rates tend to rise in proportion. A railway manager also prefers a limited number of outlets, and it is a common practice to give tapering rates for long distance haulage, and whether haulage is long or short, terminal charges at each end remain the same.

159. In 1925, the Wellington Harbour Board adopted and published a Report made by a special Committee set up to investigate the practice of charging a flat rate of freight on the exports of the Dominion of New Zealand shipped from the various ports. They pointed out that the flat rate and "call at your farm" policy was encouraging large capital expenditures and overhead cost, to make provision for overseas shipping at numerous ports round the coast far in excess of the possible requirements and trade of the country. The solution would have been a concentration at the main ports, allowing them to provide better facilities for handling and quick despatch, assuring regular shipments of goods. Regular shipments would in their turn help to stabilise market prices ruling overseas.

160. In Australia there are 40 ports which are used for the overseas trade, but approximately 75 per cent leaves from the following eleven ports:-

Sydney; Melbourne; Pirie; Adelaide; Fremantle;
 Newcastle; Tallarook; Bunbury; Brisbane; Geelong;
 Hobart (17 per cent of total of the eleven ports,
 and 12 per cent of all ports).

161. That Australia does not suffer from a shortage of ports is clear. The coastline of the continent is 12,210 miles long, giving 244 square miles of territory for each mile of coast. The overseas trade, however, is confined to a coast line of about 5,000 miles in length. The port development in Tasmania is beset with few difficulties. There are ten ports serving the island with a coastline of less than 1,000 miles.

162. Since a port is a community undertaking certain broad principles in respect of port administration should be noted, viz:-

- (a) Whatever form of administration be adopted, the whole of the foreshores within the port area should be under the absolute control of the State, either directly or by delegation of powers to a public corporation or trust.
- (b) The government of the port should be free from political influence of any kind.
- (c) The administration should include representatives of the various bodies interested in the port's welfare.
- (d) The port should be self-contained financially, and revenue should be expended solely on its maintenance and development, any surpluses being used for the building up of ample reserve funds, reducing port charges and extinguishing capital debt.
- (e) Rates, dues and charges should not be complicated, should be capable of easy collection, and levied so that there is an even distribution of taxation.
- (f) Capital charges should be so adjusted as not to be a burden on the community and adequate arrangements should be made for the ultimate amortisation of debt.
- (g) Port developments should invariably be kept ahead of actual trade requirements.

163. The forms of port administration generally adopted in the British Empire are through the medium either of a port trust, a municipality, a railway corporation, or the State itself. Autonomous control through port trusts has, on the whole, proved successful. The trade is created by an act of the legislature and is given definite powers for the development and administration of the port. The trustees are usually partly nominated by the Government, and partly elected from the payers of port rates and dues. Port trusts with full autonomy have complete control over finances, and float their own loans, subject to certain limits prescribed by Parliament. Loans frequently take the form of debentures repayable in 30, 44 or 60 years, according to the estimated life of the works. In the case of wharves, sheds, warehouses, floating plant and machinery, 30 years is the generally recognised period, whereas in the case of solid masonry docks and capital utilized in the purchase of land, 60 years is considered justifiable.

164. Control by a municipality is not usual, although the practice is common in Europe and the United States of America. State control and aid, as opposed to State management has much to be said in its favour. Whatever form of port control is adopted, the advantages of a close relationship between the ports and the transporting medium behind the ports, be it railway or road, are so great that co-ordination by some controlling authority is essential. In the United Kingdom, power is given to the Minister of Transport to co-ordinate the working between railways and independent ports, and while at some ports, which are not railway ports, a railway company operates the traffic within the port estate under an agreement with the port authority, at most of the large ports there are exchange sidings where control is transferred from the railway company to the port authority, and the locomotives of the latter do the haulage inside the port estate. In the United States and in Canada this practice has been extended to what is known as the Bolt Line System, whereby the port authority exercises complete control not only over the railway in the vicinity of the wharves, but also over the zones encircling the city, and suburbs.

165. Tasmania was the first of the states to depute the management of ports to harbour boards. The first act creating a marine board dates as far back as 1857 when the board was given the control and management of ports, harbours, docks, wharves, pilots, lighthouses and other matters relating to navigation and shipping from the Henty River on the West Coast to Cape Portland at the north-eastern extremity of the island.

166. A Board began to function in Launceston in January 1858, and since that date a series of acts have been passed continually

up to 1920. These acts have authorised various harbour improvement schemes, altered the jurisdiction of certain authorities, brought new ones into existence and improved the constitutions of existing boards. After 1889, members of the harbour boards were elected instead of nominated.

167. The present administration of ports is governed by the Marine Act of 1921, and subsequent amendments under the provisions of which there are ten port authorities. The Act contains clauses not usually to be found in an Act providing for port administration; there are no less than 51 sections governing matters such as provisions for safety on board vessels, load and deck-lines, unseaworthy ships, casualties, and collisions, survey of vessels, certificates for ships and ships' officers, certificates of competency for masters and engineers, courts of enquiry and survey, and the conduct of passengers.

168. The general duties of Boards are set out as follows: "Every board shall, within its own jurisdiction,

- (i) Maintain and repair the wharves within its jurisdiction not vested in any other authority or belonging to any private person;
- (ii) Make such new wharves as may be found necessary.
- (iii) Construct and maintain all such works and do all such things as may be found desirable for the improvement of navigation and the accommodation or convenience of shipping and of all persons resorting to any port or using any works belonging to the board."

169. The Boards have general powers to construct works with the approval of the Governor, to acquire land, erect offices, carry out repairs, to let any wharf, to set up and maintain signal stations and so on.⁽¹⁾

170. In the United Kingdom such matters would be dealt with by the Board of Trade. In other Australian States, and also in India, they are dealt with by the Governments of the particular territories within which the ports are included. The Tasmanian system has the advantage of economy through centralisation.

171. Of the ten port authorities constituted, seven are marine boards, and three are harbour trusts. Table I below details certain information relative to each board, viz:-

TABLE I

District	Composition of Board.	Term of Office.	Method of Election
<u>Marine Boards</u>			
1. Hobart	9 wardens	3 years	Wardens elected by shipowners of the port and importers and exporters.
2. Launceston	5 wardens	3 years	Wardens to be male citizens qualified to vote at elections of aldermen. Electors require similar qualifications.
3. Devonport	9 wardens	3 years)	Wardens to be British
4. Burnie	7 wardens	2 or 3 "	subjects over 21 years
5. Circular Head	5 wardens	3 years)	of age, and qualified
6. King Island	5 wardens	3 years)	voters. Electors to be
7. Strahan	1 master warden & 2 "	During pleasure)	persons qualified to vote at elections of councillors in their respective voting districts.

Harbour Trusts			
8. Leven	(Each 5 trustees)	3 years	Trustees to have qualifications as laid down for wardens (nos. 1-7 above) and electors required to possess qualifications specified in same place.
9. N.E. Harbour			
10. Smithton			

172. The jurisdiction of the Marine Boards is not confined to actual harbour limits, but is as follows:-

- Hobart - From South West Cape round the Southern and Eastern coasts to Cape Portland.
- Launceston - From Cape Portland along the North coast to Badger Head.
- Mersey - From Badger Head to the Western side of the mouth of the River Leven.
- Burnie - From the Western side of the mouth of the River Leven to the eastern side of the mouth of Sister's Creek.
- Circular Head - From the eastern side of the mouth of Sister's Creek to the parallel of $41\frac{10}{2}$ S. Latitude on the West Coast.
- King Island - The coast of King Island.

Thus the whole coast of Tasmania is placed under jurisdiction, with the authority of the harbour trusts confined to their own harbour.

173. From an examination of the Marine Act 1921-44, there would appear to be two omissions, namely:-

- (1) No provision is made for vesting in the marine boards or harbour trusts foreshore and other properties necessary for the conduct of operations.
- (2) No power is taken to prohibit the construction of wharves, jetties and other structures below high water mark by persons other than the marine boards or harbour trusts.

174. As to the first: it is usual, when providing in an act for control by a port authority, to vest in such authority not only the land needed for its immediate operations but also all Crown land falling within its jurisdiction situated within a stated distance from high water mark. The object of this, naturally, is to allow of expansion, as need arises, without expensive acquisitions of private properties, the cost of which might lay an undue burden on trade.

175. As to the second: it is important that no structure that does not conform to conditions laid down by the engineering advisers of the harbour authorities should be permitted, and it is even more important that no such structure should be permitted unless it is needed for the furtherance of a private industry. Thus, a sawmilling firm might be permitted, on conditions laid down by the authority, to build a slipway to launch timber into the water, but such firm would not be permitted to build a wharf or jetty at which dues would be levied. In other words, private persons would not be permitted to compete with a port authority in offering landing, shipping and storing facilities.

176. No harbour authority is permitted to expend loan

(i). For the 22 clauses, see Part VII of the Marine Act 1921, under "General Duties and Powers".

money exceeding £500 in the case of a marine board or £200 in the case of a trust, on any new work or alteration without the approval of the Governor, and the act provides that no more than half of the ordinary wharfage rates are payable on Government cargoes. On the other hand, the harbour authorities have full control over their revenues which are made up of wharfage charges on inward and outward cargoes, and cargoes conveyed from one place to another within the same port; charges against vessels, that is, port and harbour dues, quayage, pilotage etc.; rates collected under any statute; rents, interest, fees and fines. As is usual the objects upon which revenue may be expended are defined. One object is the creation of reserve funds for repairing or renewing properties destroyed or damaged by fire, storm or accident.

177. Four methods of borrowing are permitted, viz:-

- (i) By temporary overdrafts from a bank, of £5,000 in case of a board, and £1,500 in case of a trust.
- (ii) Under the provisions of the State Loans to Local Bodies Act 1921.
- (iii) With the approval of the Governor where interest on the amount to be borrowed does not exceed one-third of ordinary net revenue. In this case borrowing may be by issuing debentures, or any other manner approved by the Governor.
- (iv) With the sanction of both Houses of Parliament, and in accordance with the terms of a resolution agreed to by both Houses.

178. A further method of borrowing is reserved to the Marine Board of Launceston. Under "The Tamar Improvement Act 1912" the Board is empowered to carry out various works of improvements to borrow for this purpose (subject to an affirmative vote in the municipalities concerned) a sum not exceeding £400,000 and for the purposes of founding a sinking fund and paying interest on the loan, impose a rate called "The Tamar Rate". This rate is leviable in the city of Launceston on property subject to municipal rates, and in other municipalities within the Tamar district. Provision is made for the incidence of the rate to be declared from year to year, the maximum being 8d. in the £. Collections are to be made on behalf of the Marine Board by the municipalities within which the rate is levied.

179. Tasmania has been experimenting with port administration for 90 years and has ports with constitutions older than any in Australia. To obtain the best administration possible it is requisite that all concerned in it, that is, electors and elected, should have special interest in port problems and management. Where municipal interests are involved, there should be direct municipal representation. Government interests would be cared for by Government nominees, but the main body of wardens or trustees should be voted for by, and should represent an electorate having a direct interest in the port by virtue of paying port rates and dues. There should be no voting from a municipal or political register.

180. If these principles were applied in Tasmania, the constitution of all the ports, Hobart excepted, would be changed. In Launceston it may be objected that the use of the Tamar rate justifies the use of the municipal register. If the River Tamar, already a difficult means of approach, were allowed to deteriorate Launceston and certain other municipal areas would suffer, or would even become extinct. Means have been adopted to avoid this and funds are being provided by what virtually is a municipal rate. The municipalities finding the money are entitled to representation, and should be given power to nominate their representatives. After

allowing for direct municipal and Government representation, measures should be taken to ensure that the rest of the wardens or trustees are elected by port rate-payers.

181. The plan of conferring powers on the various marine boards and trusts by means of one general act is well suited to Tasmanian conditions, but it does appear that the Marine Boards of Hobart and Launceston are unduly restricted in respect of the construction of new works. The two major ports of the State might well be permitted to embark on new works, and to alter or add to an existing work up to a limit of £10,000. Such new works, alterations or additions would naturally be debited to capital account, and adequate supervising powers would be secured to the Government if a provision were inserted in the act that new work, and no alteration or addition to an existing work is to be debited to capital account without the approval of the Governor. Such a provision would be an adequate guard against unsound finance.

182. Table II below reveals that Tasmanian ports operate on a narrow financial margin and port finance in Tasmania generally is in need of reorganisation. The provision that Government stores are to pay half charges only should be removed from the act. The principle, recognised by port administrators in the United Kingdom that all traders, private or official, making use of port facilities, should pay for them should be observed. Again, the ports should be enabled to build up reserve funds.

183. It should be noted that at present no port in Tasmania can afford an engineer possessing expert marine and harbour experience, and such an officer is needed, not only to design and execute works, but to secure a continuous development policy in all the ports. There can be no steady progress if engineering schemes for improvement, development and expansion, devised by competent engineers, are subject to alteration by less competent authorities after they have been commenced. Hence the desirability for the appointment by the State Government of a whole time engineer for ports and rivers. The salary offered should be sufficient to attract a fully qualified marine and harbour engineer. The officer appointed should be in independent charge of his department, responsible direct to the Tasmanian Government; his salary and that of his staff could be debited pro rata to the various ports, and the engineer for ports and rivers would be responsible for all new works, which he would design, and would secure for all ports a continuity of policy in matters of development. Under him, there would be subordinate engineer officers stationed at, and paid direct by the ports.

184. Table II presents data relating to the financial position of the Marine Boards of Hobart, Launceston and Burnie for selected years from 1920 to 1941-42. Unfortunately the data available are in a slightly more condensed form for 1935-36 and subsequent years. It is not proposed to analyse the figures in detail but the following should be noted with respect to the years selected, viz:-

1920	Calendar year just prior to the proclamation of the Navigation Act.
1923-24	By this year the initial post war boom had spent itself and trade was being stabilised.
1928-29	Pre-depression boom year.
1931-32	Trough year of depression.
1935-36	Recovery setting in.
1938-39	Immediate pre-war year.
1941-42	Last year for which data are available.

TABLE II

Financial Position of Marine Boards of Hobart, Launceston and Burnie, 1923-24 - 1941-42.

YEAR	CAPITAL DEBT.	REVENUE			EXPENDITURE			
		Harbour Improvements Do- bentures etc	General	Total	Harbour Imp/mnts	Interest & S/Fund	General	Total
<u>1920.</u>								
Hobart	106,350	4,568	30,584	35,152	3,359	5,535	21,807	31,251
Launceston	263,713	-	-	44,421	-	-	-	44,421
Burnie	-	-	-	12,491	-	-	-	-
<u>1923-24.</u>								
Hobart	36,806	24,561	37,465	39,921	226	6,180	35,865	42,271
Launceston	330,713	-	-	53,673	-	-	-	53,673
Burnie	-	-	-	18,311	-	-	-	18,311
<u>1928-29.</u>								
Hobart	27,285	Nil	38,988	38,988	445	4,389	25,471	43,305
Launceston	373,223	-	-	62,208	-	-	-	62,208
Burnie	-	-	-	21,575	-	-	-	21,575
<u>1931-32</u>								
Hobart	12,648	Nil	38,403	38,403	Nil	1,688	31,837	33,525
Launceston	310,492	-	-	51,543	-	-	-	51,543
Burnie	-	-	-	18,938	-	-	-	18,938

TABLE II (Continued)

Date	Revenue			Expenditure		
	Capital Debt	Taxes, Dues etc.	Total	Works Services etc.	Interest & Sinking Funds	Total
1935-36 Hobart Launceston Burnie	45,377 296,995 -	48,244 - -	54,374 57,063 20,727	37,212 - -	11,755 - -	48,967 66,269 21,691
1938-39 Hobart Launceston Burnie	24,494 235,747 -	51,394 57,985 -	55,085 63,356 33,776	38,939 15,169 -	8,164 15,620 -	50,832 63,356 24,336
1941-42 Hobart Launceston Burnie	11,605 195,630 -	42,641 45,926 -	47,458 50,910 30,123	2,631 32,626 -	42,860 14,569 -	49,812 50,933 29,662

185. The revenues of the port authorities are obtained for the next part from dues levied on goods and shipping⁽²⁾ and fall under the following heads, viz:-

- (a) Port dues.
- (b) Tonnage dues, or wharfage rates on ships.
- (c) Wharfage rates on cargoes.

- (a) Port dues are paid by the shipowner for the use of water channels, artificial aids to navigation, and protection works generally; they covered also the cost of maintaining the coastal lighthouses until they passed under Commonwealth control. Then the Commonwealth Lighthouse Service in 1915 took over from the States the work of maintaining the coastal lighthouses, the Hobart Marine Board abolished its rate altogether, and a reduction was made in Western Australia. Hence, to a certain extent shipowners are still paying double dues for one service rendered, but while operating costs remain at their present level the amount now contributed by shipping towards the upkeep of the Commonwealth and State lights and State ports and waterways does not appear to be much larger than it would have been had the states retained the control of the coastal lights and increased their port rates in proportion to the increased cost of working.
- (b) Tonnage dues or wharfage rates on ships which are known by various names in various ports (e.g. quayage and berthing dues) are a payment by ships for the use of a wharf for loading and/or discharging their cargo.
- (c) Wharfage rate per ton on cargo landed or shipped is paid to the port authority by the consignor or consignee of goods at all Australian ports, except Hobart, and the ports of Victoria, wharfage is paid on exports and imports, while in Western Australia the produce of the State is free from payment of export wharfage rates. In the ports of Victoria and the port of Hobart wharfage is levied on imports only.

186. It is a generally accepted principle that the revenue of a port should not substantially exceed the total expenditure, that is, interest and sinking fund charges on debt, depreciation fund revenues, reserve and insurance funds and working and all maintenance charges.

187. Port assessment in British ports is generally on the lines indicated above. At Liverpool all goods brought to the port, whether to the river or to the docks, are liable to pay tonnage dues, and goods brought into the docks pay an additional dock rate. Precisely the same dues are levied on overside cargo as on cargo landed on a quay water space being considered as valuable as quay space. At Bristol there is a due on every article brought into the port, whether landed

(2) Some reference is necessary to the method of measuring the size of ships and cargo, viz:-

- (a) Gross tonnage is determined by dividing by 100 the contents in cubic feet of the vessel's closed in spaces, comprising that part below weather deck or upper deck, and additional erections built thereon.
- (b) Dead weight tonnage is the tonnage of 2,240 lb. per ton of cargo, fuel and stores that will sink the ship from the light waterline to the plimsoll mark.
- (c) Net tonnage is the figure remaining after deduction from the gross tonnage of an arbitrary amount for machinery space, crew space and other spaces required for navigation. Net tonnage since it represents the space available for the carrying of cargo or passengers and, therefore, the earning capacity of the ship is mainly used as the basis for levying governmental taxes, such as tonnage dues, dockage and other charges against the ship. The term register tonnage is sometimes used to mean net tonnage.

on the quay or not, and, in addition, a liconso fee is charged on every barge according to its carrying capacity. At Glasgow all goods conveyed upon or shipped or unshipped in the river or at the harbour are liable for dues. On the Tyne, which is the great coal export port, the Tyne Commissioners are authorised to levy an export due on all coal exported; in addition they levy a river due on all goods shipped in or unshipped from any vessel, and a dock rate on goods discharged from vessels in the docks. At Belfast and Loith all goods using the port, whether imported or exported pay dues.

188. The complete list of charges levied in Australian ports on ships and goods may be grouped as follows:-

TABLE III

Charges	Levied by -
On ships -	
Light dues	Commonwealth and State
Pilotage	State
Tonnage	Port Authority or Private Owner
Tonnage dues	Port Authority
Borthing dues	" "
Mooring Fees	" "
Mooring and Unmoor.	" "
Removals	" "
Stovedoring	" "
Income Tax	Licencees or Port Authority
Duty on ship's stores	Commonwealth and State
Commission	Commonwealth
Despatch	Various

189. So far as Tasmania is concerned a general port due is levied, together with a pilotage rate, and if there is no full time pilot, this service is usually performed by the harbour master of that port. Table IV below shows the port and pilotage charges for the seven Tasmanian ports, viz:-

TABLE IV

TASMANIAN PORT AND PILOTAGE DUES.

Port	PORT DUES - per gross ton registered cargo		Pilotage Dues ⁽³⁾ per gross ton			
			Sail	Steam	Minimum	Maximum
Hobart	From any place in the Commonwealth $\frac{3}{4}$ d. (max. £37/10) on arrival. " " " outside " 1d. (max. £50) " "	Inwards Outwards	6d. 3d.	4d. 2d.	£4 -	£15 £5
Launceston	1d. per ton each way. Oversea vessels using deep water ports. only special rate of 1d. payable inward only (maximum £50).	Inwards Outwards	6d. "	4d. "	£2/10/-	£15 for full pilot.
Devonport	$1\frac{1}{2}$ d. both ways with specified exceptions.	Inwards Outwards	4d. 4d.	3d. 3d.	£2 £2	£10 £10
Burnie	$1\frac{1}{2}$ d. both ways for foreign or interstate ships. Voyages within port 3d., + 1d. for every additional operation between terminal ports. Maximum amounts vary, e.g. 100 tons of combined inward and outward cargo and under - £25. 300 - 400 tons - £40. Over 400 tons - £50.	Inwards Outwards	3d. 3d.	3d. 3d.	£1 £1	£5 £5
Circular Head	2d. on arrival, with specified exceptions.	Inwards Outwards	4d. 4d.	3d. 3d.	£2 £2	£10 £10
King Island	3d. per net ton registered on arrival.	1d. per net ton for every service performed by Harbour Master				
Leven	2d. on arrival per net ton.	Inwards Outwards	2d. -	2d. -	- -	- -
Smithton	1d. per ton per every steam vessel on arrival. 2d. per ton per every sailing vessel on arrival. (If visited twice between 2 terminal ports, not more than $1\frac{1}{2}$ d. for steamers and 3d. for sailing vessel unless cargo is taken in more than once.)	Inwards Outwards	- -	- -	- -	- -

(3) The rules govern the payment of pilotage rates vary from port to port. Unless the master of the vessel holds an exemption certificate, the following vessels are liable to pay pilotage rates whether a pilot is employed or not.

Hobart: Vessels over 75 tons gross.

Launceston: All vessels to pay.

Devonport: Vessels over 50 tons gross.

Burnie: Vessels over 150 tons gross.

Circular Head: Vessels over 50 tons net.

190. Each port has its own schedule of wharfage charges which are levied on all goods imported or exported, so that every ton of goods contributes, in some measure, to general port funds. The official lists of wharfage charges give the rate for each particular commodity with a general charge for goods not enumerated. Table V below shows a list of goods which commonly appear in the schedule of wharfage charges of the several ports, viz:-

TABLE V

Tasmanian Wharfage Charges.

	Hobart		Launceston		Burnie		Devonport		Strahan		Stanley		Smithton		Ulverston		King Island	
	Inwards	Outwards	I	O	I	O	I	O	I	O	I	O	I	O	I	O	I	O
Bricks per 1,000	2/11	-	6/-	1/-	-	2/-	5/-	2/6	4d.	-	4/-	1/-	6d.	10/-	5/-	-	5/-	6d.
Calcium Carbide net drum	-	-	-	-	6d.	-	6d.	-	-	-	6d.	-	6d.	-	6/8 per ton	-	1/-	-
Cement per ton	2/6	-	2/6	-	-	6d.	-	6d.	-	6d.	-	-	-	-	-	-	5/-	-
Coal, per ton	6d. landed into Hulk	-	1/3	-	1/6	-	-	1/6	1/-	-	1/-	-	1/-	-	1/-	-	5/-	-
Motor Cars per wheel	(1d. per ft.)	-	-	1/3	2/6	2/6	2/6	2/6	5/-	2/6	2/6	2/6	2/6	2/6	10/- each	15/- each	20/- each	-
Timber Log, per 100 super ft.	3d.	-	3d.	3d.	1/6	5d.	1/6	6d.	-	4d.	-	1/-	-	1/-	-	6d.	-	6d.
Timber sawn, per 100 super feet.	3d.	-	3d.	3d.	1/6	5d.	1/6	6d.	-	4d.	-	4d.	-	4d.	-	3d.	-	6d.
Wool per bale	-	-	9d.	6d.	1/-	6d.	-	6d.	-	-	1/-	2/-	1/-	2/-	-	3/4	-	-
per bag	-	-	6d.	3d.	6d.	6d.	-	3d.	-	-	6d.	6d.	6d.	6d.	-	per ton	-	-
Goods not spec- ified in by-laws & regs of the Marine Board or Trust (per ton)	5/-	-	2/-	1/3	6/8	3/4	5/10	3/4	-	2/6	5/-	3/4	5/-	3/4	5/-	3/4	5/-	3/4

191. In addition to these port, pilotage and wharfage charges the port authorities at Hobart and Launceston levy a due for the use of wharves and docks.

(a) Hobart. The following charges are payable by vessels mooring at or on using any wharf within the port, by vessels trading beyond the limits of the port, for every trip immediately upon arrival per ton of the gross registered tonnage:-

- (i) Vessels arriving from any place within the Commonwealth of Australia or the Dominion of New Zealand - 1d. per ton. (Maximum payment per trip - £37/10/-)
- (ii) Vessels arriving from any place outside the Commonwealth or New Zealand (whether direct or via intermediate ports) - 1½d. per ton. (Maximum payment per trip £50/-/-)

(b) Launceston. The charges for the use of the dock are as follows:-

	First Day	Each Lay Day
Vessels not exceeding 100 tons	£7/10/-	£2/-/-
Vessels 100 - 200 tons	£10/-/-	£2/10/-
Vessels 200 - 300 tons	£12/10/-	£3/-/-
Vessels 300 - 400 tons	£15/-/-	£3/-/-
Vessels over 400 tons	£17/10/-	£3/-/-

192. Before concluding our review of Tasmanian port terminals some reference should be made to the physical characteristics of the three main ports, viz:-

(a) Hobart is situated on the right bank of the River Derwent, some 11 miles from its mouth. The river up to the town averages 2½ miles in width, and is free from navigational dangers. The minimum depth in the channel is 36 feet, and there is no bar. Within a mile from the banks depths are generally from 10 to 12 fathoms; within a quarter of a mile there are at least 3 fathoms. Sullivan Cove, in which most of the shipping accommodation is concentrated, has a depth of 4 fathoms 100 yards north east of Battery Point, and depths increase to 9 or 10 fathoms in the middle of the cove. Spring tides rise 4½ feet; neap (4) 3½ feet. Vessels berth at the piers and move away without tugs.

(b) Launceston is situated at the head of the river Tamar, a tidal stream, about 41 miles from the sea. The river entrance between Low Head, and West head is about 2½ cables in width. The depths of water range from 11 to 27 fathoms. There is no bar and the largest vessels can enter in any weather and at any time of the tide, in safety. There are, however, certain obstructions to navigation that must be removed before Launceston can be classed as a port without risks, and between Rosevears and Launceston there is a succession of shoals, and the channel is narrow and tortuous. Vessels of about 300 feet in length with 20 feet draught can berth in the basin off the town, but owing to the narrowness of the channel, passing vessels set up a considerable "Soend" (5) so that a careful lookout on hawsers is necessary on board the vessel berthed. The rise of tide at Launceston is 13 feet at springs and 9 feet at neaps. Oversea vessels of deep draught and large tonnage are berthed at Beauty Point Wharf, about 8 miles inside the hoads on the western bank. The wharf is 350 feet long, with mooring beacons ahead and astern. The minimum depth of water alongside at low water is 40 feet. The disadvantages of Launceston having a sub-port separated by more than 30 miles from the parent port are obvious and the port of Burnie conveniently situated, has been developed.

(c) The length of the Burnie breakwater is 1,250 feet with a depth up to 42 feet at low water and a wharf alongside, 736 feet in length by

(4) The tide soon after the moon's first and third quarters in which high water level is not lowest.

(5) Upon the relation of the entrance width to the internal width and area of the harbour largely depends the reduction of 'range'. Range, applied to waves, denotes the vertical rise and fall of sea waves; the amplitude of the vertical motion of a ship due to the range of waves is known as soend.

9 feet wide, with a depth at low water of from 30 to 40 feet.

188. So far we have been concerned only with charges and dues payable at Tasmanian ports, but since the central problem of this study is the shipping cost problem in relation to the export trade between Tasmanian and the mainland reference needs also to be made to the charges and dues of the ports of Melbourne, Sydney, Brisbane⁽⁶⁾ Adelaide and Fremantle. A comparative survey is difficult by virtue of the fact that the schedules of charges on ships and goods vary widely and very often refer to different services. Since each main port exists as a separate entity, it is not possible, owing to varying working costs, for uniform rates of port charges to be made, although uniform rates as well as uniform systems of rating would perhaps be an advantage.

189. Melbourne (a) Under the regulations of the Melbourne Harbour Trust Commissioners, the charge for the use of a wharf is at the rate of 3/- per 100 feet of the length of the vessel for every six hours with a minimum charge equal to the charge for one day.

(b) In addition there are charges for sheds, equipment, lighting and conveniences at certain specified rates. The charges for the rent⁽⁷⁾ of sheds vary with the size of the shed. In the case of vessels trading solely between ports within the Commonwealth the charges payable are only 50% of those specified, and, in the case of vessels trading solely within Port Phillip Heads the charges are only 25 per cent of the specified charges. If the charges exceed a sum equal to 1/- per ton on the cargo shipped from a vessel trading beyond the Commonwealth, or 6d. a ton for a vessel trading between ports in the Commonwealth the Trust refunds the excess amount paid.

(c) Tonnage rates are payable by every vessel using a wharf at the rate of 3/4d. per gross registered ton for every day the wharf is used, provided that $\frac{1}{4}$, $\frac{1}{2}$ or $\frac{3}{4}$ of the rates shall be paid for those parts of a day equal to, or less than, 6, 12, or 18 hours respectively. In all cases the minimum charge is equal to the charge for one day. Vessels trading solely between ports in the Commonwealth only pay 50 per cent with a minimum in all cases of 2/6d.

(d) The Wharfage rates payable on goods which have been produced or manufactured within the Commonwealth and which arrive at Melbourne from any port in the Commonwealth are only 50 per cent of the general rate special, namely, 5/- per ton gross. Goods arriving from any port within the Commonwealth, but which are not produced or manufactured within the Commonwealth pay the same rate as imported foreign goods.

(e) If goods are not removed within three days after the vessel from which they have been landed has ceased discharging cargo, the owner has to pay storage fees⁽⁷⁾ of 1/- per ton on such goods for the first three days and an additional 6d. per ton for every subsequent three days.⁽⁸⁾

(f) If a wharf or shed is required for the storage of outward cargo, prior to the berthing of the vessel by which it is to be shipped, the owner or agent pays charges according to the size of the shed⁽⁷⁾. viz:-

(6) Unfortunately, only very limited wharves were available for the port of Brisbane, which is controlled by the Marine Department, with all maintenance and other work being carried out by the Harbours and Rivers Department. With the exception of two wharves all the wharves are privately owned. Hence, the port charges levied by the Government at Brisbane are relatively light, yielding just sufficient to meet working expenses. The port rate is fixed at 6d. per ton net for a period of 30 days. The general wharfage rate - 2/6p.t.

(7) Rent and storage fees are important items of cost to the Tasmanian exporter especially when goods have to be transhipped.

(8) That is, 1/6d. per ton for the second three days, 2/6 per ton for the third three days and so on. The fraction of a ton is deemed to be equal to a whole ton.

Sheds over 40 feet wide	-	£2/-/- for first day and 10/- for each subsequent quarter of a day.
Sheds 40 - 60 feet wide	-	£3/-/- for first day, and 15/- for each subsequent quarter of a day.
Sheds 60 - 80 feet wide	-	£4/-/- for the first day and £1 for each subsequent quarter of a day.

If the shed is more than 80 feet wide the charge is £5/-/- for the first day and £1/5/- for each subsequent quarter of a day.

195. Sydney. Under the New South Wales Harbour and Tonnage Rates Act of 1920 the following charges are levied on ships and cargo by the Maritime Services Board of New South Wales, viz:-

(a) Berthing charges on vessels under 240 tons are payable in respect of each day, or part of a day, as follows:-

Vessels not exceeding 60 tons	- 2/6
Vessels over 60 tons and not exceeding 120 tons	- 5/-
Vessels over 120 tons and not exceeding 180 "	- 7/6
Vessels over 180 tons and under 240 tons	- 10/-

(b) Tonnage rates on vessels of 240 tons and over are payable as follows. For each complete period of 24 hours the rate is $\frac{3}{4}$ d. per ton; and for periods of less than 24 hours at the rate of $\frac{3}{16}$ d. per ton in respect of each six hours.

(c) Storage charges. All goods imported or landed upon any wharf or shed have to be removed within 48 hours after the discharge of the vessel at any one berth (excluding weekends and holidays). After the expiration of 48 hours, storage charges must be paid according to the following scale:-

Timber - for the first 4 days, 1d. per ton per day, thereafter, 2d. per ton per day.⁽⁹⁾

All other goods - 2d. per ton per day for the 1st week
 3d. " " " " " " 2nd "
 4d. " " " " " " 3rd "
 6d. " " " " " " 4th and subsequent weeks.

(d) Wharfage or harbour rates for selected commodities are set out in Table VI below, (10) viz:-

Articles	Inward Wharfage & Harbour Rate	Outward Wharf & Harbour Rates
(a) <u>Shipped at and Arriving from any port within the Commonwealth.</u>		
Bacon bark, bones, butter, cheese, cream, eggs, fish (fresh or frozen), hams, oysters, poultry, rabbits, tinned milk (per ton)	2/6	-
Iron and steel, pig iron, galvanised iron and fencing wire, wire netting, single-stranded drawn copper wire, bar copper, drawn copper and brass tubes and copper ingots (per ton)	2/6	-
Timber (sawn) per 630 ft, super	2/6	-
Road metal and gravel (per ton)	3d.	-

(9) 630 feet of rough timber or 620 super feet of sawn timber is taken to be the equivalent of 1 ton.

(10) Source: Schedule of Wharfage, Harbour and Transhipment Rates payable under the port of Sydney Regulations published in the Government Gazette No. 9 of 3rd July 1925, including additions and amendments published in Government Gazette No. 104 of 3rd August 1928, No. 57 of 8th May 1931, No. 165 of 11th November 1933, No. 44 of 17th March, 1939, No. 16 of 2nd February 1940.

Returned empties (direct from original consignee, but consigned to original consignor) (per ton)	1/3	-
Bricks - not ex. 9" x 4½" x 3" (per 500)	2/6	-
Coal (per ton)	1/-	6d.
Iron and Steel (scrap) (per ton)	2.6	-
Ore (per ton)	1/3	4½d.
Wheat (per ton)	-	9d.
Petroleum, crude (per ton)	2/-	-
Flour Bran, Pollard, Sharps and mill offals (per ton)	-	9d.
Returned Empties (excl. bags or bales, casks and cases in shooks and tanks) (per ton)	2/-	Free
Returned Empties (bags or bales and casks and cases in shooks)	2.6	Free
Timber sawn or rough per 630 super feet	3/6	1/6
Vegetables (per case)	1½d.	-
Wool per butt, fudge or bale	9d.	9d.
Wool, per bale	4½d.	-
Goods not enumerated (per ton, by weight or per ton at 40 cubic feet measurement)	4/-	1/6

196. Adelaide (a) Under the State Harbors Act 1913-1927 port dues are payable on all ships arriving in any port in South Australia or in the waters of the State, according to the following scale, viz:-

From or to any port or place beyond the Australasian states 4½d. per ton (both in and out), provided that 2½d. per ton only is paid, (a) on any ship calling for orders and neither discharging or loading any cargo and, (b) any ship en route to or from any Australasian State and discharging or loading cargo in South Australia.

The tonnage of a ship on which port dues are to be paid is the net registered tonnage and no vessel pays more than 9d. per ton for port dues in any six months.

(b) Any ship sailing beyond the State via Port Adelaide or out ports is in addition charged coasting dues at the rate of 3/4 per ton.

(c) Tonnage rates are payable on the gross registered tonnage of vessels which have no exemption and which berth directly or indirectly at any wharf under the control of the South Australian Harbors Board. The schedule is as follows:-

For each G.R.T. of the vessel 3/4d. per ton for the first period of 24 hours or part thereof, 3/16d. for each additional period of 6 hours or part thereof. Vessels trading interstate pay 90% only of the above rates.

197. Fremantle (a) The regulations for the Port of Fremantle are framed under the Fremantle Harbour Trust Act 1902-13. The tonnage rates payable are assessed at 1/24d. per ton gross register of a vessel for each complete hour during which the vessel occupies a berth. The minimum charge for each entry into the port is that payable for 12 hours, but in the case of a vessel occupying a berth in the outer harbour only the minimum charge is for three hours.

(b) Generally, goods landed from a vessel must be removed within sixteen working hours. Transhipment cargo is

is allowed a free storage period of 24 working hours. If goods are not removed within the specified time, storage rent is payable at the rate of 1/- per gross ton for the first week and for every subsequent week the sum of 3d. per ton additional to the amount payable for each preceding week. No goods are allowed to remain in any shed or upon any wharf for a period longer than four weeks. The storage rate on transshipment cargo and cargo landed and reshipped is 6d. per ton per week.

(c) All goods are subject to wharfage charges and the following table has been compiled from the schedule published in the Handbook of Harbour Trust Regulations, viz:-

Description of Goods	Inward Cargo			Outward Cargo		
	Wharfage	Handling Charges		Wharfage	Handling Charges	
		(X)	(+)		(X)	(+)
All goods without specific rates	5/-	3/6	2/-	5/-	3/6	2/-
Chaff in bags)						
Hay and straw in bales)						
not compressed.)	5/-	4/-	2/6	5/-	4/-	2/6
Coal (in bags) per ton	2/8	3/6	2/-	-	-	-
Empty Returns " "	10d.	3/6	2/-	10d.	3/6	2/-
Timber - per ton	2/6	5/-	2/-	1/6	5/-	2/-
Wool, (per single bale)	Nil	7d.	5d.	9d.	7d.	5d.
Minimum charges per consignment	6d.	6d.	6d.	6d.	6d.	6d.

(X) Delivered over wharves, Trust receiving and delivering.

(+) Discharged direct from ships' slings into railway waggons.

(X) Shipped over wharves, Trust receiving and delivering.

(*) Shipped direct ex railway waggons.

198. The Tasmanian exporter when consigning goods to South Australia and Western Australia on the one hand and Queensland on the other frequently finds it necessary to ship via Melbourne and Sydney. Transshipment charges and their relation to the costs of distribution of specific exports will be discussed in Chapter VII and here we shall be concerned only with the actual rates payable.

(a) Sydney. The definition of "transshipment" adopted by the port authorities of Sydney relates to transshipment within the port of goods, other than ballast, brought by sea into, and to be seaborne from the port. The charge levied on most goods is 6d. per ton but there are a number of special rates, viz:-

TABLE VIII (11)

Article	Transshipment Rate
Timber (sawn or rough) per 630 ft. super	6d.
Timber (in shocks) 40 ft. cub.	6d.
Palings (for fencing) per 630.	6d.
Road metal and gravel per ton.	1d.
Fruit (green) per package per ton.	6d.
Bacon, butter, cheese, eggs, fish, poultry,	
Hams, tinned milk per ton.	6d.
Bricks, not exceeding 9" x 4½" x 3" per 500.	6d.
Kerosene, per case.	3d.
Wool, per butt, fudge or bale.	3d.
Goods not specified, per ton by weight or per ton of 40 cubic feet measurement (at the option of the Commissioners)	6d.
Minimum Charge (per ton)	3d.

(11) Compiled from the Wharf, Harbour and Transshipment Rates payable under the Port of Sydney Regulations (Government Gazette No. 91 of 3/7/1925) and amendments (published 1928-40).

(b) Melbourne. The regulations of the Melbourne Harbour Trust define transshipment as transshipment within the port of goods to be seaborne within the port. Goods transhipped within the port not later than ten days after such goods have been discharged are exempt from rates. Thereafter, the transshipment charge is equal to a wharfage rate of 1/- per ton.

199. From the above review it will be seen that although the aggregate sum payable may be substantial the total effect (12) on shipping freight rates of all Government charges on shipping is relatively small. It is computed as a rough estimate, on the basis of the inadequate data available, that such charges represent only 3 per cent of total ship operating costs.

200. Hence, it is not to be expected, nor is it practicable, that a reduction in these charges would have any corresponding effect on the ruling freight rates. Again, the charges payable by the shipper of goods are, as such, insignificant. However, they are additional costs incurred by, say, the Tasmanian exporter and not by his Victorian rival.

(12) Including income tax and duty on ships' stores, as well as port and tonnage dues, pilotage and light dues.

CHAPTER VTHE ECONOMICS OF SHIPPING FREIGHT RATES AND SERVICES.

201. The present chapter will be concerned with various aspects of the economics of shipping freight rates and services with special reference to the following:-

- (a) Schedules of shipping services to Tasmania.
- (b) Organisation of the interstate shipping companies.
- (c) Trends in ruling freight rates 1913-1945.
- (d) Factors determining the level of freight rates for any particular route.
- (e) Distribution of shipping as between Tasmanian ports.

202. In reviewing the shipping services and freight rates available to Tasmanian importers and exporters since the pre 1914-18 war period our main concern will be the interstate trades since Mainland markets absorb on the average over 70 per cent of Tasmanian exports⁽¹⁾. Again, although freight and charter rates fares, routes and sailings in the coastal trades may be capable of control by the Commonwealth Government⁽²⁾ there can be no such control exercised over vessels plying overseas trades.

203. Three ship operating companies are engaged in the Tasmanian trades, namely:-

Huddart Parker Limited.

Union Steamship Company of New Zealand Limited.

William Holyman and Sons Pty. Limited.

(a) The firm of Huddart Parker Limited dates from the arrival in Australia of Captain Peter Huddart in 1852, and T. J. Parker in the following year. By 1870 Huddart Parker and Company had a fleet of sailing craft regularly plying the coal trade between New South Wales and Victoria. In 1880 the first steamer was purchased and in 1889 the firms entered the Tasmanian trade having been requested by the Tasmanian Woolgrowers Agency Company to carry stud sheep from Launceston to Melbourne.

(b) The Union Steamship Company of New Zealand Limited commenced operations in Dunedin in 1875 with a fleet of five steamers aggregating 2,126 tons. The Company entered the inter-colonial trade between Australia and New Zealand in 1877. In 1904 the Loongana was especially built for the Tasmanian service. These two companies merged for specific purposes and formed Tasmanian Steamers Pty. Ltd., which owns the steamships Nairana and Taroon, serving Bass Strait.

(c) William Holyman and Sons Pty. Ltd., is engaged in both the inter and intra-state trades. This company is not a member of the Australian Steamship Owners' Federation but it has never been challenged on this ground by other ship operators owing to the small volume of cargo offering in the minor coastal ports. In any case Holymans' have built up firm business contacts and competition on the basis of rate cutting would be not only costly but long and hazardous. In any case the Union Steamship Co. and Huddart Parker have shares in the company.

204. The shipping services to Tasmania will first be classified on the basis of the years 1913, 1920 and 1927,⁽³⁾ viz:-

(1) Vide, Chapter VI

(2) Or, alternatively, State Governments may (and with the help of the Commonwealth) subsidise specific industries

TABLE I

SHIPPING SERVICES BETWEEN TASMANIA, THE MAINLAND
AND NEW ZEALAND.

Route	1913	1920	1927	Remarks
Melbourne - Launceston	Passenger and Cargo Twice Weekly	Passenger and Cargo Thrice Weekly.	Twice weekly, 1st April - 15th Sept. Thrice weekly rest of year & additional sailings 18 - 26 December.	Large % of un- occupied berths and space except at holiday time
Melbourne - Devonport, Burnie	Passenger and cargo twice weekly	Passenger and cargo twice weekly	Passenger and cargo twice weekly. Additional sailings 10- 26 December	Ditto
Melbourne - Hobart	Passenger and cargo once a week. Service en route to and from N.Z.	Jan.to Feb cargo service Fortnight- ly March to Decem- ber.	Cargo Service weekly.	The passenger service was dis- continued in 1916 with the abandon- ment of Melbourne New Zealand conn- ection.
Melbourne - Strahan Hobart	Passenger and cargo service every 10 days.	Passenger and cargo service at regular intervals	Monthly cargo service, Melb. to Strahan & vice versa. Cargo service between Hobart & Strahan weekly.	The 1927 service was quite adequ- ate owing to decline in trade
Sydney - Launceston	Passenger & cargo service Fortnigh- tly.	Passen- ger and cargo ser- vice fort- nightly.	Cargo service fortnightly.	The passenger ser- vice was discon- tinued in 1921 in view of the poor support. In 1920 vessels av- eraged only app. 32 per trip from Sydney. The 1927 service was able to cope with far more cargo than was offering and the steamer fre- quently had to proceed to Burnie or Devonport to obtain a full cargo.
Sydney - Hobart	Passenger and cargo service every 5 days Jan. to Feb. weekly. March to Nov. Every 4 days in December.	Passen- ger and cargo service weekly.	Passenger and cargo ser- vices weekly. Passenger services for- tnightly during winter months.	The steamers were running with a very large no. of berths each way unoccupied, also high % of cargo space un- occupied. A large number of over- seas vessels now call for wool,

Route	1913	1920	1927	Remarks
				zinc and other cargo which previously was shipped to the Mainland for transshipment.
Sydney - N.W. Coast	Weekly cargo service	Weekly cargo service	Weekly cargo service (mostly 2 & sometimes 3 steamers).	No change. The service was not utilised to full extent.
Hobart - N.Z. (direct service)	Passenger and cargo service weekly.	Periodical cargo sailings as required; but little or no general cargo offering, shipments consisting mostly of timber,	Same	Passenger and cargo service discontinuing 1916. In 1915 taking the year as a whole the total number of persons averaged to N. Z. 8 saloon, 11 steerage and from N. Z. 13 saloon, 8 steerage. The cargo position was equally bad.
Hobart - Fremantle	-	-	A boat every 3 months.	-
Low Head - Strahan	-	One cargo boat monthly.	Same	-
Strahan - Hobart	-	Average of 1 cargo boat a week.	Average of 1 cargo boat weekly.	-
Risdon - Port Pirie	-	-	Fortnightly to 3-weekly cargo service	-
Maria Is. Sydney	-	-	As required about monthly cargo service.	-
Maria Is. - Melbourne	-	-	Weekly cargo service.	-
Hobart - Huon-Brisbane and vice versa	-	-	Fortnightly during fruit season March to September.	Besides the above services there are mostly 2 cargo vessels weekly between Melb. and Launceston, a passenger and cargo service weekly between Melbourne.

205. As from July 7th, 1921, overseas ships, while continuing to call at Tasmanian ports ceased to carry passengers or cargo between Australian ports. The only line that did so was

(3) Note in respect of the years selected:-

1913 - Pre 1914-19 war period.

1920 - Year of proclamation of the coasting trade provisions of the Navigation Act.

1927 - Post Navigation Act era.

was the Commonwealth Government Line which catered for cargo in special circumstances. Table II below compares schedules of overseas shipping services in 1913 and 1929, viz:-

TABLE II

OVERSEAS SHIPPING SERVICES CALLING AT
TASMANIAN PORTS.

Route	1915 Service	1929 Service
Hobart from London and South Africa (N.Z. S.S. Co. and S.S. & A. Co.)	14 days	Nil
Hobart-New Zealand - Monte Video - Rio - London (N.Z.S.S.Co. & S.S. AND A. CO.)	14 days	Nil
Hobart - British Ports (all Overseas Companies calling for fruit etc.)	Every few days from February to May.	Every few days during fruit season (Feb-May) No inter-state passengers or cargo.
Hobart-Continental Ports (N.D.L.Co. and German Australian Line)	Monthly	Nil

206. A classification of shipping services in the immediate pre-war year of 1939⁽⁴⁾ on the basis of operating companies, is now presented, viz:-

TABLE III

SHIPPING SERVICES BETWEEN TASMANIA AND THE MAINLAND
AS OPERATED IN 1939.

(a) Huddart Parker, Ltd.

Route	Frequency of Service
Hobart-Brisbane (Direct) ⁵ .	Monthly (Cargo)
Hobart-Sydney ⁵ .	Summer months - weekly
	Winter months - fortnightly
	(Cargo & passengers)
Hobart-Melbourne ⁵ .	Fortnightly (Cargo)

(b) Union Steamship Co.
of N.Z. Ltd.

Route	Frequency of Service
Hobart-Adelaide	Fortnightly (Cargo)
Hobart-Fremantle	One every 3 months (cargo)

(c) William Holyman and Sons Pty. Ltd.

Route	Frequency of Service.
Launceston/Melbourne	Twice weekly, sailing Tuesdays and Saturdays.
North-West Coast/Melbourne.	Leaving Melbourne each Tuesday for Burnie, Ulverstone and Devonport. Departing from Burnie each Saturday. Leaving Melbourne each Saturday for Stanley, Burnie and Devonport. Departing from Devonport each Tuesday for Melbourne via Burnie and Stanley.
Port Adelaide/Tasmania.	One vessel operated this service providing fortnightly sailings from Pt. Adelaide, alternatively for Northern and Southern Tasmanian ports, (e.g. the vessel would leave Adelaide on Thursday for Hobart leave Hobart the following Thursday for Adelaide on the third Thursday leave Adelaide for Launceston and on the 4th leave Launceston for Adelaide.) Calls were made at North-West Coast ports-Devonport, Burnie and Stanley inward and outward bound to L'Ton as the volume of cargo warranted. It usually was arranged to work one coast port only on each voyage. ⁽⁶⁾
Hobart/Melbourne ⁷ .	A fortnightly service, maintained by one steamer. Friday sailings alternately.

207. Since 1929 Wm. Holyman and Sons have maintained the connection between King Island and Melbourne. This service was previously maintained by the State Government. Under the Straits Islands Shipping Services Agreement Act, 1934⁽⁸⁾ the company now receives an annual subsidy of £4,000. Under the Agreement a regular fortnightly service is maintained to and from Melbourne, the vessel calling at either Currie or Narracoopa, (also known as Fraser River) on each of such trips. Alternatively, the Agreement provides for runs from Melbourne to King Island and return, and from Launceston to King Island and return. In addition to these

(4) Of course, all vessels operating the Tasmanian trades in 1939 have since been taken over by the Shipping Control Board which has assumed responsibility for all contracts and nominated the operation of the ships. The companies now act as agents for the Shipping Control Board under the direct control of the Tasmanian Traffic Committee (Vide Chapter III).

(5) Run conjointly with the Union Steamship Co., of N.Z. Ltd.

(6) For the relation of the number of ports of call to the cost of ship operation and, hence, to the determination of ruling freight rates, vide paras. 229-31.

(7) Both the Huddart Parker-Union Steamship combination and Holymans' maintain an alternate fortnightly service by arrangement, and hence a weekly service is available.

(8) Following on protests from shippers in the islands (both King Island and Flinders Island and the Furneaux Group) regarding the inadequacy of existing services the State Parliament appointed a Select Committee

trips the company is required to make special tonnage available, when required, for the carriage of livestock between King Island, Melbourne and Launceston. Exceptions are made in all cases where weather conditions render it impossible to fulfil the terms of the Agreement. The rate of freight Currie-Melbourne and vice versa, as fixed in the Agreement, for general cargo was 28/6d. per ton in 1938-39. This rate is now subject to a war risk surcharge of 10 per cent, a wartime increase which is comparable to an advance of approximately 40 per cent in most other Australian trades. It is not intended to pursue further the question of Tasmanian intrastate trades although the rate of water transport in south-eastern waters should be noted. During the past 25 years water transport has suffered from road competition, except to isolated ports on the Tasman Peninsular, Bruny Island, Port Esperance and Southport. Only a very small percentage of products are dependent now on river and coastal craft for carriage to market.⁽⁹⁾ Services range from one or two trips per week and rates of freight between 9/- and 15/- per ton. Statistical records of cargo lifted, much of which is carried at package rates, are not compiled by the State Statistician or any other Government authority and the companies plying these trades advise that estimates would be subject to error.

208. The following table presents data relating to the various vessels owned and operated in 1939 by those shipping companies interested in the Tasmanian trades. Only those marked with an asterisk, operated in Tasmanian waters.

TABLE IV

Ship Operating Coy.	Vessel	Type	Year Built	Tons Gross
Wm. Holyman & Sons Pty. Ltd.	Lass O'Lowrie*	Freighter S.S.	1878	244
	Wareatea*	Freighter S.S.	1883	475
	Tambar*	Freighter S.S.	1912	306
	Loatta*	Freighter S.S.	1938	247
	Woniora*	Freighter S.S.	1913	823
	Laranah*	Freighter S.S.	1914	701
	Wannon*	Freighter S.S.	1917	567
	Lanena*	Freighter S.S.	1925	1018
	Lutana*	Freighter S.S.	1922	918
	Lorinna*	Freighter M.V.	1937	1185
Huddart Parker Ltd.	Eagle	Freighter S.S.	1889	431
	Yarra*	Freighter S.S.	1907	2257
	Corio	Freighter S.S.	1919	3346
	Colac	Freighter S.S.	1920	3341
	Adelong	Freighter S.S.	1936	3577
	Barwon	Freighter S.S.	1939	4239
	Zealandia*	Passenger S.S.	1910	6683
	Also	(" M.V.	1929	8108
		(" M.V.	1938	9576
Tas. Steamers Pty. Ltd.	Mairona*	"S.S.	1917	3042
	Taroona*	"M.V.	1935	4286
Union Steamship Coy. of N. Z. Ltd.	Kowhai	Freighter S.S.	1910	792
	Koranui*	Freighter S.S.	1914	1266
	Kini	Freighter S.S.	1930	1388
	Gabriolla	Freighter S.S.	1920	1587
	Kahika	Freighter M.V.	1938	1537
	Goulburn	Freighter S.S.	1914	2367
	Omano	Freighter S.S.	1915	2550
	Kalingo	Freighter S.S.	1927	2047
	Taluno*	Freighter S.S.	1930	2742
	Whaka	Freighter M.V.	1938	2259
	Kokerangu*	Freighter S.S.	1919	3146
	Matua	Freighter M.U.	1936	4193

The total gross registered tonnage of these vessels is 81,244 tons representing approximately 18 per cent of the total Australian fleet⁽¹⁰⁾. Vessels serving Tasmanian ports represent 29,906 tons, or 6.66 per cent of the total fleet. Vessels under charter to lift bulk cargoes of such commodities as zinc and copper have been excluded.

209. Before proceeding to analyse trends in the ruling level of freight rates and factors determining same, some reference needs to be made to the organisation of the interstate shipping companies. The following are members of an association registered under the name of "The Australian Steamship Owners' Federation", viz:-

Adelaide Steamship Company.
Australian Steamships Pty. Ltd.,
A.U.S.N. Co. Ltd.
Huddart Parker Ltd.
Melbourne Steamship Co. Ltd.
McIlwraith, McEachern, Pty. Ltd.
James Paterson and Co. Ltd.

These companies operate under a working agreement which came into effect in the following circumstances.

210. As noted in Chapter III, at the outset of the 1914-18 war the fleets of the interstate shipping companies were requisitioned by the Commonwealth Government and the services were carried out under the direction of a Controller of Shipping, appointed by the Government. This control operated throughout the war period and for a time afterwards. This control operated throughout the war period and for a time afterwards. In the early part of 1920 the Controller of Shipping intimated that the Commonwealth Government was prepared to release the vessels from control provided that the shipping companies continued a joint system of working the vessels on lines similar to that which obtained when the ships were under Government control. The Controller pointed out that with the depleted tonnage available on the coast at the time a better service could be maintained by this means.

211. The shipping companies agreed to comply with the desire of the Government and a tentative agreement was made in May, 1920. An agreement was formally executed in May, 1921. This agreement provided that the total tonnage of the seven companies should be jointly controlled. Under the arrangement a permanent Traffic Committee appointed by the companies party to the agreement meets regularly and allocates the services. In the event of a disagreement arising between the members of the Committee, the principals of the companies are called upon to determine the matter at issue.

212. The financial side of the arrangement was put in the hands of an independent firm of chartered accountants appointed by the Federation, who were given absolute control of the adjustment of accounts as between the respective parties to the agreement. The agreement provides for the payment of prescribed charter rates to the owners of the vessels operating under it. An account of each voyage is to be rendered by the owners to the accountants, by whom periodical adjustments are made. Under these adjustments the profits or losses made by the companies over the period covered by the adjustment are shared on the basis determined by the accountants. At the outset the scale of charter rates paid to the owners resulted in losses by the Federation, notwithstanding that the rates were the

22nd May 1945, to consider the provisions of the Agreement of 1934. The Committee tabled its Report on 27th September, 1945 (Government Printer)

(9) With the exception of timber.

(10) Total gross registered tonnage of vessels on the Australian register in 1939 was 449,143 tons (225 vessels).

normal charter rates ruling before the war. This fact, however, did not necessarily mean that the actual trading resulted in losses, the position being that the charter rates were too high to permit of the Federation showing profits. In order to facilitate the adjustments the rates were reduced.

213. Naturally, the researcher has not been able to peruse the full text of the document but it can fairly safely be said that the agreement has been a decided benefit to both the interstate shipping industry and the community, in that it has made for rationalisation of services without which it is doubtful whether they could have been maintained under the same conditions of efficiency and at the same ruling freight rates. Moreover, certain overseas shipping interests later moved in a similar direction with a view to bringing about a more economic running of their vessels.

214. Apart from the Australasian Steamship Owners' Federation other agreements between interstate shipping companies are in existence. One such has already been noted, namely, the arrangement between the three companies engaged in the North-West Tasmania-Sydney-Melbourne trades. Again, Tasmanian Steamers Pty. Ltd. connecting Melbourne with Launceston, Devonport and Burnie, is under the joint management of the Union Steamship Co. and Huddart Parker Ltd.

215. There seems to be little doubt that the Australian Steamship Owners' Federation is but one section of the English shipping combine known as the Inchcape Group. The combine is openly defended in the United Kingdom for it is claimed that the monopolistic methods adopted eliminates waste, and that the English companies combined are enabled to compete with foreign shipping. With the same motive, namely to avoid costly competition with the Australian companies, the English combine has chosen the easier way and acquired the controlling interests in every Australian company. Thus the A.U.S.N. Company is a subsidiary company of the British India S.N. Company, a member of the Inchcape Group. The McIlraith, McEacharn Line is also an English company, the majority of the shares being held in England. Burns, Philp and Company is an Inchcape Company. The Union Steamship Company is also an Inchcape Company, and with Huddart Parker Ltd. has a large interest in the Melbourne Steamship Company. The firm of W. Holyman and Sons Ltd. is controlled by the Union Steamship Company and Huddart Parker and Company. The firm of McDonald, Hamilton and Co. is also owned by British interests, and the largest shareholders have large interests in Burns, Philp and Co. and the P. & O. Company, both Inchcape Companies.

216. If the Navigation Act does, in effect, protect part of the English shipping combine, what is the scope of its monopoly power so far as Australian shipping is concerned? It is difficult to assess the extent of the operations of the shipping companies of Australia for they have many other interests, apart from shipping. In some cases they are interlinked with each other, and also have cross relationships in other industries. The extent of these relationships and co-partnerships are very difficult to determine. Official records of lists of shareholders are incomplete and misleading. For example, a trustee agency or a bank may be found to hold a large parcel of shares in a company. There is nothing to show for whom these shares are held. Other "dummies" are used, consisting of officials of companies and relatives of directors.

217. Some indication of the complex interlocking of Australian secondary industry in general is revealed by the following examples, (11) viz:-

- (a) The Adelaide Steamship Company holds about half the shares of the Abermain-Leaham Collieries Ltd., and about 35 per cent of the North Bulli Colliery Ltd.

- (b) Howard Smith Ltd., which originally had coal and shipping interests, separated its interests, and gave its shipping branch the title of the Australian Steamships Pty. Ltd. This company, in addition, holds controlling interests in Caledonian Collieries Ltd. Inevitably Collieries Ltd., Australian Sugar Co. Ltd., Commonwealth Steel Products Ltd. and Brisbane Harbours Ltd.
- (c) Several large shareholders in the North Coast Steam Navigation Company are also large holders in Burns, Philp and Coy.
- (d) Burns, Philp and Coy. have controlling interests in the Solomon Islands Development Coy. Ltd., Burns Philp (South Sea) Coy. Ltd., Choiseul Plantations Ltd., Shortland Islands Plantations Ltd.
- (e) Huddart Parker Ltd. are large shareholders in the Abermain-Seaham Collieries Ltd., in Hobburn Ltd. (colliery), and also holds 88 per cent of the stock of the Metropolitan Coal Coy. Ltd.
- (f) Mellraith, Macleahern Ltd., holds 45 per cent of shares issued by Bollaambi Coal Coy. Ltd.

218. When the control of seaborne commerce is concentrated in the hands of a relatively few large concerns, as, in Australia, the several groups act in "conformance" (12). This method of price and product determination (13) may be interpreted as a method of monopolistic control, tending towards higher costs for shipping services, but it is merely the same type of producer agreement as is prominent in all major industries (14). The Australian Shipping Conference is mainly concerned with the allocation of routes and certain rate agreements. By agreeing to dispatch ships on days when other conference lines are not booking cargo, each line is enabled to avoid the weak bargaining position which results when shippers have alternative transportation services at their disposal (15). Again, particular lines may confine their

- (11) Extracted from the Report of the Royal Commission on the Navigation Act 1924. The project to be conducted in 1946 by the present researcher, "The Structure of Australian Secondary Industry" will be an attempt to measure the degree of control exercised by the largest corporations in the economy. It is anticipated that the project will fall into the following broad sections, viz:-
- (a) Trends in the Scale of Manufacturing Operations, 1914-1944; or, alternatively 1931-1944.
- (b) The Integration of Manufacturing Operations (Mainly concerned with the extent and significance of central office operations.)
- (c) The Concentration of Production in Manufacturing. (That is, to what extent do a few firms control the supply of a number of separate products?)
- (d) The Product Structures of the Largest Companies (Including the causes and economic significance of multi-product production)
- (e) The History of Concentration in Selected Industries (possibly a normal trade cycle period will be selected so that the movements in concentration and/or deconcentration - together with their various causes - may be related to the general conclusions arising from my article "Trends in the Concentration of Operations in Australian Secondary Industry 1923-43" (The Economic Record, Vol. XXI, No. 40). In tracing the history of concentration in selected industries, recourse will be had to a causal analysis wherever possible).
- (12) A "conformance" is not a meeting of the representatives of competing lines but the name given to the group of lines which agree to hold such meetings at intervals and agree to abide by the agreements reached - vide paras. 210-214.
- (13) For, after all, the freight rate charged and service rendered is comparable to a price quotation for any particular commodity sold on the market.

services to a specified port. Conference rate agreements usually define the minimum rates at which specific commodities will be transported. The resultant stability in the rates enables the shipper to conduct business on the basis of a constant transport factor. Such is preferable to a fluctuating rate even though it may fall to an exceedingly low level when the companies are engaged in rate wars.

219. Granted, (a) that the interstate shipping companies exercise monopoly power through the Federation and, (b), that they hold shares in a number of industries other than shipping is it possible to ascertain the extent to which the companies may, or do, engage in monopolistic practices? (16) Three specific examples will serve to illustrate the type of discriminatory monopoly that may be exercised by the shipping companies.

220. Evidence was submitted to the Royal Commission on the Navigation Act 1924 that while the timber freight from Cairns to Brisbane was 6/- per 100 feet super, the freight from Mourilyan to Brisbane (a shorter distance on the same route), was 16/4d; from Townsville to Sydney the rate was 7/3d. and from Mourilyan to Sydney (a shorter distance on the same route) 17/7d. The reason given for this remarkable difference in freight rates was that the demands made by the waterside workers at Mourilyan were so great that extra freight had to be charged. The waterside workers were taken from Innisfail (12 miles from Mourilyan) to Mourilyan by special train when required, and returned home by similar means. Their working day commenced from the boarding of the train at Innisfail, and ceased on their return from Mourilyan. The higher rate resulted in the Cairns mills, ousting the Innisfail and Mourilyan products from the markets. The reasons given by the representatives of the shipping companies for the high rates from Mourilyan were not satisfactory. Handling charges at Mourilyan were undoubtedly heavier than at Cairns but not to the extent of the penalty rates charged. The Commissioners concluded that the Adelaide Steamship Company, which has vessels on the North Queensland Coast, had financial interests in the Cairns timber industry, and, as a natural result, preferential treatment was given to timber cargo from the port of Cairns. That is, the industry at Cairns was assisted by a low rate being quoted, while the rival company operating at Innisfail was penalised by a high rate.

221. Our second example of monopolistic action is drawn from the West Australian timber industry (17). Freight rates on timber from Western Australia to the Eastern States in the early 1920's was found to be prohibitive and mills began to close. Representations were made to the shipping companies that a reduction of 20 per cent was necessary. The shipping companies offered a reduction of 10 per cent and refused to reduce any lower. Representations were then made to Scott Fell and Company, a company outside the Shipping Federation, who agreed to carry timber from

(14) Many examples may be quoted such as the Australian Associations of Textile Manufacturers, Cement Manufacturers etc. Vide Chapter VII

(15) Compare the conjointly run services, each company operating alternative trips, Hobart/Brisbane, Hobart/Sydney, Hobart/Melbourne.

(16) The effect of the absence of conditions of free entry should be noted. For example, no overseas shipping company is likely to enter into competition with such a service as that operated between Melbourne and Launceston by Tasmanian Steamships Pty. Ltd. The Inchcape Group has sufficient interests at least to exert influence with one of the companies controlling this service (as noted earlier, Tasmanian Steamers Pty. Ltd. is a combination of interests of the Union S.S. Co. and Huddart Parker Ltd.)

(17) Note that both examples are drawn from industries situated at a long distance from the market (e/- Tasmania). North Queensland, Western Australia and Tasmania may be considered in terms of the three angular points of a triangle which is the Commonwealth.

Western Australia to the Eastern States at a rate equal to a 20 per cent reduction on ruling rates. Thereupon, the Federation reduced their rate by 20 per cent and negotiations between the timber industry and Scott Fell were dropped. Then it was evident that the latter company was not going to compete the Federation raised the rate quoted by 10 per cent. The timber industry again opened negotiations with Scott Fell and Co., the Federation retaliated by threatening the sawmilling companies with practically a "boycott" if they patronised Scott Fell and Company's vessels. Negotiations again fell through on account of the coal strike.

222. Finally, about the middle of 1919, in which year there were heavy crops, the shipping facilities at the ports of Burnie, Devonport and Stanley were so inadequate that producers were unable to place their produce on the mainland markets. Public demand forced the State Government to enter the North West Coast trades (vide Chapter III) but immediately the interstate companies entered into keen competition. (The chief market for the primary products of the North West Coast is Sydney and the interstate companies synchronized their sailing dates with those of the State vessels). This attempt to drive the State shipping service out of business gave the North-west coast ports a very frequent service. The amount of cargo lifted increased and Ulverstone rose to the status of an interstate port. (For the distribution of inward and outward tonnage among the various Tasmanian ports see following chapter). Not only does this example draw attention to the functional relationship between shipping facilities and the level of production but also refutes the shipping companies old contention that they are the sole judges of the service required.

223. Before passing to our consideration of those factors which determine the ruling level of shipping freight rates at any particular time it is desirable to present data in respect of freight rate quotations on general cargo per ton weight or measurement for selected years within the period 1913-45. The years selected roughly correspond to those used earlier in Chapter IV, "The Economics of Port Terminals" (Vide para. 184).

TABLE V.

Capitals Interstate Shipping Freight Rates for General Cargo

(Tasmania/Mainland)⁽¹⁸⁾

(Per ton weight or measurement One ton meas.= 40 cubic ft)

To	From -				
	Brisbane	Sydney	Melbourne	Adelaide	Fremantle
<u>1913</u>	(50/6T ⁽¹⁹⁾)				
Hobart	(31/6D ⁽²⁰⁾)	13/6	13/6	28/-	38/-
Launceston	31/6	13/6	13/6	28/-	38/-
Devonport	31/6	13/6	13/6	28/-	38/-
Burnie	31/6	13/6	13/6	28/-	38/-
<u>1921 (Aug)</u>					
Hobart	45/6	20/-	20/-	46/-	61/-
Launceston	45/6	20/-	20/-	46/-	61/-
Devonport	45/6	20/-	20/-	46/-	61/-
Burnie	45/6	20/-	20/-	46/-	61/-
<u>1925</u>					
Hobart	42/-	20/-	20/-	46/-	61/-
Launceston	40/6	17/6	17/6	46/-	61/-
Devonport	40/-	20/-	17/6	46/-	61/-
Burnie	40/-	20/-	17/6	46/-	61/-

(18) The rate quoted for each year was that ruling at the 30th June. Since the main purpose of this study is to examine trading relations between Tasmania and the Mainland no specific reference to freight rates between Australia and overseas ports will be made in this Chapter. However, account will be taken of them, where necessary, when dealing with the

To	From -				
	Brisbane	Sydney	Melbourne	Adelaide	Fremantle
<u>1929</u>					
Hobart	45/-	22/-	22/-	33/-	55/-
Launceston	43/6	22/-	19/6	33/-	55/-
Devonport	43/-	22/-	19/6	33/-	55/-
Burnie	43/-	22/-	19/6	33/-	55/-
<u>1933.1934.35</u>					
Hobart	44/-T 43/-D	20/-	20/-	28/6	63/-
Launceston	44/-T 43/-D	20/-	18/-	28/6	63/-
Devonport	44/-T 43/-D	20/-	18/-	28/6	63/-
Burnie	44/-T 43/-D	20/-	18/-	28/6	63/-
<u>1936 and 1937</u>					
Hobart	44/6T 39/-D	20/-	20/-	28/6	52/6
Launceston	44/6T 34/-D	20/-	18/9	28/6	52/6
Devonport	44/6T 34/-D	20/-	18/-	28/6	52/6
Burnie	44/6T 34/-D	20/-	18/-	28/6	52/6
<u>1938, 39 (to 22/10/39)</u>					
Hobart	44/6T 39/-D	20/-	20/-	28/6	52/6
Launceston	40/6T 34/-D	20/-	18/-	28/6	52/6
Devonport	40/6T 34/-D	20/-	18/-	28/6	52/6
Burnie	40/6T 34/-D	20/-	18/-	28/6	52/6
<u>23/10/39-1/10/40 (21)</u>					
Hobart	48/6T 42/11D	22/-	22/-	31/4	57/6
Launceston	44/6T 37/5D	22/-	19/9	31/4	57/6
Devonport	44/6T 37/5D	22/-	19/9	31/4	57/6
Burnie	44/6T 37/5D	22/-	19/9	31/4	57/6
<u>2/10/40-15/2/42 (22)</u>					
Hobart	51/2T 44/10D	23/-	23/-	32/9	60/5
Launceston	46/7T 39/1D	23/-	20/7	32/9	60/5
Devonport	46/7T 39/1D	23/-	20/7	32/9	60/5
Burnie	46/7T 39/1D	23/-	20/7	32/9	60/5
<u>16/2/42-31/12/45 (23)</u>					
Hobart	65/7T 50/9D	28/7	28/7	37/1	68/3
Launceston	51/2T 44/2D	28/7	26/-	37/1	68/3
Devonport	51/2T 44/2D	28/7	26/-	37/1	68/3
Burnie	51/2T 44/2D	28/7	26/-	37/1	68/3

cost structure of particular industries. Except in a few cases, where special contracts have been struck and in the case of timber, all interstate rates are quoted on a general cargo basis only.

224. In respect of the data above three points in particular should be noted, viz:-

- (a) the sharp rise in freight levels 1913-21.
- (b) the stability of the rates in the inter war period.
- (c) The wartime inflation of rates as a result of the war risk surcharge imposed in October 1939.
- (d) the differential between the cost of transhipped and direct cargoes.

225. So far as the movements in the rates between 1913 and 1921 are concerned it must be remembered that while world freight rates fell after reaching a record high level in the post war period of 1918-21, in Australian coastal waters there was no such tendency for there was no compensating decrease in the cost of ship operation. The sharp rise in rates was brought about by the increases in wages, coal, victualling and overhead expenses. The average increase in these costs were as follows:- (24)

TABLE VI

Item	% Increase in 1922 on 1913
Labour	63
Deck and Stewards' stores	161
Engineers' Stores	99
Victualling	83
Wages	123
Coal	155

The above increases do not include those directly brought about by the Navigation Act, namely,

- (a) Cost of alterations to vessels to comply with the provisions of the Act.
- (b) Cost of wireless services.
- (c) Cost of extra manning.

266. Table VIII below presents figures for the percentage increase in rates over the period 1939 (30th June) to 1945. It will be observed that apart from the Hobart/Brisbane (transhipped) route the greatest increase in freight costs since 1939 has been on the shortest and most frequently used routes of Hobart/Melbourne and Northern ports/Melbourne.

TABLE VIII

Route	Percentage Increase in Freight Rates 1945
Hobart/Brisbane	Transhipped - 47.19 Direct - 30.78
Hobart/Sydney & Melb.	42.92
Hobart/Adelaide	29.82
Hobart/Fremantle	30.00
Launceston)	Transhipped - 26.34
Devonport) to Brisbane	Direct - 29.90
Burnie)	

as compared with 1939.

- (19) T = including transshipment.
- (20) D = direct shipment.
- (21) 1938-39 rates plus 10% wartime risk surcharge.
- (22) 1938-39 rates plus 15% wartime risk surcharge.
- (23) Some of the 1938-39 rates were advanced at the beginning of this period viz:- Hobart-Brisbane (transhipped), rise of 6d.
Tasmanian Ports - Sydney, rise of 2/-
Tasmanian Ports - Melbourne, rise of 2/-

Launceston) Devonport) Burnie)	to Sydney	42.92
Launceston) Devonport) Burnie)	to Melbourne	44.44
Launceston) Devonport) Burnie)	to Adelaide	29.32
Launceston) Devonport) Burnie)	to Fremantle	30.00

227. The table above does not allow for the additional costs resulting from the wartime shortage of shipping. Very few direct boats have been available for the carriage of goods exported to Brisbane, Adelaide and Fremantle. Hence, shippers now often have no option but to tranship at Sydney or Melbourne at the following additional costs per shipping ton:-

TABLE VIII

Route	Direct Rate 1939 (A)	Direct rate 1945 (B)	Trans. costs 1945. (C)	Total of B & C	% incr. (over pre-war Direct shipments)
Hobart/Brisbane	39/-	50/9	14/10	65/7	66.74
Launceston) Burnie) Devonport)	34/-	44/2	7/-	51/2	50.02
Tasmanian Ports/Adelaide	28/6	37/1	25/4	62/5	117.92
Tasmanian Ports/Fremantle	52/6	68/3	15/6	83/9	59.52

In addition to these extra costs exporters in the south of the State, who normally ship through Hobart, frequently have had to rail goods to Northern ports. Further expenses have been incurred in the form of Storage charges on the Mainland whilst waiting for boats to Adelaide, Fremantle and Brisbane.

228. As noted earlier shipping freight rates on the Australian coast are quoted on a general cargo basis only with the exception of a few special contract rates (e.g. for cement) and rates for timber. Timber rates for the more important Tasmanian trades were as follows:-

TABLE IX

Timber Rates, 1939

Route	Rate per 100 super ft
Launceston/ Melbourne	5/-
N.S. Coast Ports/ Melbourne	5/- (Devonport, Burnie, Stanley)
Ulverstone/Melb.	6/-
Launceston & N.W. Coast ports/Adelaide	7/-
Hobart/Melbourne	5/-

229. Having surveyed the shipping freight rates ruling in those Australian coastal trades relevant to this study, it is now necessary to refer to the problem of rate making. Contrary to two widely accepted notions the rates are rarely determined on the basis of either, (a) the number of sea miles travelled or (b) the cost of ship operation. On the Australian coast the lowest rate per mile is that ruling between the most important ports. For example, between Melbourne and Sydney a distance of 564 miles the rate in, say, 1936 was 20/- per ton and it is the same for Hobart to Melbourne yet the distance is only 470 miles. On a pence per ton per mile basis Melbourne/Sydney cost .348d., whilst Hobart/Melbourne cost .511d., despite a difference of 94 miles. It may be urged that the lower rate between Melbourne and Sydney is due to outside competition but even if such is the case, the competition itself may be attributed to the greater volume of business offering between the two ports. Regarding (b) above, the ship operator recognises that the tonnage available on some routes served will be insufficient to cover running costs and hence a certain degree of discriminatory monopoly has to be exercised in determining rates for the several routes⁽²⁵⁾. Assuming correct judgment on the part of the entrepreneur, the ship operator, the overall result will be an adequate return on total capital invested.

230. The costs of ship operation are difficult to determine and it can fairly be said that little effort has ever been made to analyse the cost of transporting any particular commodity over a certain route. The main items involved in ship operation are as follows:-

- Fuel.
- Port charges.
- Wages (including overtime).
- Insurance.
- Stores and Provisions.
- Repairs and overhaul.
- Commission.
- Hire of gear.
- Wharf labour.⁽²⁶⁾
- Claims.
- Wharf rents.
- General expenses and management.

It should be noted that the above list excludes purely overhead charges such as interest charges and the like. No attempt will be made to analyse each item and relate them to total operating costs for not only are the necessary data not available, but also such detailed analysis would hardly be relevant to this study. We need simply understand that ship operating costs probably set a lower limit in rate making disallowing special considerations involving discriminatory rates.⁽²⁷⁾ The upper limit to be observed is what-the-traffic-will-bear. The rate, in practice, will be determined somewhere between these two (shadowy) limits. A few general comments will be made in respect of several of the above items with special reference to the cost of waterside labour. This latter has been the subject of considerable criticism by exporters who blame the cost of wharf handling for some of the higher rates.⁽²⁸⁾ It is probable that the cost of waterside labour represents as much as 35 per cent of total operating costs. On the other hand the wages of the ship's crew are not likely to exceed 7 or 8 per cent of this total cost.

(24)-Data in Table VI have been extracted from the Report of the Royal Commission on the Navigation Act, 1924. The Commissioners after examining the increased percentage of earnings and costs of certain vessels in the interstate trade concluded that the post war increase in rates was justified. Of course, the Navigation Act was not solely responsible for the increased cost of ship operation. Other factors should be included such as the determinations of the Arbitration Court and the Customs Tariff.

231. Port Charges.

As referred to in Chapter IV port and harbour dues payable in Tasmania compare favourably with those charged by harbour trusts on the Mainland. However, facilities at all ports are inadequate for the expanding volume of the State's trade and the installation of mechanical devices such as the fork truck lift would speed the turn round of vessels. However, it is understood that most harbour authorities in the State are contemplating or planning extensions. The "decentralization" of Tasmania's seaborne trade among a number of small ports is reflected in the freight rates for, obviously, as the distribution of cargo increases rates must tend to rise in proportion.

232. Commission.

Since the main business of a ship is to carry cargo many specialised ways have been devised by shipowners to obtain cargo. It is obvious that a cargo of assorted commodities sufficient to fill all available space is more profitable than a part cargo. Overhead expenses of working the ship must be met whether it is fully or partly loaded. The profits of a voyage depend usually on the last, say, third or quarter of a full cargo. Freight brokers act as go betweens for the shipper and shipowner; the brokerage fee ranges up to 3 per cent. A freight forwarder is an expert in the transportation details of export shipments, especially in respect of the export declaration, consular invoice, bill of lading, marine insurance certificate and so on. Furthermore, an inland exporter can consign goods to the freight forwarder at the port, who will be responsible for booking space on a ship and attend to the requisite papers. The forwarder received a fee from the shipper and also brokerage from the shipowner for service rendered in the form of assembling many small packages⁽²⁹⁾ for shipment in bulk.

233. Wharf labour.

Representations were made to the Stevedoring Industry Commission for data relating to the cost of waterwise labour in Tasmanian ports but the request was refused. A second approach was made after the cessation of hostilities but without success.

The position has undoubtedly been distorted over the war period for the following reasons:-

- (a) Ships have been operated continuously and, in consequence, the amount of overtime worked has caused wide fluctuations in costs.
- (b) The type of cargo handled during the war differed considerably from that handled pre-war.
- (c) Wages have increased (both through increases in the cost of living and overtime rates) but output per man hour has declined.
- (d) The larger cargoes lifted resulted in congestion at the wharves and increased handling costs further.

234. (a) The conditions of work and rates of pay of permanent and casual waterwise workers in Australia are determined by the Federal Court of Conciliation and Arbitration. The last judgment was made by Judge Beeby on 2nd July 1937 and the minimum rates of wages to be paid was fixed at £3.16.0 plus a constant amount of 5/- per week of 44 hours. The above amounts are adjusted every three months according to the position and fluctuations of the Court's "All Items" retail price under numbers, viz:-

TABLE X

Weekly Wage Rates for Waterside Workers

Index No. Divisions.	Rate	Index No. divisions	Rate
	£ S D		£ S D
64.5 - 65.4	3. 16. 0	70.5 - 71.4	4. 2. 0
65.5 - 66.4	3. 17. 0	71.5 - 72.4	4. 3. 0
66.5 - 67.4	3. 18. 0	72.5 - 73.4	4. 4. 0
67.5 - 68.4	3. 19. 0	73.5 - 74.4	4. 5. 0
68.5 - 69.4	4. 0. 0	74.5 - 75.4	4. 6. 0
69.5 - 70.4	4. 1. 0	75.5 - 76.4	4. 7. 0

The amounts of the rates assigned to the index number divisions above do not include a margin of 6/- and the constant addition of 5/- referred to. Any extension of the above table must be of the same construction.

(b) Rates of pay for overtime are prescribed as follows:-

Between 6 p.m. and midnight, Monday to Friday inclusive - ordinary rate and a half.

Between midnight and 7 a.m., Monday to Saturday inclusive - double ordinary rate.

Saturday noon to midnight and midnight Sunday to 7 a.m. Monday Double ordinary rate.

Ordinary holidays -

Between midnight and 7 a.m. - two and a half times the ordinary rate.

Between 8 a.m. and 5 p.m. - ordinary rate and a half.

Between 5 p.m. midnight - double ordinary rate

Sundays and Other holidays - For work done,

between midnight on Saturday and midnight on Sunday, and between midnight and midnight on extraordinary holidays, two and a half times the ordinary rate must be paid.

(c) So far as the conditions of work are concerned the clauses in the award are comprehensive but need not be reviewed here. They include provisions for working through meal hours, time off for smoke-ohs, duty away from home ports, conditions of work in respect of the maximum weight to be lifted per man, the number of men per hold, transfer of labour, times and places of engagement, penalties and so on. The Electrolytic Zinc of Australasia Ltd. and the Mount Lyell Mining and Railway Co. Ltd. are included among those employers exempted from the provisions of the award, since those companies employ permanent hands to work the ships berthed at the companies' wharves. Owing to the importance of a speedy turn round of vessels which is, of course, dependent upon the speed of loading and unloading it is interesting to note the provisions in the award relative to the minimum number of men to be employed to work a hold or on deck loading and unloading; viz:-

(a) Six, if the vessel be more than 500 tons (net register).

(b) Four, if the vessel be more than 100 tons, and not more than 500 tons.

(c) Two, if the vessel be not more than 100 tons.

(25) Examples in relation to Tasmania are the Bass Strait Island and the Ulverstone/Melbourne and Stanley/Melbourne services. A good example of the real determinants of freight rates is obtained from the King Island/Melbourne service. Pre-war the rate ruling for Northern ports/Melbourne was 18/-; that for King Island/Melbourne was 28/6. The margin was to cover the relatively higher cost of running small vessels, the small volume of cargo, the delays caused by weather conditions, lack of cargo-handling facilities and consequent slow turn-round of vessels.

(26) Included, since the rate quoted includes the cost of loading and unloading as well as sea carriage.

(27) Vide para. 229.

(28) Again, the shipping companies stated to the researcher that general cargo often costs £1 to load and unload, a sum exceeding the pre-war rate between Melbourne and Northern ports.

235. An attempt was made early in 1945 to cover employees engaged in the stevedoring industry by a state award under the Wages Board Act, 1920. The determination of the Shipping Wages Board of 4th May 1943 was amended as from 7th March 1945 to include employees in the ports of Hobart, Port Huon, Port Cygnet, Launceston, Beauty Point, Devonport, Burnie, Stanley and Strahan engaged in supervising loading, discharging and stacking of cargo on vessels. The ship operators appealed to the High Court against the new determination and were upheld on the grounds that stevedores belonged to an interstate industry and, therefore, conditions of employment could not be determined by a State Tribunal. However, the Tasmanian legislature recently passed a Wages Board Bill (No. 3 of 1945) providing for a determination to be made in respect of one section of an industry and hence the determination disallowed by the High Court is likely to be reinforced. In actual fact pressure from the stevedores themselves through union circles has resulted in rates of wages and overtime being paid which approximate to the schedule in the award.

236. (a) The determination was made by reference to the "needs" basic wage of £4/10/- a week, with a fixed loading of 4/-, a total of £4/14/- per week. The 'needs' basic wage is that assessed on the Commonwealth Statistician's 'all-items' index number of 1105-1107, being the index number for Hobart, for the December quarter 1944. The award provided that the prescribed wage rates were to be adjusted according to movements in the index, such adjustments to be made on the first pay period in a May, August, November, and February of any year.

(b) The award provided that employees engaged in supervising the receiving, loading, discharging, sorting and stacking of cargo were to be paid at the following rates of pay per week of 44 hours:-

(i)	Permanent employees who are paid for working overtime	8. 4. 0
(ii)	Permanent employees who are not paid for working overtime	9.14. 0
(iii)	Casual employees (per hour)	4. 7½
(iv)	Employees assisting classes (i) or (ii) or (iii) above (per hour)	4. 0

In addition, casual employees had to be paid a minimum of 4 hours' pay for any time worked up to 4 hours, and 3 hours' pay for any time in excess of 4 hours and up to 8 hours. The foregoing rates included a war loading of 6/- per week for permanent hands and 3½d. per hour for casual hands to continue for three years as from 10th October, 1944. Overtime rates were to be computed on the basis of time and a half.

237. Several other factors having a greater or lesser influence in rate making at any particular time may be mentioned, viz:-

- (a) Types of Cargo. Types of cargo which involve special risk take higher rates than general cargo. On the other hand, such commodities as ore and coal which are handled in bulk and by means of special large scale equipment usually take lower rates than general cargo. Some reference will be made in Chapter VII to the possible advantages of the use of "special purpose" as opposed to "general cargo" ships in the interstate trade with special reference to such bulk commodities as cement and timber. However, so far as Tasmania generally is concerned the possibilities of exploiting the advantages to be derived

(29) Represent an important section of Tasmania's export trade.

from large scale transport are slight owing to the large number of ports to be served in Tasmania and the limited tonnage available even when concentrated at one or two centres. It should be noted here that the very fact that small vessels only are suitable to the Tasmanian trades results in higher rates than would apply on runs operated by larger vessels.

For the difference between the working expenses of a large and small vessel is less than the difference between their respective earning capacities.

It will be emphasised in Chapter VII that insofar as sea transport is considered as a factor of production the true measure of the cost of this factor, as is the case with all other factors, is not its absolute purchase price but the proportion which the price bears to the total costs of production⁽³⁰⁾. It is obviously more expensive to carry frozen meat than ordinary cargo, because of the refrigeration equipment and insulation necessary. A brief discussion of some of the structural changes necessary in, say, a fruit ship will show how the character of cargo carried influences rates. A fruit ship is usually faster than a general cargo ship since the capital expenditure involved is approximately 40 per cent more. This higher original cost requires a higher speed with facilities for rapid turn-around in port, if an equal earning power per unit of capital invested is to be obtained. The alternative is to charge higher rates. In practice a compromise results; the fruit ship is several knots faster than a cargo vessel and rates in the trades where these "special purpose" ships ply are usually higher than for trades of comparable length elsewhere. Other reasons for the higher running costs of fruit ships are:-

- (i) Refrigeration apparatus to maintain constant temperatures.
 - (ii) Large number of small hatches, and often side ports, to expedite unloading.
 - (iii) Since bananas, for example, stow 150 cubic feet to the ton the emphasis in construction is on space.
- (b) ^a Competition. Competition as a factor in Australian coastal rate making is largely eliminated by the "Conference" but in cases where a company (e.g. Wm. Holyman and Sons) is outside the Federation there is always the possibility of a rate war when rates could be cut to levels out of all proportion to the cost of service. However, the degree of competition possible at any time is always dependent on the physical conditions determining the degree of freedom of entry into the particular trade.

(30) Where commodities are bulky and realise a low sale value the proportion of freight costs to total costs of production and marketing will be high. In such cases the shipping companies quote special contract rates, e.g. cement is freighted by Holymans' at 11/- per ton from Devonport. Again chaff, a bulky product is carried on a weight basis Launceston/Melb. 22/- per 20 hundredweight. Neither of these rates are proportional to the general cargo rate Devonport/Melbourne and Launceston/Melbourne.

- (c) Competition of markets. Assuming equal costs of production in Tasmania and Victoria for a commodity the exportable surplus of which is to be sold in N.S.W. and that competition for the available market is keen, unless the rate quoted per unit by the shipping companies from Melbourne to Sydney was as high as that quoted for the Hobart-Sydney trip the Victorian manufacturers would capture the market. (On the assumption that the Tasmanian producers refused to cut profits and sell below market price). The company operating the Hobart-Sydney service would then be faced with a loss of tonnage to the Melbourne-Sydney run. In order to equalise the available cargo on a per capita basis some adjustment is likely to be made in the original rates quoted, which were probably based on purely technical consideration.

238. Before concluding this chapter it is necessary to refer to the method of collection of shipping statistics and the distribution of shipping among the several Tasmanian ports. Special provisions in the Customs Act 1901-1936 require the master of any vessel arriving from any country outside Australia or from any other State of the Commonwealth to enter "inward" at the port of entry and similarly on departure the ship must be entered outward. Among the documents which must be lodged by the master of the ship is a form for Statistical purposes setting out the following particulars:-

Name of ship (Details of ship, cargo, ports,
Nationality of ship./crew, passengers).
Steam or motor driven.
Sail or auxiliary.
Net tonnage of ship.
Whether carrying cargo or in ballast.
The original port of departure on the voyage
to Australia.
The terminal port of voyage on departure from
Number of crew. /Australia.

239. These forms are lodged at each port and in addition to the particulars regarding the ship particulars are furnished of the passengers and the tonnage of cargo loaded or discharged. The quantity of cargo is stated either according to weight or bulk according as freight is charged and the bulk cargo is converted to tons avoirdupois on the basis of 40 cubic feet to the Ton. A point of some significance in the statistics of shipping is their limitation in indicating the trading relations or shipping connections between different countries or states inasmuch as it is practicable in a statistical presentation of the direction of shipping to associate only the terminal ports to the exclusion of intermediate ports of call. For instance a liner leaving Sydney for London via Hobart, Melbourne, Adelaide, Fremantle, Durban, Cape Town, Canary Islands will appear in the Commonwealth Statistics as a vessel from Australia to the United Kingdom. In the records of the different Australian ports, of this ship for State and port statistics, the statistical treatment will vary. On leaving Sydney, Melbourne and Adelaide the outward movement of the vessel will be recorded as an overseas vessel departing for the United Kingdom via States; from Fremantle the final port of departure, the record will be (overseas) ship departing direct to United Kingdom. Entering from Sydney (which is the point of commencement of the voyage) into Melbourne, the record will be arrival overseas ship from New South Wales. At Adelaide and Fremantle the records will be overseas ship arriving from N.S.W. via States. It will be noticed, too, that at Melbourne, Adelaide and Fremantle this vessel on its coastal itinerary is recorded twice inward and twice outward, whereas Sydney, the terminal port, records one move-

mont inward and one outward - the entrance into Sydney of this ship represents the termination of one voyage; and the departure from Sydney represents the commencement of another voyage.

240. Similar differences occur in the records of Australian ships in the interstate trade where the intrastate movement becomes a feature. A vessel arriving at Burnie from Melbourne is interstate direct; leaving Burnie for Devonport is an outward local movement from Burnie. Arriving at Devonport it is interstate via ports; departing from Devonport on the return trip to Melbourne is interstate via ports; arriving at Burnie from Devonport is local; departing from Burnie for Melbourne via King Island is interstate via ports; arrival at King Island is local; and departure from King Island is interstate direct. These records apply to the statistics of the several ports; in compiling the results for the State as a whole, however, the arrival and the departure can each be recorded once only, and in the case quoted above the arrival will be credited to Burnie and the departure to King Island; so that if such voyages are frequent, and they are, there will be many more arrivals (interstate) than departures shown at Burnie; and many more departures than arrivals at King Island. The explanation is that the results are for Tasmania as a whole and that for the voyages concerned Burnie is the port of arrival in Tasmania and King Island is the port or place of departure from Tasmania.

241. Table XI below presents data for selected years relating to the total inward and outward tonnage of shipping classified according to the first and last port of call in Tasmania. It will be observed that outward shipping is somewhat more evenly distributed among the ports than inward shipping. Although the figures recorded for Hobart still lead the field in both cases, by 1943-44 there had been a definite shift in favour of the Northern ports - a shift due almost entirely to wartime control of shipping since 1939.

TABLE XI

SHIPPING - OVERSEAS AND INTERSTATE.

PORT RETURNS OF INWARD AND OUTWARD SHIPPING, TASMANIA.

1923-24 - 1943-44

Port	(+) I O	1923-24		1928-29		1931-32		1935-36		1938-39		1943-44	
		Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%
Hobart	I	682,528	49.31	688,586	55.77	747,260	57.19	945,762	47.84	1,058,979	47.47	340,303	42.76
	O	632,430	46.05	615,378	49.15	749,962	57.28	901,562	44.94	934,548	43.68	284,431	37.37
Launceston	I	313,727	22.67	250,646	20.30	282,130	21.59	368,286	18.63	405,454	18.18	115,091	14.46
	O	287,166	20.91	282,345	22.54	272,638	20.82	402,979	20.09	413,949	13.18	114,746	15.08
Burnie	I	181,543	13.2	150,191	12.16	129,535	9.92	376,752	19.01	465,141	20.85	156,119	19.67
	O	193,825	14.48	163,339	13.04	148,605	11.35	431,551	21.51	496,436	21.80	120,872	15.88
Devonport	I	134,272	9.70	81,129	6.57	71,066	5.44	172,215	8.67	173,021	7.76	128,914	16.20
	O	196,134	14.28	133,570	10.67	88,395	6.75	182,904	9.12	257,727	11.31	161,506	21.22
King Island	I	21,740	1.50	21,500	1.74	25,466	1.95	6,200	0.31	11,446	0.51	10,689	1.34
	O	22,400	1.63	21,920	1.75	22,740	1.74	6,377	0.42	11,592	0.51	9,931	1.31
Smithton	I	7,597	0.50	5,542	0.45	4,288	0.33	8,038	0.41	10,257	0.46	3,660	0.46
	O	8,727	0.63	5,688	0.45	4,573	0.35	9,632	0.48	10,498	0.46	3,493	0.46
Stanley	I	24,832	1.80	26,576	2.15	28,669	2.19	66,128	3.35	48,673	2.18	14,915	1.87
	O	12,138	0.88	21,255	1.70	7,831	0.60	35,080	1.75	42,874	1.83	33,044	4.34
Strahan	I	14,202	1.00	9,264	0.75	15,012	1.61	31,092	1.57	46,663	2.07	20,651	2.59
	O	10,065	0.73	6,980	0.56	13,344	1.03	32,699	1.63	46,120	2.03	27,499	3.61
Ulverstone	I	2,538	0.22	-	-	2,110	0.16	1,413	0.07	10,973	0.49	5,514	0.69
	O	4,147	0.30	586	0.05	507	0.10	2,762	0.14	3,042	0.13	5,514	0.72
Total	I	1,383,987	100.00	1,234,589	100.00	1,306,625	100.00	1,976,896	100.00	2,330,587	100.00	795,856	100.00
	O	1,373,199	100.00	1,252,153	100.00	1,309,400	100.00	2,006,239	100.00	2,276,765	100.00	761,086	100.00

Note: The figures tabled above for each port do not take into account coastal movements of shipping. Ships are recorded as arrivals at the first Tasmanian port of call only, and as departures only at the last port of call in Tasmania.

(+) I = inward.
O = outward

CHAPTER VI

AN ANALYSIS OF TASMANIA'S INTERSTATE AND OVERSEAS TRADE

242. Prior to Federation each Australian Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution Act (Section 92). On the expiry of the "book-keeping" period, these records were discontinued as from 13th. September 1910 and the latest published returns were for the year 1909. Later the Governments of Western Australia and Tasmania (in 1922-23) revived the records, and hence statistical data are now available for these states.⁽¹⁾ The fact that practically the total trade of these states is seaborne renders the collection of such data relatively simple. At the Conference of Statisticians held in January 1928, it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities, but to date no such action has been taken by the Bureau of Census and Statistics or by the Government Statisticians in states other than Western Australia and Tasmania.

243. The Government Statist for South Australia publishes limited figures for that State made up from the records of Western Australia and Tasmania, and from various other sources. Since February 1940 statistics in some detail have been collected by the Government Statistician of Queensland. The statistics of interstate trade for New South Wales and Victoria are very meagre. The Melbourne Harbour Trust publishes, in its annual report, the quantities of various commodities of interstate trade loaded and discharged at the Port of Melbourne. The trade with individual states is not disclosed.

244. A word needs to be said at the outset regarding the valuation of imports and exports (overseas or interstate).

(a) With respect to imports, acting upon a recommendation of the Tariff Board the relevant section of the Customs Act 1901-1936 now provides that, when any duty is imposed according to value, the value for duty is to be the sum of the following:-

- (1) (i) the actual money price paid or to be paid for the goods by the importer plus any special deduction, or
- (ii) the current domestic value of the goods which ever is the higher.
- (2) all charges payable for placing the goods f.o.b. at the port of export; and
- (3) 10 per cent of the amounts specified under (a) and (b) above.

Current domestic value is defined by the Commonwealth Statistician as "the amount for which the seller of the goods to the purchaser in Australia (or a State thereof) is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country".

(b) Since 1st July 1937, the following (revised) definitions have been adopted for exports generally:-

- (1) Goods sold to overseas buyers before export - the f.o.b. equivalent of the price at which the goods were sold.
- (2) Goods shipped on consignment - the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods were dispatched for sale.

(1) Collected through the co-operation of the Marine Boards and not the Department of Trade and Customs.

245. The Trade Position. The following table shows clearly the visible balance of trade for the years 1923-24 - 1943-44, viz:-

TABLE I⁽²⁾

Year	Total Trade £'000.	Imports (3) £'000	Exports £'000	Excess Exports £'000	Excess Imports £'000	Exports as a % of Ex- ports.
1923-24	18,652	9,809	8,843	-	965	110.9
1924-25	17,656	8,808	8,848	40	-	99.5
1925-26	17,162	8,451	8,711	260	-	97.0
1926-27	18,843	9,406	9,437	31	-	99.7
1927-28	19,490	9,529	9,961	432	-	95.7
1928-29	18,998	9,235	9,763	528	-	94.6
1929-30	18,936	9,848	9,088	-	760	108.4
1930-31	14,328	7,344 ⁽⁴⁾	6,984	-	360	105.2
1931-32	13,726	6,683 ⁽⁴⁾	7,043	360	-	94.9
1932-33	13,623	6,937 ⁽⁴⁾	6,686	-	251	103.8
1933-34	15,097	7,587 ⁽⁴⁾	7,510	-	77	101.0
1934-35	16,229	8,148 ⁽⁴⁾	8,081	-	67	100.8
1935-36	19,125	9,816 ⁽⁴⁾	9,309	-	507	105.4
1936-37	21,320	10,722 ⁽⁴⁾	10,598	-	124	101.2
1937-38	22,992	11,855 ⁽⁴⁾	11,137	-	718	106.4
1938-39	23,734	11,501 ⁽⁴⁾	12,233	732	-	94.0
1939-40	25,386	12,483	12,903	420	-	97.0
1940-41	25,706	12,120	13,586	1466	-	89.2
1941-42	29,348	13,192	16,156	2964	-	81.7
1942-43	30,607	14,382	16,225	1843	-	88.6
1943-44	33,184	14,391	18,793	4402	-	76.6

246. In view of the many "invisible" factors involved in international exchanges a precise statement of the "balance of payments" as at any particular time for any country is a difficult matter, and the case of Tasmania in this regard is not less difficult than that of most other countries. In Tasmania an important activity is the provision of services for tourists, which has the same effect on the trade balance as an export of goods, though no entry appears on the trade statistics on this account. On the other hand, there are services such as shipping, banking, insurance and so on which enter into the equation, but which cannot be valued with even a reasonable degree of accuracy. Hence, the figures in the above table are those arising from the visible interchange of commodities to which definite value can be given.

247. Subject to these limitations, therefore, there was a large balance of imports over exports in 1923-24. This corresponds with governmental borrowings on Loan Account outside Tasmania and the investment of external capital in local industrial enterprises. From 1924-25 to 1928-29, exports exceeded imports in every instance, the surplus in the latter year reaching the figure of £528,000. In 1929-30, the balance was again largely in favour of imports, the excess amounting to £760,000, despite an export of £426,000 of gold in connection with the Australian exchange difficulty. Again in 1930-31, with gold exports amounting to £120,000 imports were in excess by £360,000 after correcting the sterling values of oversea imports, but in the following year a favourable balance of £360,000 was shown without the assistance of any accumulated gold in the State's exports. For six years the balance again swung in favour of imports to the extent of £251,000 in 1932-33; £77,000 in 1933-34; £67,000 in 1937-38. In 1938-39, however, the balance was again in favour of exports to the extent of £731,600. This favourable balance has been maintained throughout the war years, as might be expected, the percentage of imports to exports falling from 94 in 1938-39 to a record low of 76.6 in 1943-44. In this latter year the excess of the value of exports over imports was recorded as £4,402,000.

(2) This and subsequent tables have been compiled from Statistics of the State of Tasmania, Part IV (Trade and Shipping) prepared by the Deputy Commonwealth Statistician for Tasmania (Government Printer).

248. Table II below presents data relating to the trade per head of the mean population, viz:-

TABLE II
Trade per Head of Mean Population

Year	Imports			Exports			Balance of Trade Excess of Exports		
	£.	S.	D.	£.	S.	D.	£.	S.	D.
1923-24	45.	6.	8	40.	17.	5	- 4.	9.	3
1924-25	40.	15.	7	40.	19.	3	+ 0.	3.	8
1925-26	39.	6.	10	40.	11.	1	+ 1.	4.	3
1926-27	44.	2.	4	44.	5.	3	+ 0.	2.	11
1927-28	44.	10.	2	46.	10.	6	+ 2.	0.	4
1928-29	42.	13.	6	45.	2.	4	+ 2.	8.	10
1929-30	44.	18.	3	41.	8.	11	- 3.	9.	4
1930-31	32.	8.	11	31.	6.	10	- 1.	2.	1
1931-32	28.	18.	2	31.	3.	2	+ 2.	5.	0
1932-33	29.	16.	4	29.	6.	8	- 0.	9.	8
1933-34	32.	8.	7	32.	15.	9	+ 0.	7.	2
1934-35	34.	15.	1	35.	5.	4	+ 0.	10.	3
1935-36	42.	12.	2	40.	8.	6	- 2.	4.	0
1936-37	46.	3.	9	45.	12.	11	- 0.	10.	8
1937-38	50.	8.	9	47.	7.	7	- 3.	1.	2
1938-39	48.	10.	11	51.	12.	8	+ 3.	1.	9
1939-40	52.	6.	3	54.	1.	6	+ 1.	15.	3
1940-41	51.	1.	1	57.	4.	8	+ 6.	3.	7
1941-42	55.	2.	1	67.	9.	9	+12.	7.	8
1942-43	59.	17.	11	67.	10.	6	+ 7.	12.	7
1943-44	58.	19.	4	77.	0.	1	+18.	0.	9

Except for the depression years when both imports and exports per head fell sharply the table reveals a steady upward trend in the dependence of the Tasmanian consumer on trade relations. The rate of increase during the period 1923-24 - 1938-39 is computed at 1.6 percent for imports and 1.8 per cent for exports; and for the period 1923-24 - 1943-44 the rate is 1.6 per cent for imports and 2.1 per cent for exports.

249. Before proceeding to the main section of this chapter, an analysis of the actual content of Tasmania's interstate and overseas trade, it is convenient to refer to the distribution of imports and exports among different countries. As will be observed from the data in Table III the value of Tasmania's interstate trade (1938-39) was 4.76 times greater than the value of her overseas trade. In other words, approximately 80 per cent of the import and export trade of Tasmania is connected with the Mainland States. For this reason, the scope of this study is mainly concerned with Tasmania's interstate trade.

(3) The recorded figures for overseas imports include an allowance for freight and other charges. This is not so for interstate imports. It is estimated, however, that the freight on the latter approximated £400,000 per annum pro-war. This figure has probably increased by £100,000 since 1941-42.

(4) Values calculated for the purpose of this table. The recorded values were:- 1930-1, £7,230,000; 1931-2, £6,534,000; 1932-3, £6,796,000; 1933-4, £7,427,900; 1934-5, £7,963,000; 1935-6, £9,564,100; 1936-7, £10,461,500; 1937-8, £11,466,700; 1938-9, £11,215,500.

250. The percentage distribution of imports and exports among the Australian states, the United Kingdom, New Zealand, other British possessions and foreign countries for selected years is presented in Table IV below viz:-

TABLE IV
PERCENTAGE DISTRIBUTION OF TASMANIAN TRADE
(Percentage of Values £A)

Year	Imports					Exports				
	Aust. States	Unit. King.	N. Zeal.	Other Brit. Poss.	Foreign Coun.	Aust. States	U. King.	New Zeal.	Other Brit. Poss.	Foreign Country
1923-24	81.47	11.35	0.57	1.25	5.36	69.75	16.54	0.40	0.55	12.76
1928-29	80.89	10.85	1.79	0.89	6.07	71.89	12.02	0.16	0.55	15.37
1931-32	91.35	3.78	1.09	0.95	2.83	70.86	18.26	0.16	1.74	8.96
1935-36	89.57	5.34	0.30	1.97	3.81	70.44	16.99	0.27	3.60	8.69
1938-39	87.66	5.74	0.66	1.62	4.28	72.22	16.03	0.11	3.56	8.08
1943-44	90.89	1.79	0.49	0.71	6.12	93.89	2.12	-	0.17	3.81

Imports from Australian states were at their maximum in 1931-32 (trough of depression) and even in 1938-39 the percentage of imports from this source was 6.99 higher than the percentage in the pre-depression boom year of 1938-39. The percentage of exports absorbed by the Australian states reached the abnormal figure of 93.89 percent in 1943-44. However, as soon as normal trading relations with overseas countries are renewed an increasing proportion of Tasmanian exports will be shipped to overseas markets, although one can only speculate in respect of absolute quantities and the distribution as among British and foreign countries.

251. So far as the value and percentage distribution of imports and exports among the several Australian states is concerned data for the years 1938-39 and 1943-44 are presented in Table V below, viz:-

TABLE V
TASMANIAN IMPORTS FROM AND EXPORTS TO
AUSTRALIAN STATES, 1938-39 AND 1943-44

(A) Year	Imports				
	Victoria	N.S.W.	Q'ld	S.A.	W.A.
1938-39					
Value £A	6,981,829	2,585,215	20,377	494,563	408
% Distribution	69.25	25.64	0.20	4.91	0.004
1943-44					
Value £A	9,270,189	2,804,774	1,107	1,004,668	11
% Distribution	70.87	21.44	0.008	7.68	-
(B) Year	Exports				
	Victoria	N.S.W.	Q'LD	S.A.	W.A.
1938-39					
Value £A	3,420,776	4,264,809	613,718	349,883	186,036
% Distribution	38.72	48.27	6.95	3.96	2.11
1943-44					
Value £A	7,705,029	7,580,643	108,7560	1,267,400	244,628
% Distribution	43.67	42.96	6.16	5.82	1.39

Apart from a slight decline in respect of trade with New South Wales⁽⁵⁾ (partly compensated for by an increase with South Australia) there was little change in the relative distribution of imports and exports from and to the five states concerned. Approximately 70 per cent of goods imported are of Victorian origin, whilst nearly 50 per cent of the State's exports were shipped to New South Wales (1938-39). Generally, the direction of Tasmanian exports is a function of the distribution of the Australian population but there are a number of other factors operating as will be observed in Chapter VII.

252. The pre-war year of 1938-39 has been selected as a year of average experience insofar as the product structure and direction of the State's import and export trade is concerned. It will be observed from Table IV that, in 1938-39, 87.66 per cent of exports were sold in Australian markets. In order that the effects of organising for total war on the character of the State's trade⁽⁶⁾ may be observed data relating to the year 1943-44 will be included in the analysis to follow.

253. For statistical purposes goods entering into interstate and/or overseas trade are grouped into twenty one major classes, which are further sub-divided into 301 sub-classes. (The classification of factories used in the Production Bulletin consists of 16 classes with approximately 160 sub-classes). The number of items or sub-classes recorded as exports is only 154. As well as a card number each item is allotted a "statistical number" in connection with the administration of the Customs Tariff. The twenty-one classes mentioned above are listed as follows:-

Class I	-	Foodstuffs of Animal Origin (but excluding living animals).
Class II	-	Foodstuffs of Vegetable Origin
Class III	-	Spirituous and Alcoholic Liquors
Class IV	-	Tobacco and Preparations thereof.
Class V	-	Live Animals
Class VI	-	Animal Substances (mainly unmanufactured) Not foodstuffs.
Class VII	-	Vegetable Substances and Fibres.
Class VIII	-	(a) Apparel. (b) Textiles. (c) Manufactured Fibres.
Class IX	-	Oils, Fats and Waxes.
Class X	-	Paints, Colours and Varnishes.
Class XI	-	Stones and Minerals (including ores and concentrates).
Class XII	-	Metals, Metal Manufactures and Machinery.
Class XIII	-	Rubber and Leather Manufactures and Substitutes (including boots and shoes)
Class XIV	-	Wood and Wicker (raw and Manufactured).
Class XV	-	Earthenware, Cements, China, Glass and Stoneware.
Class XVI	-	Paper and Stationery.
Class XVII	-	Jewellery, Timepieces and Fancy Goods.
Class XVIII	-	Optical, Surgical and Scientific Instruments.
Class XIX	-	Drugs, Chemicals and Fertilizers.
Class XX	-	Miscellaneous.
Class XXI	-	Gold, Silver and Bronze Specie.

(5) Due to wartime rationalisation of transport.

(6) From the point of view of,

- (a) the type of goods entering into trade; and
- (b) the percentage distribution as between states.

254. Special text tables have been prepared which compare the nature and value of imports and exports in the years 1938-39 and 1943-44 according to the country or state of origin. The percentage distribution of the various classes of goods above has been computed for each of the two years under review, viz:-

TABLE III

Tasmanian Imports and Exports from and to Different Countries 1923-24 - 1943-44.

Year	Value of Imports £A (Direct shipments) from -					Value of Exports £A (Direct shipments) to -				
	Australian States	United Kingdom	New Zealand	Other British Possessions	Foreign Countries	Australian States	United Kingdom	New Zealand	Other British Possessions	Foreign Countries
1923-24	7,991,349	1,113,382	55,811	122,727	525,384	6,168,322	1,462,857	35,377	48,658	1,128,013
1924-25	7,127,401	980,661	99,414	90,377	510,607	5,541,927	1,844,887	50,763	57,556	1,313,040
1925-26	6,932,583	834,928	90,689	113,583	479,010	6,132,004	1,084,468	46,567	52,038	1,395,778
1926-27	7,673,368	944,191	88,725	148,530	551,459	6,960,518	1,198,814	30,235	52,872	1,194,932
1927-28	7,887,940	907,125	43,746	145,751	544,204	6,832,367	1,477,124	22,976	52,604	1,575,846
1928-29	7,470,193	956,103	165,474	82,569	560,907	7,018,914	1,173,870	15,525	54,008	1,501,039
1929-30	8,013,572	998,090	161,562	135,801	569,077	6,590,439	1,508,185	39,173	54,283	886,934
1930-31	6,438,849	492,195	50,563	49,043	199,016	4,877,167	1,404,072	22,457	52,978	627,282
1931-32	5,968,950	247,262	71,328	61,750	184,612	4,990,139	1,285,871	11,456	124,357	631,161
1932-33	6,231,574	322,818	21,208	63,293	157,212	4,895,268	1,065,825	20,030	124,824	579,751
1933-34	6,790,706	373,525	48,577	60,867	154,260	5,126,460	1,301,663	26,100	161,372	894,205
1934-35	7,226,139	427,588	29,431	70,013	210,389	5,922,609	1,511,766	28,936	140,221	477,872
1935-36	8,566,835	511,089	28,811	93,064	364,346	6,557,469	1,581,299	25,133	335,337	809,412
1936-37	9,428,880	590,197	29,601	139,395	273,469	7,188,014	1,474,348	26,806	443,730	1,465,778
1937-38	9,926,803	930,075	61,186	112,656	435,978	8,249,446	1,679,273	41,726	235,580	930,604
1938-39	10,082,392	659,687	76,027	186,525	496,951	8,835,222	1,960,428	13,879	434,977	988,646
1939-40	10,890,248	799,733	19,655	250,728	523,231	10,476,992	1,526,769	7,811	357,572	534,083
1940-41	10,937,932	432,098	34,268	450,061	265,332	12,026,589	692,027	6,082	278,748	582,807
1941-42	12,138,243	388,423	20,014	227,460	417,679	14,283,405	613,644	4,976	145,688	1,108,161
1942-43	13,117,873	445,056	24,659	251,978	542,421	15,340,468	156,366	75	74,821	653,617
1943-44	13,080,749	257,775	70,077	102,068	880,497	17,644,600	399,398	22	32,494	716,845

TABLE VI. (a).

SUMMARY OF THE NATURE AND VALUE OF IMPORTS INTO TASMANIA
FROM THE AUSTRALIAN STATES, 1938-39 and 1943-44.

State of Origin	Classes i - iv	Class v - vii	Class viii	Classes xi-x	Class xi	Classes xii & xxi	Classes xiii & xv	Class xiv	Classes xvi - xx	Total All Classes
New South Wales.										
Value £A - 1938-39	1,015,754	60,869	151,604	53,783	163,238	702,535	94,253	42,279	300,900	2,585,215
1943-44	856,082	55,103	185,246	45,893	271,678	879,988	83,403	15,350	412,031	2,804,774
Percentage 1938-39	39.29	2.35	5.86	2.08	6.31	27.17	3.97	1.64	11.64	100.00
Distribution 1943-44	30.52	1.96	6.61	1.64	9.69	31.37	2.97	0.55	14.69	100.00
Victoria										
Value £A - 1938-39	1,452,705	297,316	1,526,858	256,819	32,778	2,146,894	263,066	99,267	906,126	6,981,829
1943-44	2,518,688	800,944	1,728,189	307,693	50,358	2,211,921	277,221	44,698	1,330,477	9,270,189
Percentage 1938-39	20.81	4.26	21.87	3.69	0.47	30.75	3.77	1.42	12.98	100.00
Distribution 1943-44	27.17	8.64	18.64	3.32	0.54	23.86	2.99	0.48	14.35	100.00
Queensland										
Value £A - 1938-39	8,552	92	497	30	49	1480	119	8,615	943	20,377
1943-44	108	-	-	-	-	-	-	999	-	1,107
Percentage 1938-39	41.97	0.45	2.44	0.15	0.24	7.26	0.58	42.28	4.63	100.00
Distrib. 1943-44	0.97	-	-	-	-	-	-	99.03	-	100.00
South Australia										
Value £A - 1938-39	148,201	28,123	7,453	5,149	255,787	38,399	568	1,201	9,282	494,563
1943-44	240,242	127,449	3,108	12,768	525,132	44,504	2200	243	49,022	1,004,668
Percentage 1938-39	29.97	5.69	1.51	1.04	51.72	7.85	0.12	0.243	1.87	100.00
Distrib. 1943-44	23.91	12.69	0.31	1.27	52.27	4.43	0.22	0.024	0.49	100.00
Western Australia										
Value £A - 1938-39	121	222	-	-	-	61	-	-	4	408
1943-44	-	-	-	-	-	-	-	-	11	11
Percentage 1938-39	29.66	54.41	-	-	-	14.95	-	-	0.98	100.00
Distrib. 1943-44	-	-	-	-	-	-	-	-	100	100.00
Totoal All states										
Value £A - 1938-39	2,625,333	386,622	1,686,412	315,781	451,852	2,889,769	358,006	151,362	1,217,255	10,082,392
1943-44	3,615,120	983,496	1,916,543	366,354	847,168	3,136,413	362,824	61,290	1,791,541	13,080,749
Percentage 1938-39	26.04	3.83	16.72	3.13	4.48	28.66	3.55	1.50	12.07	100.00
Distrib. 1943-44	27.63	7.52	14.65	2.80	6.52	23.98	2.78	0.47	13.70	100.00

TABLE VI. (b)

SUMMARY OF THE NATURE AND VALUE OF IMPORTS INTO TASMANIA

FROM BRITISH COUNTRIES 1938-39 and 1943-44.

Country of Origin.	Class i -iv	Class v - vii	Class viii	Classes ix & x	Class xi	Class xii & xxi	Classes xiii & xv	Class xiv	Classes xvi -xx	Total all Classes
United Kingdom										
Value £A. 1938-39	15,105	8,152	62,461	4,080	11,239	274,841	18,626	7,226	124,966	526,696
1943-44	1,166	872	22,222	927	877	163,633	6,565	4	61,509	257,775
Percentage 1938-39	2.86	1.55	11.86	0.77	2.13	52.18	3.54	1.37	23.73	100.00
Distrib. 1943-44	0.45	0.33	8.62	0.36	0.34	63.48	2.55	-	23.86	100.00
Canada										
Value £A. 1938-39	4,258	127	926	176	136	14,864	2,112	29,486	7,598	59,686
1943-44	-	30,235	3,978	1,400	5,269	3,148	-	6,012	980	51,022
Percentage 1938-39	7.13	0.21	1.55	0.29	0.23	24.90	3.54	49.40	12.73	100.00
Distrib. 1943-44	-	59.26	7.80	5.49	10.33	5.83	-	11.78	0.38	100.00
India and Ceylon										
Value £A. 1938-39	120	106	13,511	-	-	-	-	12	310	14,059
1943-44	-	258	2,173	-	-	8	-	-	54	2,493
Percentage 1938-39	0.85	0.75	96.10	-	-	-	-	-	2.20	100.00
Distrib. 1943-44	-	10.35	87.16	-	-	-	-	-	2.17	100.0
New Zealand										
Value £A. 1938-39	1,761	36,574	93	-	17	17,908	-	1	4,346	60,700
1943-44	1,075	29,928	-	-	-	30,227	1	-	8,846	70,075
Percentage 1938-39	2.90	60.25	-	-	-	29.50	-	-	7.16	100.00
Distrib. 1943-44	1.53	42.17	-	-	-	43.18	-	-	12.62	100.00
Other Brit. Possessions										
Value £A. 1938-39	59,194	372	131	249	-	159	-	76	14,996	75,177
1943-44	44,626	21	-	3,265	-	-	-	96	545	48,553
Percentage 1938-39	78.74	0.49	0.17	0.33	-	0.21	-	0.10	19.95	100.00
Distrib. 1943-44	91.91	0.04	-	6.72	-	-	-	0.19	1.12	100.00
Total Br. Countries										
Value £A. 1938-39	80,438	45,331	77,122	4,505	11,392	307,772	20,738	36,804	152,216	736,318
1943-44	46,867	61,314	28,373	5,592	6,146	147,016	6,566	6,112	71,934	429,920
Percentage 1938-39	10.92	6.16	10.47	0.61	1.55	41.80	2.82	5.00	20.67	100.00
Distrib. 1943-44	10.90	14.26	6.60	1.30	1.43	45.83	1.53	1.42	16.73	100.00

TABLE VI. (c)

SUMMARY OF THE NATURE AND VALUE OF IMPORTS INTO TAS-
MANIA FROM FOREIGN COUNTRIES 1938-39.

Country of origin	Classes i - iv	Classes v - vii	Class viii	Classes ix & x	Class xi	Classes xii & xxi	Class xiii & xv	Class xiv	Classes xvi - xx	Total all Classes
Belgium	£A -	£A -	£A 2,488	£A 114	£A -	£A 1,058	£A 2,181	£A -	£A 1,235	£A 7,046
France	589	928	188	450	-	215	147	3	2,851	5,371
Germany	69	-	900	1	-	10,588	908	29	18,859	31,354
Japan	1	-	639	-	-	40	69	9	248	1,006
Netherlands East Indies	-	50	-	134,091	-	-	-	-	3	134,144
Norway	821	-	-	10	-	31	-	-	733	1,595
Sweden	62	3,964	-	1	17	3,103	106	2,695	1,822	11,770
Switzerland	-	-	271	1	1	5,977	9	-	1,245	7,504
United States	902	20,763	396	494	2,682	47,026	247	16,335	5,663	94,508
Other Foreign Countries.	12,612	7,215	3,010	26,497	6	1,343	675	252	50,860	102,470
Total Foreign Countries	15,056	32,920	7,892	161,659	2,706	69,381	4,342	19,323	83,489	396,768
Per. Distrib.	3.79	8.30	1.99	40.74	0.68	17.48	1.09	4.87	21.04	100.00

(7) Figures for 1943-44 are not included in this table because, although the total value of imports into Tasmania from foreign countries was £A880,497, (C. f. 1938-39, £396,768), 96 per cent are classified as "Other Foreign Countries". The most predominant classes were Oils, Fats, Waxes, Paints (£A270,527), and Metals and Manufactured Metals (£A818,352).

SUMMARY OF THE NATURE AND VALUE OF EXPORTS FROM TASMANIA TO THE

TABLE VII (a)

State to which goods were exported. X	I - IV	V - VII	VIII	IX - X	XI	XII & XII	XIII & XV	Class	Total
New South Wales	Value £A-1938-39 1,916,918	Value £A-1938-39 3,127,057	Value £A-1938-39 44,95	Value £A-1938-39 41.30	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44
Victoria	Value £A-1938-39 923,875	Value £A-1938-39 2,085,279	Value £A-1938-39 27,01	Value £A-1938-39 27.06	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44
Queensland	Value £A-1938-39 488,849	Value £A-1938-39 761,491	Value £A-1938-39 79,65	Value £A-1938-39 70.02	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44
South Australia	Value £A-1938-39 71,985	Value £A-1938-39 126,898	Value £A-1938-39 20,57	Value £A-1938-39 12.35	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44
West. Australia	Value £A-1938-39 96,806	Value £A-1938-39 143,739	Value £A-1938-39 52.04	Value £A-1938-39 58.75	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44
Total Australian States.	Value £A-1938-39 3,498,433	Value £A-1938-39 6,244,464	Value £A-1938-39 39.60	Value £A-1938-39 35.39	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44
TOTAL	Value £A-1938-39 8,855,222	Value £A-1938-39 17,644,600	Value £A-1938-39 6.66	Value £A-1938-39 14.50	Distrib. 1943-44	Percent. 1938-39 1943-44	Percent. 1938-39 1943-44	Distrib. 1943-44	Percent. 1938-39 1943-44

TABLE VII (b)

SUMMARY OF THE NATURE AND VALUE OF EXPORTS FROM TASMANIA to

BRITISH COUNTRIES 1938-39 and 1943-44.

Country to which Goods were Exported.	Classes i - iv	Classes v - vii	Class viii	Classes ix - x	Class xi	Classes xii & xxi	Classes xiii & xv	Class xiv	Classes xvi - xx	Total all Classes
United Kingdom										
Value £A-1938-39	1,326,518	344,133	-	1,290	-	275,993	50	12,005	439	1,960,428
1943-44	216,871	90,220	-	-	-	92,274	-	-	33	399,398
Percent. 1938-39	67.66	17.55	-	0.06	-	14.08	-	0.61	0.002	100.00
Distrib. 1943-44	54.30	22.58	-	-	-	23.10	-	-	-	100.00
Canada										
Value £A-1938-39	-	-	-	-	-	-	-	-	-	-
1943-44	-	19,019	-	-	-	-	-	500	-	219,519
Percent. 1938-39	-	-	-	-	-	-	-	-	-	-
Distrib. 1943-44	-	97.44	-	-	-	-	-	2.56	-	100.00
India and Ceylon										
Value £A-1938-39	31,048	17,960	-	-	-	355,479	-	-	228	404,715
1943-44	10,565	-	-	-	-	-	-	-	-	10,565
Percent. 1938-39	7.67	4.44	-	-	-	87.83	-	-	0.06	100.00
Distrib. 1943-44	100.00	-	-	-	-	-	-	-	-	100.00
New Zealand										
Value £A-1938-39	1,222	1,194	-	-	38	2,526	-	6.545	2,354	13,879
1943-44	22	-	-	-	-	-	-	-	-	22
Percent. 1938-39	8.80	8.60	-	-	0.27	18.20	-	47.15	16.96	100.00
Distrib. 1943-44	100.00	-	-	-	-	-	-	-	-	100.00
Other Brit. Possess.										
Value £A-1938-39	27,270	-	21	126	-	1,993	-	416	436	30,262
1943-44	2,410	-	-	-	-	-	-	-	-	2,410
Percent. 1938-39	90.11	-	0.01	0.41	-	6.69	-	1.37	1.44	100.00
Distrib. 1943-44	100.00	-	-	-	-	-	-	-	-	100.00
Total Brit. Countries										
Value £A-1938-39	1,386,058	363,287	21	1,416	38	635,991	50	18,966	3,457	2,409,284
1943-44	229,868	109,239	-	-	-	92,274	-	500	33	431,914
Percent. 1938-39	57.53	15.09	-	0.59	-	26.39	-	0.79	0.14	100.00
Distrib. 1943-44	53.22	25.29	-	-	-	21.36	-	1.15	-	100.00

TABLE VII (c)

SUMMARY OF THE NATURE AND VALUE OF EXPORTS FROM TASMANIA
TO FOREIGN COUNTRIES, 1938-39.

Country to which Goods were Exported.	Classes i - iv £A	Classes v - vii £A	Class viii £A	Classes ix - x £A	Class xi £A	Classes xii & xxi £A	Classes xiii & xv	Class xiv £A	Classes xvi -xx £A	Total all Classes £A
Belgium	28,652	19,154	-	-	127,706	4,716	-	-	-	180,228
France	11,423	120,074	-	-	2,698	-	-	-	-	134,195
Germany	55,858	33,900	-	-	642	-	-	-	-	90,400
Italy	-	75,089	-	-	-	-	-	-	-	75,089
Japan	-	15,270	-	-	-	236,582	-	-	-	251,852
Netherlands	6,754	5,453	-	-	-	-	-	-	-	12,207
United States of America	1,448	16,486	-	-	148,268	-	-	-	-	166,202
Other Foreign Countries	18,360	34,105	5	2,564	-	11,125	-	-	12,314	78,473
Total Foreign Countries	122,495	319,531	5	2564	279,314	252,423	-	-	12,314	988,646
Percentage Dis- tribution.	12.36	32.32	-	0.26	28.25	25.53	-	-	1.25	100.00

(8) Except for a small shipment of foodstuffs worth £1106 all goods exported oversea, to other than British countries, in 1943-44 were bought by the United States (£715,739).

255. Imports from Australian States (Table VI (A))

(a) Now South Wales. Nearly 40 per cent of goods imported from this State in 1938-39 were classed as foodstuffs, liquor and tobacco (Classes I-IV). Apart from the metals group (Classes XII and XXI) distribution among the remaining classes was fairly even. The value of imports from Now South Wales increased from £2,585,215 in 1938-39 to £2,804,774 in 1943-44, an increase of 8.49 per cent, and the percentage of the value of foodstuffs to total trade declined by approximately 9 per cent.

(b) Victoria. Foodstuffs (Classes I-IV), textiles and manufactured fibres (Class VIII), the metals groups (Classes XII and XXI) accounted for 73.43 per cent of goods imported from Victoria in 1938-39. Their relative importance had declined but slightly by 1943-44, although there was some shift in the relative importance of foodstuffs in favour of metals.

(c) Queensland. Although foodstuffs and timber (Class XIV) each represented 40 per cent of imports from Queensland in 1938-39 by 1943-44 foodstuffs had declined to less than 1 per cent. However, the total value of the Queensland trade had declined from £20,377 to £1,107.

(d) South Australia. On the other hand, the value of imports from South Australia was double the pre-war figure in 1943-44. However, wartime controls had little effect on the character of the import trade of mineral ores and concentrates representing in both years over 50 per cent of total value.

(e) Western Australia. Even before the war the value of goods imported from Western Australia was negligible and by 1943-44 the total value recorded was £11.

(f) All States. The total value of goods imported into this State in 1943-44 represented an increase of £2,998,357 or 29.74 per cent over the value recorded in 1938-39. Taking the figures showing the percentage distribution of imports into Tasmania in 1938-39 it is convenient to arrange them in order as follows:

<u>Class</u>	<u>Percentage of Total Imports.</u>
Classes XII and XXI (Metals and Manufactures of metals, including bullion and specie)	28.66
Classes I - IV (Food, drink and tobacco.)	26.04
Classes VIII (Apparel, textiles and manufactured fibres)	16.72
Classes XVI - XX (Miscellaneous n.e.i.)	12.07
Class XI (Stones and Minerals)	4.48
Class V - VII (Live animals, animal and vegetable substances)	3.83
Classes XIII and XV (Materials, raw and manufactured, of rubber, leather, glass)	3.55
Classes XIV (Timber and wood manufactures)	1.50
Classes IX-X (Oils, Fats and Waxes)	3.13
	<u>100.00</u>

256. Imports from British Countries. (Table VI (B))

(a) United Kingdom. The total value of imports from the United Kingdom declined by £1268,921 or 51.06 per cent. However, metals and machinery (Class XII) and Classes XVI - XX maintained their relative importance accounting for 52.18 and 23.73 per cent of total imports respectively in 1938-39, and 63.48 and 23.86 in 1943-44.

(b) Canada. The value of timber imports from Canada declined sharply over the war years, but the value of imported foodstuffs classified under Classes V - VII increased from £127 to

£A30,235 and accounted for nearly 60 per cent of the total value of imports in 1943-44. Metals and machinery also declined both relatively and absolutely.

(c) India and Ceylon. Imports declined by 82.77 per cent or £A11,566. Pre-war the most important items imported were textiles and manufactured fibres.

(d) New Zealand. Although the importation of foodstuffs (Classes V - VII) had declined by 1943-44 as compared with 1938-39, imports of metals and machinery and of goods in the miscellaneous group represented by Classes XVI - XX rose by 40.75 and 103.5 per cent respectively.

(e) Other British Possessions. This group recorded an overall decrease of £A26,624, or 35.42 per cent. In 1938-39 foodstuffs (Classes I - IV) accounted for 78.74 per cent of the total import value and by 1943-44 there had been a further shift in favour of foodstuffs, 1938-39 percentage rising to 91.91.

(f) All British Countries. The most important single class of goods imported from British Countries is metals and machinery (Class XII) although (Classes XVI-XX) accounted for 20.67 per cent of the total value of imports.

257. Imports from Foreign Countries (Table VI (C))

The value of goods imported from Germany, the Netherlands East Indies and the United States, £A31,354, £A134,144 and £A94,508 respectively accounted for 65.53 per cent of the total recorded value of imports from foreign countries. On the product side 79.27 per cent of the total value was represented by Classes IX and X (£A161,659), Classes XII and XXI (£A69,381) and Classes XVI-XX (£A83,489).

258. Exports to Australian States (Table VII (A))

(a) New South Wales. The total value of goods exported to New South Wales increased by £A3,315,834 or 77.75 per cent over the five years of war, but except for minor increases in respect of textiles and the miscellaneous group (Classes XVI-XX), foodstuffs (Classes I - IV) and metals and machinery (Class XII) continued to account for approximately 43 and 23 per cent of total exports respectively.

(b) Victoria. The value of exports to Victoria recorded an increase over the 1938-39 level of 125.24 per cent, or £A4,284,253, by 1943-44. Apart from foodstuffs (Classes I - IV) which account for more than 25 per cent of the total value, the percentage distribution of the various classes of goods is more dispersed than in the case of New South Wales. It should further be noted that the operation of wartime transport regulations has resulted not only in a greater relative increase of exports to Victoria as opposed to New South Wales, but also, by 1943-44, the total value of exports to the former state was £A124,386 more than the value of exports to the latter. Pre-war, the value of exports to New South Wales was worth £A844,033 more than those sent to Victoria.

(c) Queensland. In 1938-39 foodstuffs (Classes I - IV) represented nearly 80 per cent of the value of goods exported to Queensland. By 1943-44 the value had increased by 77.21 per cent and the percentage of the total value represented by foodstuffs had declined to 70.92.

(d) South Australia. Sharp increases in the value of exports classified under Classes XII, XIV and XVI-XX resulted in an overall increase of 193.45 percent, or £A676,857 per cent. The demands of a total war economy have wrought some changes in the volume of different goods exported, the most important being a decline in stones and minerals (27.53 to 9.33 per cent) and an increase in metals and metal manufactures (9.08 to 41.79 per cent).

(e) Western Australia. Finally, in the case of Western Australia it may be observed that the percentage of foodstuffs exported (Classes I - IV) improved to 58.75 by 1943-44, whilst the export of textiles and timber declined to £15,560 and £4,729 respectively.

(f) All States. The outstanding fact to be noted from the point of view of Tasmania's interstate export trade over the period 1938-39 - 1943-44 is the overall increase in the total value of £18,809,378, or 99.71 per cent. Using the data for 1938-39 the various classes of goods exported are arranged in order, as follows:-

<u>Class.</u>	<u>Percentage of Total Exports.</u>
Classes I - IV (Food, drink and tobacco)	39.60
Classes XII and XXI (Metals and metal manufactures, including bullion and specie)	17.52
Class VIII (Apparel, textiles and manufactured fibres)	10.87
Class XI (Stones and minerals)	8.72
Class XIV (Timber and wood manufs.)	7.23
Classes XVI- XX (Miscellaneous n.i.)	6.66
Classes V - VII (Live animals, animal and vegetable substances)	6.43
Classes XIII and XV (Materials, raw and manufactured, of rubber, leather, glass, etc.)	2.78
Classes IX - X (Oils, fats, waxes etc)	0.17
	<u>100.00</u>

259. Exports to British Countries (Table VII (B))

(a) United Kingdom. The pre-war value of Tasmanian exports to the United Kingdom was £1,960,428, 67.66 per cent of which was in the form of foodstuffs (Classes I - IV). By 1938-39 shipping restrictions had reduced the state's exports to £1399,398.

(b) Canada. The Tasmanian contribution to the Australia-Canada Reciprocal Aid Agreement had the effect of opening up a new market for Tasmanian products. Foodstuffs (Classes V - VII) and timber to the value of £19,519 were shipped in 1943-44.

(c) India and Ceylon. Apart from a small shipment of foodstuffs worth £10,000 exports to India and Ceylon by 1943-44 had ceased. In the pre-war year of 1938-39, 87.83 per cent of the total export value (£4404,715) was received for goods classified under Class XII.

(d) New Zealand. The main product exported to New Zealand pre-war was timber, the value of which equalled 47.15 per cent of the total export value. Exports to New Zealand by 1943-44 had virtually ceased.

(e) Other British Possessions. Normally, over 90 per cent of goods exported to other British possessions are foodstuffs classified under Classes I - IV.

(f) All British Countries. Although the total value of exports to British countries declined from £2,409,284 in 1938-39 to £1431,914 in 1943-44 the relative importance of foodstuffs (Classes I - IV) and metals and metal manufactures (Class XII) was maintained. These two classes accounted for 57.53 and 26.39 per cent of the total export value in 1938-39.

260. Exports to Foreign Countries (Table VII (c))

in 1938-39, the total value of goods exported to foreign countries was £1988,646, 53.78 per cent of this total being absorbed by minerals, metals and metal manufactures. Japan imported

metals valued at £A236,582, whilst the United States and Belgium imported minerals to the value of £A148,268 and £A127,707 respectively. Foodstuffs (Classes V - VII) exported were valued at £A319,531 (32.32 per cent of total) the largest shipments being to France (£A120,074) and Italy (£A75,089).

261. Since the cost analysis of Chapter VII will include inward freight charges only in so far as they increase the purchase price of both imported raw materials (and hence force up production costs) and plant and equipment (with higher resultant overhead charges), the following detailed examination of the product structure of Tasmania's interstate and overseas trade will refer only to those goods exported. Data relating to selected commodities for the years 1938-39 and 1943-44 are collated in Table VIII below. In making the selection of specific items to be included cognizance was taken not only of absolute quantities and/or values, but also of the probable difficulty or otherwise of obtaining accurate data relating to the proportion which shipping costs⁽⁹⁾ bear to total costs of production⁽¹⁰⁾ and/or final selling price⁽¹¹⁾. As will be observed in Chapter VII it was not found practicable to analyse the cost structure of all products listed for various reasons.

(9) For the purposes of this study the terms "shipping costs" equals shipping freight rates plus all other incidental charges involved in marketing goods extra-state.

(10) Again, the term "costs of production" may be defined as including:

- (a) the purchase price of raw materials (including transport charges)
- (b) overhead costs (incl. rent, depreciation, etc)
- (c) labour costs (including managerial costs)
- (d) marketing costs (incl. transport costs and selling costs, Chamberlain, of course, would object to the inclusion of selling costs in production costs for he differentiates between pure and monopolistic competition on the basis of the presence or absence of selling costs).

(11) Selling price equals the items included under note (10) above plus a certain pre-determined profit margin.

SELECTED GOODS EXPORTED FROM TASMANIA (OVERSEA AND INTERSTATE)

1938-39 and 1943-44

Article	Unit of Quantity	1938 - 39				1943-44			
		Quantity		Value £/s		Quantity		Value £/s	
		Oversea	Interstate	Oversea	Inter-state	Oversea	Inter-state	Oversea	Inter-state
CLASS I									
Butter	Cwt.	9,391	43,143	62,641	297,777	4,064	17,440	28,811	139,678
Cheese	Cwt.	-	24,936	-	96,317	-	13,051	-	69,928
Fish (Fresh and Other except crayfish)	Cwt.	3	3,653	14	5,977	-	42,591	-	85,887
Crayfish	Case	-	13,968	-	21,477	-	3,455	-	8,240
Bacon and Ham	Cwt.	-	3,018	-	16,285	-	1,177	-	8,249
Lamb and Mutton	Lb.	1,928,438	18,816	53,130	250	4,748,913	26,880	186,122	391
CLASS II									
Confectionery, Cocoa and Chocolate	-	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)
Dried Apples	Lb.	96,008	621,000	1,410	13,860	-	4,032,990	-	174,599
Fresh Apples	Bushel	3,341,065	1,753,864	918,793	528,741	-	1,607,680	-	641,503
Pears	Bushel	244,386	10,690	67,406	3,246	-	10,436	-	3,913
Fruits and Vegetables Preserved in liquid	Lb.	2,720,053	8,532,494	58,740	121,133	-	22,155,784	-	420,382
Fruit Juices and Syrups	Cask	-	660	-	4,972	-	10,933	-	143,519
Pulped Fruits	Lb.	6,190,453	8,816,812	121,422	104,941	-	18,205,707	-	232,720
Barley	Bushel	91,310	52,617	22,678	9,919	-	-	-	-
Beans	Bushel	-	17,821	-	6,898	-	26,515	-	22,115
Oats	Bushel	2,810	169,902	478	30,618	-	22,152	-	4,615
Peas	Bushel	96,240	137,529	37,453	61,912	-	294,782	-	216,948
Flour	Ton	3	2,230	29	26,494	-	960	-	11,151
oatmeal and Rolloed Oats	Ton	2,922	1,049	3,487	21,693	-	783	-	16,860
Hops	Lb.	-	2,037,120	-	146,986	-	1,905,120	-	180,334
Jams and Jellies	Lb.	6,178,948	15,087,865	143,080	353,899	471,224	22,141,145	14,081	642,562
Pickles and Sauces	Case	-	5	-	7	-	35,344	-	25,092
Potatoes	Ton	2	77,045	22	974,266	-	132,408	-	1,631,328

(12) Not available as one firm only is engaged in the export trade.

		1943 - 1944							
	Unit of Quantity	Quantity		Value \$A		Quantity		Value \$A	
		Oversea	Interstate	Oversea	Interstate	Oversea	Interstate	Oversea	Interstate
CLASS III Spirituuous and Al- coholic wines	Gallon	3,450	207,115	741	57,738	-	-	68	63,022
CLASS VI Calf, Cattle and Horse skins, Rabbit skins Sheepskins, with or without wool Wool, greasy Wool, scoured and washed Wool, Noils	Cwt. Lb. No. Lb. Lb. Lb.	- 3,923 249,608 11,730,857 237,523 7,712	20,972 bales 2,172 bales 1,782 3,393,733 - 593 bales	- 533 41,931 622,171 15,960 518	41,229 65,253 18,795 150,594 - 7,867	- 100,802 - 5,423,800 33,904 29,655	18,466 1,036,375 - 1,396,785 - 448,590	- 49,307 3,106 431,796 3,943 3,089	45,613 434,302 26,071 86,034 - 26,393
CLASS VIII Woollen and Worsted Manufactures	Cubic ft.	-	402,526	-	922,062	-	673,584	-	2,628,068
CLASS XI Pyrites Silver lead Tin Wolfram Zinc Zinc residues Limestone	Ton Ton Ton Ton Ton Ton Ton	- 18,050 - 13 269 - -	53,225 - 2,128 299 8,084 37,913 269,340	- 275,974 - 2,698 642 - -	66,914 - 333,786 62,155 52,961 78,071 70,703	- 12,482 - - - - -	30,355 - 1,286 332 5,106 122,153	- 198,720 - - - - -	38,015 - 288,927 146,504 18,328 32,039
CLASS XII Cadmium Copper Zinc Ingots, etc.	Cwt. Ton Ton	1,454 - 42,587	1,887 12,602 28,230	25,570 - 847,692	44,463 568,548 520,334	- - 10,102	33,576 10,256 61,707	- - 227,291	107,261 823,232 1,379,515
CLASS XIV Timber, dressed Timber, logs Timber, undressed n.e.i. Palings Staves, dressed and undressed Pegs Racquets	Super ft. Super ft. Super ft. No. No. No. No. No.	214,166 - 1,097,367 125,420 3,060 - -	4,205,809 216,064 41,209,700 1,499,700 331,552 - -	6,179 - 11,481 1,265 29 - -	86,471 2,890 434,501 15,918 12,376 25,790 39,213	- - - - - - -	8,133,253 45,750 37,910,900 10,100 29,095 - -	- - - - - - -	229,535 435 - 116 991 18,133 1,239

Article	Unit of Quantity	1938 - 1939				1943 - 1944			
		Quantity		Value £A.		Quantity		Value £A.	
		Oversea	Interstate	Oversea	Interstate	Oversea	Interstate	Oversea	Interstate
<u>CLASS XV</u> Cement	Ton	-	66,497	-	239,817	-	22,904	-	82,185
<u>CLASS XVI</u> Paper and Paper pulp	-	-	-	-	-	-	-	-	(13) 1,749,979
<u>CLASS XIX</u> Calcium carbide	Ton	635	5,644	14,606	125,164	-	9,276	-	231,516
Total Export Value of Selected Commodities (A)	-	-	-	3,358,773	6,891,281	-	-	1,146,334	13,187,467
Total Export Value of all Commodities (B)	-	-	-	3,397,930	8,835,222	-	-	1,148,759	17,644,600
Total (A) as Percentage of Total (B)	-	-	-	99.87	78.0	-	-	99.79	74.72

(13) overstated since the figure includes a miscellanea of stationery product.

262. It is not proposed to analyse each item in the table above, (13) but here it should be noted that 51, 29.48 per cent, of the 173 items declared by the Deputy Commonwealth Statistician to be exports are included. The percentages of the total export value of selected commodities (interstate and overseas) to the total export value of all commodities are tabled above, the figure for interstate exports being lower than for overseas exports for each year. A greater diversity of commodities enter the Interstate trade in contrast to the relatively few types of goods exported overseas. Of the 51 items included in Table VIII only 31, or 60.78 percent, were exported overseas in 1938-39. By 1943-44 the values recorded for three commodities had risen and for 28 had fallen. (14) So far as the values of goods exported to interstate markets are concerned 27 rose, and 21 declined (one to zero) over the period 1938-39 - 1943-44. Two commodities, silver lead and scoured wool were not exported to the mainland in either year.

263. Finally, it is necessary to turn our attention to the distribution of the import and export trade among the nine Tasmanian ports (including King Island) for the six selected years in the period 1923-24 - 1943-44. From Tables IX (a) and (b) it will be observed that the concentration of trade in the two main ports of Hobart and Launceston is more marked in the case of imports. However, apart from the increasing trade of the North-western ports of Burnie and Devonport, and the decline in the case of Ulverstone it is difficult to abstract any particular trend in the volume of trade passing through the several ports over the twenty year period under review. As to the effects of wartime shipping controls on the distribution of trade among the ports it should be noted that in 1943-44, 52.99 percent (1938-39, 45.95 per cent) of total imports were landed at Hobart, whilst only 41.35 percent (1938-39, 45.14 per cent) of goods exported were shipped from Hobart. On the other hand the Northern ports handled a proportionately greater amount of exports during the war period than was the custom in pre-war years. Goods produced in Southern Tasmania have, in many instances, had to be railed to Launceston, Devonport or Burnie for shipment involving a considerable increase in marketing costs. (15)

264. Although the product structure of Tasmania's export trade has been analysed (16) some idea of the geographical location of the state's exporting industries may be gleaned by tabulating the recorded values of certain specific commodities according to the port of shipment. Table X includes 82.68 per cent (£10,114,406) of all goods exported from the State in 1938-39.

(13) Vide Chapter VII.

(14) Of the 28 commodities for which the exportable value had declined by 1943-44 21 had ceased to be exported altogether.

(15) Vide Chapter VII.

(16) Vide paras. 260 and Table VIII.

TABLE IX (a)

Recorded Value of Imports into Tasmanian Ports, 1923-24 - 1943-44

Port.	1923-24		1928-29		1931-32		1935-36		1938-39		1943-44	
	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total
Hobart	5,007,915	51.06	4,400,192	47.65	3,259,067	49.9	4,726,146	49.1	5,13,858	45.95	7,626,187	52.99
Launceston	3,311,969	33.77	3,534,140	38.27	2,284,153	34.96	3,370,138	35.24	3,950,614	35.22	4,453,405	30.90
Burnie	549,423	5.60	549,462	5.95	346,305	5.30	558,996	5.80	949,626	8.47	852,998	5.93
Devonport	560,486	5.71	442,976	4.80	317,720	4.86	429,240	4.40	615,737	5.49	757,227	5.26
Ulverstone	139,820	1.43	90,272	0.98	66,282	1.01	91,026	0.95	115,357	1.03	84,563	0.59
Strahan	90,905	0.92	96,705	1.05	165,863	4.63	238,000	2.49	245,467	2.18	291,919	2.01
Stanley	72,573	0.74	45,260	0.49	29,466	0.45	47,991	0.50	56,831	0.51	63,737	0.44
Smithton	45,205	0.46	45,847	0.50	35,212	0.54	59,047	0.62	67,900	0.62	69,491	0.48
King Island	30,357	0.31	30,392	0.33	30,284	0.46	43,561	0.46	57,738	0.51	191,639	1.33
Total	9,808,653	100.00	9,235,246	100.00	6,533,902	100.00	9,564,145	100.00	11,215,478	100.00	14,391,166	100.00

(12) Launceston for these years includes Flinders Island.

TABLE IX (b)

Recorded Value of Exports from Tasmanian Ports, 1923-24 - 1943-44.

Port	1923-24		1928-29		1931-32		1935-36		1938-39		1943-44	
	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total
Hobart	4,759,854	53.82	5,024,809	51.49	3,679,139	52.24	4,629,322	49.73	5,521,241	45.14	7,770,324	41.35
Launceston	1,970,795	22.28	2,593,888	25.66	1,931,331	27.42	2,588,870	26.95	3,070,424	25.10	5,259,960	28.20
Burnie	680,916	9.10	661,370	6.78	461,387	6.55	667,283	7.68	1,376,749	11.25	2,535,030	13.46
Devonport	576,895	6.52	532,307	5.45	322,538	4.57	488,460	5.25	878,136	7.18	1,606,476	8.55
Ulverstone	200,897	2.27	108,131	1.11	40,264	0.57	75,202	0.81	124,960	0.98	16,904	0.09
Strahan	391,050	4.42	541,506	5.55	405,078	5.75	543,456	5.83	725,209	5.92	956,533	5.08
Stanley	123,748	1.40	179,823	1.84	108,378	1.53	175,684	1.89	283,182	2.31	428,002	2.28
Smithton	88,251	0.91	48,851	0.50	31,621	0.45	59,322	0.64	84,273	0.69	67,361	0.46
King Island	51,127	0.58	68,471	0.70	63,228	0.90	81,041	0.87	160,972	1.36	152,769	0.81
Total	8,843,533	100.00	9,759,156	100.00	7,042,964	100.00	9,308,650	100.00	12,233,152	100.00	18,793,359	100.00

Table X

Selected Tasmanian Exports Classified According to Port of Shipment
1938-39

Article	Burnie	Devonport	Hobart	King Island	Launceston	Smithton	Stanley	Strahan	Ulverston.
	£A.	£A.	£A.	£A.	£A.	£A.	£A.	£A.	£A.
Ale and Beer	..	..	55,204	..	207	..	..	..	..
Bacon and Ham	11,013	721	..	..	4,547	..	1	..	..
Barley, Pearl	..	..	2,367	..	..	..	..	..	..
Butter	147,758	881	13,866	28,632	109,245	..	59,044	..	1,062
Cheese	..	..	464	58,604	3,962	10	33,277	..	..
Cider	3	..	2,522	..	8	..	..	16	..
Fish	140	29	19,103	2,010	5,869	..	287	..	..
Flour	..	..	13,140	..	13,383	..	..	..	..
Fruit, Fresh	807	32,401	1,317,184	..	178,272	8	4	..	122
" Dried	..	..	15,306	..	57	..	..	..	..
" Preserved	22	471	177,235	..	2,145	..	..	..	..
" Pulped	..	..	226,300	..	55	..	8	..	..
Hops	..	..	146,986	..	..	..	..	..	..
Jams and Jellies	..	..	496,978	..	1	..	..	..	..
Oatmeal, etc.	..	..	20,427	..	4,753	..	..	..	..
Oats	366	15,303	2,590	..	12,803	..	..	..	34
Peas, Unprepared	6,596	32,613	6,640	..	44,394	..	4,450	..	4,672
" Split	..	..	4,965	..	1,785	..	..	..	..
Potatoes	447,811	311,045	1,204	..	38,654	..	69,593	..	105,981
Apparel, Drapery and Textiles N.E.I.	1,851	83	15,621	539	20,297	109	33	34	580
Carbide	..	..	139,770	..	..	..	..	..	..
Cement	..	239,817	..	..	..	..	..	..	..
Hides and Skins -									
Furred Skins	3,474	105	6,283	161	56,431	50	54	..	304
Sheepskins	2,194	363	33,755	378	21,954	327	22	1,655	78
Other	4,279	780	25,689	387	7,103	363	1,174	857	592
Limestone	..	70,703	..	..	..	..	..	..	..
Metals and Ores -									
Cadmium	..	..	70,013	..	20	..	..	..	..
Copper	..	..	..	..	..	..	..	..	..
Osmiridium	..	..	2,986	..	..	..	..	568,548	..
Silver-load Ore	236,454	..	..	..	..	..	..	..	..
Tin Ore	65,186	..	..	32	39,520	..	..	..	..
					268,568	..	..	..	..

115.

Table X (cont.).

Zinc	..	..	1,368,026	..	..	..	..	..	..
Zinc Residues	..	..	78,071	..	..	..	..	..	..
Machinery and other Metal Manufacts.	7,229	2,483	33,847	876	23,063	264	1,524	3,537	659
Timber -									
Drossed	369	..	786	..	35,353	32,846	21,410	..	1,886
Logs	1,145	..	12	..	75	..	242	1,315	101
Palings	1,789	635	10,648	..	1,419	454	..	..	2,238
Sawn	46,511	19,053	32,331	..	223,835	46,572	21,899	5,401	380
Staves	1,820	847	29	..	763	961	7,393	..	592
Food Manufactures, incl. Pegs & Racquets	1,132	82	33,749	..	41,614	..	..	12	18
ool	676	9	416,488	697	376,327	143	1,780	6	479
oolon Manufactures	2,225	25,233	431	..	894,173	..	..	..	..
Total Value £A Of Selected Commodities(A)	990,850	753,537	4,841,016	92,316	2,431,165	82,112	222,201	581,381	119,778
Total Value of All Goods Exported (B)	1,376,749	878,136	5,523,241	166,972	3,070,424	84,273	233,182	725,209	124,966
Total (A) as a Percentage of Total(B)	71.97	85.82	87.65	55.29	78.8	97.44	78.47	80.17	95.85

CHAPTER VII.

AN EXAMINATION OF THE COST STRUCTURE OF SPECIFIC INDUSTRIES.

265. We have now reached the stage where we are ready to enter on the main task of this study, namely, the measurement of the extent to which shipping costs influence the costs of production and output policies of specific Tasmanian exporting industries.

266. It was obvious from the outset that difficulties would be encountered in making a selection of industries for which a cost analysis should be attempted, for the State's exports are representative of the three main fields of production, namely, agriculture, mineral and manufacturing. (1) So far as the first two categories are concerned freight rates, either rail or sea cannot be considered as exerting an absolute locating effect. But they are a determinant of output policies for on the level of marketing costs depends the profit margin. (2) Since the prices of most agricultural products are subject to wide fluctuations owing to alternating over supply and under supply, it is only to be expected that the ratio of shipping costs to selling price will vary from season to season. In such cases it is, perhaps, more satisfactory to compute the ratio of shipping costs to total costs of production (including marketing costs.) Naturally, a separate approach had to be made for each of the above three sections of the survey, viz:-

- (a) Agriculture. Data were sought from the State Fruit Board, Apple and Pear Acquisition Board, Potato Marketing Board and The Australian Potato Committee and the Tasmanian State Wool Committee. In this group also we may conveniently include meat (State Meat Board of Tasmania).
- (b) Mining. The researcher discussed the shipping problem facing the mining and metal extraction industries with the several companies concerned and in the case of the Mt. Lyell Mining and Railway Company Ltd. and the Electrolytic Zinc Co. of Aust. Ltd. reference was also made to their head offices in Melbourne. Valuable data were also extracted from a thesis entitled "The Tasmanian Non-Ferrous Mineral Industry". (3)
- (c) Manufacturing. From the point of view of the survey this group is the most important, since the freight rate factor can exercise both a definite influence on the problem of location and on the various decisions involved in planning the level of output and markets in which the product is to be sold.

267. In the agricultural and mineral industries the shipping freight problem conforms fairly closely to a certain standard pattern but in the case of manufacturing industries the problem varies widely not only from industry to industry but also from firm to firm.

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- (1) This classification is, obviously, more satisfactory from our point of view than the broader dichotomy of primary and secondary.
 - (2) Especially in respect of agricultural industries.
 - (3) Submitted to the University of Tasmania by T. G. Brinsmead, B.Com. for the Degree of Master of Commerce (1943).

A preliminary list of 112 firms engaged in exporting a proportion of total output to Mainland or overseas markets was prepared by the Deputy Commonwealth Statistician. (4) Many of these firms are, of course, engaged in multi-product production.

268. Data were submitted by a proportion of all the firms contacted; those who failed to do so may be grouped into two broad classes, viz:-

- (a) A small minority who were suspicious as to the purpose of the survey and who were hesitant to reveal information which they feared might not be regarded as strictly confidential.
- (b) The remainder did not consider it worth their while to examine the incidence of sea freight charges on their cost structure because of its relative unimportance in determining their output policy.

269. In respect of those firms which did submit data the outstanding difficulty was to obtain data which were comparable as between individual firms within the same industry, and, from the point of view of the whole economy as between separate industries. (5) Moreover, both the reliability and comprehensiveness of the data varies greatly as between firms and industries. (5) The present researcher has observed elsewhere (6) that the larger the organization from which data are sought the more co-operative is the attitude with which the survey is received. In respect of this particular survey four main difficulties in the collation of data should be noted:-

- (a) The cessation of hostilities in August 1945 meant, in effect, that three periods, each distinct from the other, ought to be considered. The pre-war period which may be regarded as indicative of normal experience for some firms only; the war years 1939-45, with the consequent inflation of the cost structure, distortion of the pattern of production for each individual firm, and the loss of mainland and/or overseas markets; and the present transition period, in which the bulk of the field work was undertaken, is beset with uncertainty, and hence entrepreneurs are naturally cautious in predicting the state of the ultimate post-war market.
- (b) The number of firms from whom data were sought made it necessary to determine upon a standard form of approach. Three different questionnaires were used, with a singular lack of success. A copy of the third draft is included in Appendix A of this Chapter. The basic problem was not merely to overcome the psychological effect of "just another form", but also to adapt the questionnaire to coincide with the particular accounting systems adopted by the individual firms. For example, one firm declared (and we heard no more from them!) that it would take their cost accountant six

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- (4) It is desired to acknowledge the co-operation and assistance at all times of the Deputy Commonwealth Statistician for Tasmania, Mr. H. J. Exley, M.A., F.S.S.
 - (5) Such difficulties are, of course, inherent in all cross sectional studies which aim to survey a single aspect of a wide selection of different industries.
 - (6) "The Location of Industry and Distribution of Employment", Research Monograph, 1944 (University of Tasmania) Chapter III, p. 43.

weeks, working full time with the assistance of two clerks, to arrive at an exact figure for the proportion of total costs of production absorbed by shipping costs. And there were 21 other questions.

- (c) The above difficulty was further emphasised by the fact that few firms can easily be persuaded to divulge to an outside organisation a cost breakdown, for, naturally, costs are a cherished secret and partly determine the basis of present-day monopolistic competition.
- (d) Finally, the depletion of administrative staffs over the six years of war made it difficult for firms to extract current statistical information, let alone that for a number of pre-war years. The figures in a number of cases are averages and hence suffer the usual limitations of averages. Nevertheless, they give a useful indication of the actual position from year to year and the limits of probable variation are not wide.

270. Reference has been made in paragraph 269 (b) to the difficulties involved in compiling a suitable questionnaire which would enable comparable data to be collected and at the same time allow for a wide diversity in respect of the freight rate problem for each individual industry. As a first step two sample industries were selected for analysis, namely, cement and patent racquets, the former being a bulky low-priced product, whilst the latter although light and highly-priced, presents some cost difficulty in packing for shipment and also, being a luxury product, is dependent upon the prevailing pattern of consumer preference and the state of demand generally. Moreover, being such a product, competition is on the basis of price, and quotations usually vary around a small unit and hence an added cost of say 6d. per racquet might place the Tasmanian producer at a considerable disadvantage when competing on Mainland and/or overseas markets. Cement, on the other hand, represents perhaps the classic example of the effects of freight costs on the production of a bulky and at the same time low-priced commodity. Except in the case of such products as textiles and the previously noted tennis racquets, where competition for the available market is keen and competition is on the basis of a narrow price margin in any case, the freight rate item cannot be considered in vacuo, but must be compared with final selling value. In other words, a freight cost of say £100 in respect of any two commodities may represent 3 per cent of final selling price in the case of commodity "A" (total annual selling value of £30,000), and 30 per cent in the case of commodity "B" (total annual selling value of £3,000). In addition, the profits realised from the sale of commodity "A" might represent say 15 per cent of final selling price, and in the case of commodity "B" 1.5 per cent of final selling price.

271. Such was the general picture which was confirmed by the initial survey of the cement and the patent racquet industries, and in the light of the experience gained the original questionnaire used as a basis of discussion when the researcher interviewed the two companies concerned, was re-drafted in a less simplified form. When it became obvious that to attempt an analysis for many small firms would be impracticable, owing to the limited nature of their accountancy systems, this second questionnaire was finally re-drafted as in Appendix A. Considerable criticism has been levelled at the questionnaire, but, since in the case of every firm surveyed, the sending out of the questionnaire has been followed up by a personal interview, it has been possible to emphasise that it was not intended that every question should be relevant. Again, in the case of a number of industries of widely

differing characteristics the particular approach adopted by the questionnaire has proved to be quite suitable.

272. It was intended that the survey should trace through for each individual industry the effects of shipping costs (vide para. on individual industries from the importation of raw material, manufacturing accessories, and plant and equipment, through to the exportation of the finished product to Mainland and/or overseas markets. It is convenient to summarise briefly the 21 questions included in the questionnaire in order that their logical connection might be appreciated, viz:-

- (a) In the case of a firm engaged in multi-product production annual figures for each product were sought, and if the firm did not desire to reveal actual production figures the percentage which each product bears to total output was asked as an alternative. If production was subject to wide annual variations and/or was affected by wartime controls the firm was asked, in addition, to quote figures for a normal pre-war year.
- (b) The sources of the raw materials for the manufacture of the particular product or products, and the average annual quantity consumed of each, revealed whether the particular industry concerned was dependent upon local or Mainland (overseas) raw materials. (Note also stock investment risks and losses when isolated from raw material markets making it necessary to carry much larger stocks than manufacturers in mainland capitals).
- (c) The market in which the product is sold and the quantity (or proportion) which each absorbs. This is the crux of the freight rate problem, for obviously the smaller the percentage of output exported the smaller the total shipping cost, and hence the smaller the proportion of total production costs absorbed by shipping costs. However, it is more likely that the limited local market in Tasmania (7) will make the successful marketing of a considerable proportion of total output in Mainland and/or overseas markets necessary in order that production may be expanded to that point of equilibrium where final selling price (or alternatively, the average selling price for each market) is equal to total costs of production (including marketing costs) plus a normal return on invested capital. Such a point of equilibrium is, of course, not identical with the point of optimum output under monopolistic competition, which is that output at which total profits are maximised. In the case of nearly all the industries surveyed it will be observed that the limited Tasmanian market absorbs but a small percentage of total output, and this is the case for practically every secondary industry in Tasmania employing more than 20-25 wage earners.

(7) Calculating on a population basis the following general picture emerges:-

<u>Manufacturers in:-</u>	<u>Home State</u> <u>Market.</u> <u>%</u>	<u>Market Outside Home State</u> <u>i.e. in shipping category</u> <u>%</u>
Now South Wales.	39.5	60.5
Victoria.	27.5	72.5
Queensland.	14.3	85.7
South Australia.	8.8	91.2
Western Australia.	6.6	93.4
Tasmania.	3.4	96.6

The figures above understate the position insofar as manufacturers probably enjoy greater per capita sales in their own states thus giving a further advantage to the larger states.

- (d) We have already seen that the terms "shipping freight rate" and "shipping costs" cannot be regarded as identical terms for the very fact that shipping freight rates are incurred implies that a number of additional charges have also to be paid. The term "shipping freight rates" in general includes the cost of loading and unloading at the wharves, sorting and stacking and the actual cost of sea carriage. (8) So far as items other than the actual freight rate are concerned those included under the heading "shipping costs" should only be those incurred by virtue of the necessity to ship. For example, cartage to the waterfront should not be included for a similar expense would be incurred whether the commodity was sold on the home or mainland (overseas) market. The following may be noted at this stage as being of fairly general application, (9) viz:-

- (i) Special packing for sea carriage.
- (ii) Export and import wharfages.
- (iii) Storage charges.
- (iv) Agency, commission and other charges involved in selling away from Tasmania.

In the above list marine insurance has been omitted owing to the difficulty of obtaining true f.o.b. values of exports. In any case the omission is not a serious one for in the case of low priced commodities the cost of insurance is very small; whilst in the case of highly priced commodities although the cost is higher, it is of relatively little consequence for the very reason that total shipping costs are not either a locating factor or a determinant in output policy. The following table presents data relating to present rates of marine insurance, viz:-

TABLE I.

	Melbourne	Sydney	Brisbane	Adelaide	Perth.
Marine Insurance	5/9%	7/3%	9/3%	8/-%	11/-%
less discount	15%	15%	15%	15%	15%
Stamp Duty	3d.%	3d.%	3d.%	3d.%	3d.%
War Risk Insurance	2/6%	2/6%	2/6%	2/6%	2/6%

- (e) Comments were then sought regarding each item comprising the term "shipping costs". For example, an attempt was made to arrive at some conclusion in respect of the costs for loading and unloading vessels at the wharves. The continuance of the 30 per cent war surcharge since the cessation of hostilities was subject to considerable criticism.
- (f) The method by which the production is quoted on the market -
- (i) F.O.B. SALES. The seller delivers the goods on the export wharf, is responsible for getting the

- (8) During the war years and up to the present time (March, 1946) the ordinary rates quoted have been inclusive of the special war surcharge.
- (9) Another general item is interest on working capital tied up in goods in transit and in excess of stocks over and above the quantity which would be held if the factory were in close proximity to the market.

shipping documents prepared, and is paid, usually in full but sometimes only in part on clearing the bill of lading. The buyer's responsibility then begins, freight and insurance being payable by him as well as the usual costs at the overseas end. F.o.b. selling enables the exporter to receive quick payment on shipment and he avoids the risk of overseas marketing associated with price fluctuations and, in some cases, bad carriage.

- (ii) C.I.F. SALES. Shipments made on ordinary consignment, local freight, interstate freight and other charges being paid by brokers and charged against the account sales, the net proceeds being remitted to the consignor. No advances are made against these consignments. With efficient agents the exporter gets a fairly quick return. Oversea consignments are now of two main types, namely:-

- (A) Ordinary consignments. The goods are shipped to brokers who make an advance, by means of a confirmed credit arranged with a local bank, to cover costs of shipping with a varying margin over and above these costs. After a sale has been effected the broker renders an account sales showing returns, less costs, commission and advance. If there is any surplus remaining, this is credited to the exporter by the broker's representative.
- (B) Assignments on guaranteed advance. This differs from the ordinary consignment in the respect that the advance made by the broker is a guaranteed minimum, virtually a minimum f.o.b. price. Naturally, this advance is in excess of the usual advance but somewhat below the current f.o.b. equivalent. If returns fail to cover the advance, brokers' commission and consolidated charges, the broker has no claim on the consignor for the deficiency. On the other hand, if returns exceed these charges, the surplus accrues wholly to the consignor.

In a number of cases (e.g. chocolate) the product is quoted f.o.b. factory, freight allowed, this being done in order to place distributors in the various markets on an equally competitive basis. Again, f.o.b. factory freight allowed is used as a means to enlarge market areas in order to increase the volume of production, the local market in Tasmania being so limited. Under the freight allowance plan buyers situated at the point of production pay the same delivered prices as those located in, say, the comparatively distant markets of Western Australia and Queensland. The manufacturer, however, receives a rate of profit which is proportionately reduced as a higher freight burden is absorbed. The successful operation of the freight allowance system requires a factory base price high enough to return sufficient revenue in nearby markets to enable the entrepreneur to absorb the freight charges to more distant markets and still leave a satisfactory overall rate of profit. As a result of such freight absorptions, differing rates of profit are received from each group of buyers without a corresponding difference in the nature of the product or in terms of sale.

- (g) Questions 7, 8 and 9, relating to the items covered by the charge made by the shipping companies proved to be redundant as in every case (with an exception in the case of such commodities as cement) the freight rate charged for each product is the rate quoted for general cargo. However, attention was drawn in many cases to the inflation of freight rates since 1939 due to the imposition of the war surcharge.
- (h) Having collected all the necessary preliminary data the approach then shifted to the relation of shipping costs to production costs and the final selling price, viz:-
- (i) The proportion which shipping costs bear to the price paid for imported raw materials and the amount by which total costs of production are increased.
 - (ii) The extent to which freight rates payable on the importation of plant and equipment increase overhead costs. In so far as the machinery imported is manufactured overseas, all manufacturers throughout Australia are affected equally for the landed price is equalised. However, insofar as the machinery is imported from a Mainland state the higher purchase price, as a consequence of the shipping charges payable, may react unfavourably on overhead costs.
 - (iii) Finally, with regard to the marketing of the finished product on Mainland and/or overseas markets the proportion of final selling price absorbed by shipping costs was sought. If the product was sold f.o.b. an attempt was made to estimate a figure on the assumption that the product was sold at the point of consumption. (c.i.f.)

It will be observed that (i), (ii) and (iii) represent two separate costs of "isolation", namely, (a) the higher prices that must be paid for raw materials and manufacturing accessories and (b) the extra costs incurred by virtue of the necessity to ship the finished product to the point of sale. (10) Although the ratio of shipping costs to final selling price may be subject to much variation from year to year, it is to be preferred to the ratio of shipping costs to total costs of production since that latter figure is normally exclusive of profit, leaving aside the concept of normal or entrepreneurial profit. It may be argued, of course, that the State's exporting industries must be able to bear the burden of shipping costs, as otherwise they would not continue to export but such an argument presupposes a frictionless economic system which is far from being the case. There may be no other available markets and great difficulties in changing over to different forms of production, both of which apply to say the cement, chocolate and apple industries. This could

(10) Actually, the cost of exporting to an overseas market is not one of the costs of Tasmania's isolation in the same sense as isolation from mainland markets, for all Australian producers are equally placed in respect of the former.

result in acceptance of less than the full costs of production with a consequent lowering of living standards and/or the maintenance of production by Government grants, either directly, as bonuses on production or exports, or indirectly, through cheap credit, low freight rates, writing off debts due by producers to Governmental agencies, and through various other less important channels.

- (i) It was then necessary to consider some aspects of the Tasmanian producers' rivals on Mainland or overseas markets.
 - (i) With regard to the rival's cost of production the extent to which they are affected by transport costs (either rail or sea) in obtaining supplies of raw materials. In a very optimistic frame of mind an additional question was included in respect of the relative positions of the home and rival producers' costs of production.
 - (ii) On the assumption that shipping costs increase the price at which the Tasmanian product has to be offered in order to realise a satisfactory return, data were sought regarding the effects on the (Tasmanian) exporters' competitive position on mainland and/or overseas markets. Or, alternatively, if the Mainland producers' price has to be accepted, the extent to which the proportion of price going to profits is absorbed by shipping costs.
 - (iii) Summing up, the returns from a unit of the product sold on the various markets were compared. In some cases very full data were submitted revealing the advantage derived from selling in Tasmania and thereby incurring no shipping costs. In other words, ceteris paribus, insofar as the product is marketed on Mainland or overseas markets, profits are reduced pari passu with the level of the shipping costs payable.
- (j) In many cases, one market (e.g. Victoria) absorbs the bulk of the total output of an industry. The reason was often stated to be that "the market was there". An enlightening answer to say the least. The real reasons vary from population questions to proximity to Tasmania, to consumer awareness (e.g. pie apple), to the absence of competition from producers in other states (due to the effects of rail freight rates etc.), to the absence of transshipment charges, to comparative production costs.
- (k) The resulting effects if shipping freight rates were lowered by shipping companies with the help, say, of a Governmental subsidy. It is considered that the extent to which Tasmanian producers are protected by an artificial screen of sea freights has been exaggerated in both State Government and academic circles. Admittedly, a lowering of the ruling rates may leave the Tasmanian market open to Mainland producers, but this market represents such a very small proportion of the overall Australian market. Tasmanian producers would, on the other hand, have access to the extensive

markets of the Mainland capital cities. However, it must be admitted that the small local producer of non-exportable commodities may find himself in competition for the home market with Mainland companies operating under a much lower cost basis. Moreover, the mainland market is not available to him owing to his high costs of production.

- (l) The extent to which pre-war and/or present ruling freight rates need to be lowered in order to place the Tasmanian producer in a satisfactory trading position on Mainland and/or overseas markets, and the extent to which it would be possible to sell the product not only in greater quantities on present markets, but also to extend to other markets. The elimination of sea freight would improve the Tasmanian producer's present position as he would thus avoid one of the costs not borne by his competitors. For example, a New South Wales manufacturer bears no outward sea freight charges in placing his goods on the Sydney market, nor does a Victorian manufacturer in placing his goods on the Melbourne market, but the Tasmanian manufacturer must pay freight costs to all states and then still pay the distribution costs which are common to all manufacturers distributing from each capital city.
- (m) The freight rate item is one determinant in the location of industry, and hence, if shipping costs do represent a high proportion of total costs of production, and if the particular industry does export most of its output to the main centres of population on the mainland, other factors must have weighed more heavily when the decision was made to locate in Tasmania. What these decisions were proved to be varied. The whole question of the relation of freight rates to the location and decentralisation of industry will be more fully discussed in Chapter VIII.
- (n) The possibilities of making a contract with the shipping companies at lower rates on the assumption that an increased and steady quantity of cargo could be guaranteed. Reference was made to the monopoly enjoyed by the shipping companies, and little hope was founded in the economies of large scale transport.
- (o) Tasmania's export trade over the war period was affected not only by rising freight rates, but also by direct Governmental control of shipping space. It was found to be important to consider the extent to which this control has affected the competitive position of an industry in its pre-war markets. Again delays in shipping movements have meant that there are extra storage charges at the point of export and the burden of finance is also greater. If the exporting company is selling f.o.b. then no return is received until the product is loaded on the ship. But the company still has to meet its wages bill and other current expenses of production. A long period of waiting requires a fund of liquid capital, or ready access to credit accommodation involving extra costs.
- (p) A general observation was invited regarding the steps desirable to offset the disadvantages of insularity. In the following discussion special reference will be

made to the provision of "special purpose" as opposed to "general cargo" ships in the interstate trade, so lowering costs for those bulk commodities exported in large quantities.

273. Only those industries for which most reliable and complete data were available are included below.

274. CEMENT. In pre war years the total consumption of cement in Australia amounted to over 850,000 tons per year, having reached this level by a gradual though steady increase from the record low figures reached in 1931-32 when the total Australian trade was below 400,000 tons per year.

275. From Table II (page 126) it will be seen that the Tasmanian industry at Railton has established an export trade to all Mainland states except Western Australia, with Victoria as the main market, normally accounting for over 50 per cent of total output. Peak production was reached during the year ended 30th September, 1940 with a total of 93,428 tons despatched, of which 27,099 tons (or 29 per cent) only were consumed in Tasmania.

276. The figures showing exports as percentages of total recorded production reveal that there has been a distinct falling off in the export trade compared with the pre-war level. This has been solely due to the shortage of shipping space, since Tasmanian cement was not granted a high priority whilst supplies for defence and other constructional works were available from Mainland producers. Of course, with the decline in the defence programme the over-all Australian consumption of cement decreased, and is only now reviving with the post-war return to private and public building programmes.(11)

277. Table III below indicates that the consumption of cement on the home (Tasmanian) market has exceeded the pre-war average of 30 per cent during the years 1942-44. The total production on the other hand, has declined steadily since 1940, and the 1944 output represents only 30 per cent of the pre-war (1939) production.

TABLE III.

Year Ended.	Consumed in Tasmania. (Tons)	Total Recorded Production.
30.9.1938.	22,439 (27.5%)	82,772
30.9.1939.	22,718 (25.2%)	90,042
30.9.1940.	27,099 (29.0%)	93,428
30.9.1941.	21,450 (26.0%)	82,532
30.9.1942.	23,068 (37.5%)	61,343
30.9.1943.	18,116 (39.0%)	46,300
30.9.1944.	13,335 (35.6%)	37,489
Total 1938-44.	148,225 (30%)	492,906

278. Although the industry is located at the source of raw material, inward freight rates on manufacturing accessories are incurred. Limestone, clay and ironstone are obtained from local deposits,

(11) For a discussion on the economics of Tasmanian cement see C. P. Haddon-Cave, "The Location of Industry and Distribution of Employment", Research Monograph, 1944 (The University of Tasmania). Ch. III, pp.13-19.

TABLE II.

EXPORTS OF TASMANIAN CEMENT 1938 - 1944.

(Unit of quantity - tons)

Year Ending	EXPORTS (DIRECT SHIPMENT) TO					TOTAL	EXPORTS AS PERCENTAGE OF TOTAL RECORDED PRODUCTS *					TOTAL.
	Victoria	N.S.W.	Queensland	S.A.	Overseas		Victoria	N.S.W.	Queensland	S.A.	Overseas	
30.9.1938	42,725	9,179	4,970	2,441	-	59,333	52.2	11.2	6.1	3.0	-	72.5
30.9.1939	50,812	8,222	6,240	2,050	-	67,324	56.4	9.2	6.9	2.3	-	74.8
30.9.1940	51,414	7,092	5,791	1,837	195	66,329	55.0	7.6	6.2	2.0	.2	71.0
30.9.1941	46,676	5,441	4,807	4,158	-	61,082	56.5	6.6	5.8	5.1	-	74.0
30.9.1942	28,924	3,497	4,085	1,769	-	38,275	47.2	5.7	6.7	2.9	-	32.5
30.9.1943	19,979	1,183	3,477	1,545	-	28,184	43.25	2.6	11.8	3.35	-	61.0
30.9.1944	16,051	1,326	2,590	1,482	3,005	24,154	42.8	2.7	6.9	4.0	8.0	64.4
TOTAL 1938-1944.	256,581	35,658	33,960	15,282	3,200	344,681	52.1	7.4	6.8	3.1	.5	70.0

whilst coal is brought from the East Coast mines. Gypsum is imported from South Australia and paper bags, spare machinery parts, bricks, etc. are also imported from the mainland. Annual inward freights paid reached their peak in 1940, but have since declined to £2276 (1944) viz:-

ANNUAL INWARD FREIGHT COSTS PAID (£)

Commodity.	1938	1939	1940	1941	1942	1943	1944
Baggs	1736	1697	2092	1939	1425	569	607
Gypsum	2579	2296	2640	2737	2787	988	1385
All other	559	303	585	478	501	532	284

279. Inward freight charges on raw materials and plant do not unduly increase production costs although it should be noted that, if the rates were lower on coal, Newcastle coal would be used since the Tasmanian product contains 20 per cent ash and the necessary burning temperature is, therefore, not easily reached. Approximately 22 per cent of Tasmania's annual production of coal is burnt in the cement kilns. Table V below presents data relating to the quantity and value of coal produced for the years 1938-43, and it will be observed that the level of output has been steadily increasing, with a slight fall in 1940. Reference has previously been made (12) to the relation of a lowering of the ruling freight rates and the consequent lowering of the "protective" screen (if there is one) provided by the high rates. It was denied that the advantages to be derived by Tasmanian exporters from the resultant widening of the market would be outweighed by the loss of markets that might result by Mainland producers underselling Tasmanian products. The case of coal, a factor used in the productive process, is somewhat different. Would the increased efficiency resulting from the burning of Newcastle coal (purchased at a nearly comparable price through reduced rates) by all industries requiring high burning temperatures in manufacture, be equal to, or greater than the cutback in coal production with consequent disemployment of both labour and capital? An answer here is not possible.

TABLE V.
Tasmanian Coal Production 1938 - 43.

Year.	Quantity. (Tons)	Value. (£A)
1938	83,753	61,991
1939	99,392	74,460
1940	83,136	63,688
1941	109,714	85,311
1942	134,442	108,241
1943	145,882	117,361

280. Reference has already been made to the several markets in which cement is sold and the proportional amounts which each absorbs. The following table presents confidential data with respect to the percentage of selling prices in four states, for the years 1938-44, absorbed by shipping freight rates (not shipping costs):-

(12) *ibid.* p. 272 (1).

Similarly:-

Victoria: 30.9.1944

Price = 10% loss, plus 20% freight, plus 90% other costs.

New South Wales: 30.9.1938.

Price = 12% profit, plus 18% freight, plus 70% other costs.

30.9.1944.

= 6% loss, plus 26% freight, plus 80% other costs.

Queensland: 30.9.1938.

Price = 10% profit, plus 33% freight, plus 57% other costs.

30.9.1944.

= 11% profit, plus 36% freight, plus 53% other costs.

South Australia: 30.9.38.

Price = 11% profit, plus 17% freight, plus 72% other costs.

30.9.44.

= 8% loss, plus 24% freight, plus 84% other costs.

283. The wholesale prices of cement per ton ruling in the above four markets for the years 30.9.1939 to 30.9.1944 have been collated and are present below:-

TABLE VIII.

Year.	Sydney ⁽¹⁴⁾	Melbourne ⁽¹⁴⁾	Queensland ⁽¹⁵⁾	S.A. ⁽¹⁶⁾
1938	90/-	86/-	86/-	87/-
1939	88/3	83/9	86/-	97/-
1940	87/6	83/-	82/-	87/-
1941	92/1	80/-	77/6	87/-
1942	97/2	80/-	73/6	87/-
1943	100/4	83/4	73/6	87/-
1944	100/4	84/4	73/6	87/-

We may now derive absolute figures as the components of the ruling prices for the years ending 30th September, 1938 and 1944, viz:-

N.S.W. 30.9.1938.

Price (90/-) = Profits (10.8 shillings), plus freight (16.2 shillings), plus other costs (63.0 shillings).

30.9.1944.

Price (100/4) = Profits (6.0 shillings), plus freight (25.5 shillings) plus other costs (80.5 shillings).

(14) Sydney (Portland) and Melbourne (Aust. A.R.C., Portland Standard Specification) prices supplied by the Commonwealth Statistician Canberra.

(5) Supplied by the Queensland State Stores Board, the biggest buyer of cement in the State and hence it obtains a somewhat more favourable price than commercial buyers. Contractors - the Queensland Cement and Lime Company Ltd.

(16) Supplied by the Government Statistician, who contacted the two firms manufacturing cement in the State. The price quoted is subject to a 6/- addition if the cement is delivered in the metropolitan area.

Victoria: 30.9.1938.

Price (86/-) = Profits (12.0 shillings), plus freight (11.2 shillings), plus other costs (62.8 shillings).

30.9.1944.

Price (84/-) = Profits (8.4 shillings) plus freight (16.9 shillings), plus other costs (75.8 shillings).

Queensland: 30.9.1938.

Price (86/-) = Profits (8.6 shillings), plus freight (28.6 shillings), plus other costs (48.8 shillings).

30.9.1944.

Price (73/6) = Profits (8.1 shillings), plus freight (26.5 shillings), plus other costs (58.3 shillings).

South Australia:

30.9.1939.

Price (87/-) = Profits (9.6 shillings), plus freight (14.0 shillings), plus other costs (62.6 shillings).

30.9.1944.

Price (87/-) = Profits (7.0 shillings), plus freight (20.9 shillings), plus other costs (73.1 shillings).

284. The wholesale price of cement in Tasmania has been 90/6 per ton on trucks at Hobart railway station for some years. - It is estimated that a ton of Railton cement sold in the Tasmanian market realises an average profit of approximately 27.0 shillings, or 30 per cent of final selling price. This brings the above data into relief and emphasises the relative trading disadvantages of the Tasmanian exporter.

285. Before proceeding further it should be clearly understood that as in the case of many other products, the competition of producers on the various markets is not on the basis of price, but on the basis of cost components, for the price is controlled by the manufacturer (or manufacturers) in the importing State. In other words, the Tasmanian producer who exports to the Mainland must observe the prices ruling in each of the several States. The aim of such producers' agreements, known as "orderly marketing", is the elimination of cut-throat competition on the basis of selling prices. Such cut-throat competition could easily arise in the case of such a standard commodity as cement with a relatively fixed market. No Tasmanian cement is exported to Western Australia. It is interesting to note that so far as the selling policy of Goliath Portland is concerned, Queensland is divided into two sections, North and South. There is a cement company near Brisbane which dominates the "Southern Market" but in the "Northern Market" the high freight rates affect both companies equally, and the Tasmanian product can be successfully marketed because of lower manufacturing costs. A similar situation in reverse arises in the case of competition between South Queensland cement and imports from overseas. Oversea cement from, say, Great Britain or Denmark could not, pre-war, undercut the Australian product at the point of production. So far as Queensland is concerned overseas cement cannot compete in Southern Queensland,

but oversea vessels could place their "dump" rate cement in North Queensland ports at a cost equal to or lower than the state company located in the South, could land its cement. (17).

236. If freight rates were lowered by shipping companies, or by a Governmental subsidy, Mainland producers would certainly compete on the Tasmanian market, for at present the home producer is sheltering behind the "protective screen" of high freight rates. However, the extent to which Mainland producers would in fact export would be limited by the prevailing state of demand, by the extent to which the rate declined and whether they had an exportable surplus. In any case, the Tasmanian industry is dependent for its continued existence on an economic basis on its competitive position in Mainland markets, where nearly 75 per cent of total output is sold. o

237. It is probable that the freight rate is maintained at its present level owing to the fact that the cost of handling the cement at Devonport is out of all proportion to the value of the work done. The fundamental problem appears to lie in the cost of labour, for which high overtime rates are paid. (18) Again, the productivity of the labour is said to be unduly low, viz:-

Tasmania. Average of 24 tons per hour per hatch.

Melbourne. Average of 15 tons per hour per hatch.

238. The lowering of rates will be the main determinant in any future expansion of the industry in Tasmania. Before the Shipping Control Board came into existence, cement companies enjoyed equal bargaining power with the shipping companies, and could always use as a bargaining weapon the threat to run their own shipping services. (19) In this connection the optimum size ship is about 2,000 tons.

239. The larger the quantities for transport that can be guaranteed to the shipping companies, the better the bargain that can be struck. Regular shipments would enable special ships to be built for the transportation of cement and hence facilitate handling with a resultant lowering of costs. The various contracts struck with the shipping companies have varied according to the prevailing economic conditions; the best arrangement was made in 1936.

240. Although due consideration has been given to the cost of freighting cement by the shipping control authorities there has been no lowering of the cement rate over the war period. In fact there has been a 30 per cent increase when war surcharge is considered. But it must be appreciated that the export of a portion of the Tasmanian output is essential for the continuance of manufacturing operations. About four years ago the company investigated the possibility of transferring sections of its plant and equipment to other uses at least for the duration of the war, but the specialized nature of the equipment does not lend itself to anything other than the purpose for which it was built.

(17) It is interesting to note that both high and low shipping freight rates nullify the tariff. (a) High interstate rates nullify the tariff when it costs the producer as much to send his product from A to B as it does to bring the competitive product from overseas to B. (b) Low overseas rates nullify the tariff when the overseas companies land some oversea products at so far below the average rate as to constitute to the importer a refund of the amount paid in duty.

(18) Vide paras. 233-236, Chapter V.

(19) It was noted in Chapter V that commodities such as bulky, low priced commodities as cement and chaff received special concession rates from shipping companies. The company at Railton being the only Tasmanian exporter means, in effect, that a private contract is struck between the shipping companies and the cement company. Vide next paragraph.

291. CHOCOLATE AND CONFECTIONERY.

As in the case of cement, only one firm is engaged in this industry in Tasmania, namely, Cadbury-Fry-Pascall Pty. Ltd. at Claremont. Very full and reliable data were submitted, the products manufactured and the relative proportions of each being as follows:-

TABLE IX.

Product.	Percent to Total.	
	1938-39	1944-45.
1. Cocoa	16	17
2. Bourn-vita	2	7
3. Chocolate and chocolate confectionery	67	63
4. Sugar confectionery	15	13
	<u>100</u>	<u>100</u>

There has been little shift in the pattern of production over the six years of war except insofar as the lines constituting items three and four above were standardised. Of course, there has also been a shift in the section of the population consuming the product, together with rationing of supplies to retailers.

292. The chief raw materials used in manufacture are coca beans, sugar and milk. Cocoa beans are imported from British West Africa, sugar from Queensland via New South Wales refineries, and milk from Tasmania, Victoria and New South Wales. Other manufacturing accessories are bought in many parts of the world.

293. The Tasmanian plant is merely one unit of the larger Cadbury organisation and hence caters for the Australian market only, viz:-

TABLE X.

Stato.	% of Sales to	
	Total Sales 1938-1939	
Tasmania	7	
Victoria	32	
New South Wales	34	
Queensland	11	
South Australia	9	
Western Australia	7	
Overseas (British)	- (very small %)	

Pre-war figures only are given in the above table, as transport regulations during the war have prevented the firm from selling chocolate and confectionery in New South Wales and South Australia. It is anticipated that the post war distribution of output will be similar to the pre war distribution.

294. An analysis of shipping costs for each Australian trade was not available but a fair average may be derived from the shipping costs involved in the export of selected lines to the main distributing centre at Sydney, viz:-

TABLE XI

Item.	Cost per 100 lbs. of Product.	
	1939.	1945.
	s. d.	s. d.
Special packing for Sea Carriage.	5. 6.	9. 3.
Export Wharfage		
Sea Carriage	2. 9 $\frac{1}{2}$	3. 11 $\frac{1}{2}$
Import Wharfage	6 $\frac{3}{4}$	6 $\frac{3}{4}$
Stack and Sorting	3 $\frac{1}{4}$	3 $\frac{1}{4}$
Cartage to Distributing Centres	5	7 $\frac{1}{4}$
Marine Insurance	1 $\frac{1}{4}$	4
War Risk	-	$\frac{1}{4}$
Total	9. 7 $\frac{3}{4}$ d.	15. 0d.

Shipping containers have increased in cost by approximately 72 per cent since 1939. The above costs for 1939 and 1945 represent 6.5 per cent and 9.75 per cent respectively of the selling price of the line concerned. The firm has been granted a number of price increases for the various products manufactured by the proportion of shipping costs to selling price has risen by 3.25 per cent.

295. The firm considers that all the items in the table above are heavy but made special reference to the outstanding increase since 1939, in the cost of shipping containers. In the example given above, the increase in the cost of fibre containers was 72 per cent. The greater proportion of exports is at present packed into fibre board shipping containers, but as the range of lines is increased with a return to peacetime production, a proportion of timber cases made from Tasmanian hardwood will need to be used. These will cost approximately double the cost of the pre-war softwood cases made of Canadian spruce.

296. The company maintains its own distribution system throughout the Commonwealth and the various products are sold at the same price in each State. Shipping costs are not allowed to affect sales volume in any state even though some products might be sold at a loss. In connection with the ruling shipping freight rates payable particular reference was made to the 30 per cent surcharge and the additional costs incurred owing to the present shortage of shipping. As referred to in Chapter V there have been very few direct boats during the war years to Brisbane, Adelaide and Fremantle and hence it has been necessary to tranship at Sydney or Melbourne at additional costs per ton (for figures see Table VIII, Chapter V). Frequently, goods have also had to be railed to Launceston when ships from Hobart have not been available. Again, additional storage charges on the Mainland have been incurred while waiting for vessels to Adelaide, Fremantle and Brisbane.

297. Regarding the proportion which inward shipping costs bear to the price paid for imported raw materials, it was found impossible to prepare more than a rough estimate owing to considerable variation in the costs of transport on imports. For example, the price paid for sugar includes freight costs, these being prepaid by the supplier. A weighted average would probably be about 1 per cent of the value of the goods. This is applicable to goods imported from the Mainland only. The position in relation to imports from overseas is much more complicated and cannot be estimated, as in many cases the overseas freight charges are paid by importers who partly process the raw materials (e.g. oversea paper for label printing).

293. Although the freight rates from the Mainland to Tasmania increase the cost of plant and equipment by amounts varying say from 1 to 4 per cent and thereby increase depreciation costs, the total effect on production costs is immaterial. At the same time Mainland manufacturers are on a slightly better competitive footing. Again, many machines imported from overseas are transhipped at Sydney or Melbourne which places the Tasmanian producer at some disadvantage owing to the additional landing costs involved.

299. It is estimated that shipping costs normally represent 6.5 per cent of the final price obtained for all lines on the average of all (civilian) production. Cadbury products are in competition with all other cocoa, chocolate and confectionery manufacturers in Australia, but principally Nestle's in Sydney and MacRobertson's in Melbourne.

300. Transport costs in obtaining raw material and manufacturing accessories affect the Tasmanian industry more than Mainland rivals, as in a great many cases they obtain the necessary supplies locally, whereas Cadbury's have no option but to ship from the Mainland to Tasmania. This adversely affects production costs to the extent of £5000 per annum.

301. This extra cost item of £5000, plus a further £15,000 on the distribution of manufactured goods, results in a reduction of profits, since prices are fixed (equalised) on a competitive basis for the whole of Australia. Again, some lines cannot be marketed at all owing to the absence of a profit margin and the market is such that higher prices cannot be charged to recoup the Tasmanian firm for the extra freight costs involved in its Claremont location.

302. Furthermore, and as emphasised earlier (20) manufacturers in Sydney or Melbourne are dependent on an export market to a limited degree only, since they are located in the main centres of population, whereas the Tasmanian industry can serve only a very small local market. The table below compares the percentages of final selling price absorbed by profit for a "typical" line sold in all States. Of course, account has been taken only of the variation caused by shipping freight rates and landing charges, viz:-

TABLE XI.

Market.	% of Final Price going to Profits.	% of Australian Population in each State.
Tasmania	12%	3.4%
Victoria	5 $\frac{1}{2}$ %	27.5%
New South Wales	5 $\frac{1}{4}$ %	39.5%
Queensland	2%	14.3%
South Australia	1 $\frac{3}{4}$ %	8.8%
Western Australia	- $\frac{1}{2}$ % (loss)	6.6%
Overseas (Price fixed according to costs and only small quantity exported.)		

303. A lowering of the freight rates between Tasmanian and the Mainland would assist manufacturers in the Mainland states when competing with the Tasmanian industry for the home market, but the

(20) Vide para. 272 (c)

advantage to be derived from lower rates would be very much in favour of the latter because their competitive position would be improved in a market of approximately 7,000,000 as compared with the limited size of the Tasmanian market available to the Mainland manufacturers. (21)

504. In actual fact, however, the mere lowering of the rates between Tasmania and the Mainland would not place the Tasmanian manufacturers in a "satisfactory" position in the market to which they were shipped, in comparison with the local manufacturer in that market. There are other expenses incurred arising out of the necessity to ship such as, for example, cases or containers, and stock investment risks or losses owing to the isolation from raw material markets.² (22) However, the lowering of the rates would improve the Tasmanian manufacturer's present position as one of the costs not borne by competitors would be avoided.

505. Moreover, a lowering of freight rates between Tasmania and the Mainland would so reduce costs that a substantial increase in productive capacity would be possible owing to wider markets. The home industry would be able to manufacture lines previously unprofitable if sold at the ruling mainland prices for similar lines. And, of course, the elasticity of demand is such that a more highly priced Tasmanian product would sell in very limited quantities only.

506. Since freight rates do represent a high proportion of total costs of production, since they are a determinant insofar as output policies are concerned, and since the industry is dependent on Mainland markets why did the Cadbury plant locate in Tasmania? To an incalculable extent the decision of the parent firm to commence operations at Claremont was based on idealistic considerations. In respect of freight rates they represented a smaller proportion of selling price owing to lower rates and higher prices. In addition, there were other advantages at the time, but these have since been lost in comparison with mainland manufacturers over the past 20 years.

507. During the war period transport restrictions interrupted exports to New South Wales and South Australia. In the other States shipping control has restricted selling operations but has not seriously interfered with either business contacts or competitive position.

508. In dealing with the problem of Tasmania's insularity it was emphasised that the Tasmanian industry must carry much larger stocks of raw materials than those plants located in the mainland capitals. Not only is there the additional interest on capital, storage and insurance costs, additional losses through deterioration and changes in market values, but also - important in the case of such commodities as chocolate - the manufacturer is unable to quickly vary his pattern of production to meet changing conditions. There are other disadvantages derived from the Claremont location, and which must adversely influence entrepreneurs when considering the projection of new industries in Tasmania. For example, the lack of shopping facilities, particularly where girls are employed. Owing to Saturday morning closing, and no reinstatement of a shopping night, it is impossible for employees in industries outside Hobart to do any shopping. This forces employees to seek work in Hobart where they can hurriedly shop in lunch hours or after finishing work at night, but it is also increasing the inefficiency caused by absenteeism amongst employees who cannot, or do not wish to, change their employment.

(21) Cf. statement in para. 272 (c).

(22) Cf. para. 272 (b).

309. The labour market is extremely limited in Tasmania owing to the small population. The inability to extend owing to shortage of the labour supply is a severe handicap to existing industries and must deter the establishment of new industries. (23) At the present time at the Cadbury factory, production has been curtailed and male labour reduced owing the shortage of female labour.

310. TEXTILES.

The two sections of the textile industry with which we shall be concerned are engaged in the manufacture of wool yarn and woollen flannels, dress goods and blankets. Since production is mainly divided between two main concerns we shall treat them separately, viz:-

(a) Patons & Baldwins Ltd.

- (i) This company is engaged solely in the production of wool yarn. Considerable quantities of raw material have to be imported from the mainland and for a normal year are as follows:-

TABLE XII

Commodity.	Quantity.	Source.
Wool	7,287 tons	Victoria.
Chemicals	1,170 tons	Victoria
General Supplies	490 tons	Victoria.
Wool	663 tons	South Australia.
Wool	61 tons	New South Wales.
Chemicals	18 tons	New South Wales.
Supplies	41 tons	New South Wales.

Various minor items are imported from the United Kingdom but these are landed at the same cost at every main Australian port and hence all manufacturers are on an equal basis.

- (ii) Only a fraction of total output is absorbed by the Tasmanian (home) market as is revealed by the following table, viz:-

TABLE XIII

Market.	Average Quantity.	Percent of Total Output.
	(cubic tons)	
Tasmania	200	1.4
Victoria	4,860	34.4
New South Wales	5,990	42.3
Queensland	1,480	10.5
South Australia	990	6.9
Western Australia	620	4.4
Overseas	6	-

(23) The textiles industry in the North also experiences frequent shortages in the female labour market.

No special comments need to be made in respect of distribution of output which is determined on the basis of the distribution of population.

- (iii) Wool yarn, being a fairly highly priced product, the proportion which shipping costs bear to final selling price is only 2.85 per cent. (This figure is calculated by taking a weighted average based on the quantity sold in each State). Such expenses are recognised as a factor to be considered but only one among many. (24.) It is estimated that inward shipping costs increase total production costs by an average amount of .84d. per lb. of yarn. The Tasmanian yarn is quoted at the same c.i.f. price in each capital city.
- (iv) It is understood that given another chance the company would not locate in Tasmania for the factor of humidity is not now important with technological advances. Again, the labour being isolated is unskilled. (25) Hydro-electric power is not a locating factor so far as the textile industry is concerned for the average annual cost is only £9,000. Electrical steaming is more expensive than coal - and local Tasmanian coal mined at Stanhope can be economically utilised provided that suitable equipment is used.

(b) Kolsall & Kemp (Tas.) Ltd.

- (i) Although the pattern of production varies according to changes in demand it can be stated that this Company divides its total output as follows:-

TABLE XIV

Product.	Percent of total output.
Domestic Flannels	50
Dress Goods, Blazer Flannels	30
Blankets	20

- (ii) The raw wool used in manufacture is purchased in Victoria, New South Wales, Queensland and South Australia, as well as locally. Aids to manufacture are imported from Victoria and, through agents, from overseas.
- (iii) The entire output is sold on a f.o.b. Launceston basis to all buyers in all states except Victoria. So far as this latter state is concerned, in order to compete for the available demand on a slightly more favourable basis the goods are quoted c.i.f. Victoria. Rival manufacturers quote f.o.b. Melbourne.

(24) It is likely that a reduction of the Launceston-Brisbane and Launceston-Perth rates would widen the market available in those two cities. At present only very small quantities are exported.

(25) The fact of isolation, of course, minimises to some extent industrial warfare.

- (iv) The proportion which shipping costs bear to the imported value of raw wool varies, of course, with the ruling price for wool. The range is from 2 to 4 per cent whilst an average is approximately $3\frac{1}{2}$ per cent. The proportion which shipping costs bear to the total value of all raw materials is 2 per cent; it should be noted that this firm has bought larger quantities of Tasmanian wool during the war years than normally.
- (v) Overhead costs are increased by the freight rates and landing charges payable on imported plant and equipment. Operations were commenced in 1923 and hence the present plant is 22 years old. Plant replacement should have been carried through in 1939 (6% depreciation rate = 16 years). Although imported plant is free of duty shipping costs, insurance and exchange charges often increase the landing price in Tasmania of plant between 80 - 100% on the sterling value.
- (v9) The table below shows the proportion of total output absorbed by the various mainland markets, viz:-

TABLE XV

Market	Percentage of Output (Average)
Victoria	54
New South Wales	31
Western Australia	6
Tasmania	5
South Australia	3
Queensland	1

- (vii) A figure of 1.84 was abstracted from the Company's books showing the average percentage of the final price obtained on mainland markets which is absorbed by shipping costs. (Or $\frac{1}{2}$ d. per yard, 27 inch cloth). So far as the total costs of production are concerned shipping costs account for 2 per cent only but this is said to be a considerable item from the point of view competitive marketing. In the depression years competition was so keen in the Australian market for standard flannels that prices were quoted in sixteenths of a penny. Mainland manufacturers have certain freight charges also but no data are available for a comparative survey. The main factor determining the maintenance of a competitive position on mainland markets is a reduction of the excess productive capacity normally existing. This frequently resulted in competitive price cutting and a lowering of profit margins.
- (viii) The main rivals of the Tasmanian firm are the Victorian and New South Wales mills which operate to satisfy the home demand; surplus production only is sold in other states, mainly in the form of made up garments. The Tasmanian firm, of course, has no extensive local market. The prices

of standard domestic flannels are fixed by the Associated Wool and Worsted Manufacturers of Australia and hence there is competition on a product basis only. So far as dress flannels are concerned there is too much variety in the products for any price fixing agreements to be effective; hence, there is an intense process of product differentiation the emphasis being on novelty lines. (26)

- (ix) Although the shipping cost item is not one of the main determinants of output proximity to market is advantageous for other reasons; and although the earlier history of this plant is obscure it is quite certain that the Tasmanian location was chosen only as a result of a misunderstanding between the Australian and Head Office (England) directors. In respect of power, quite apart from the fact that power is not a large element in cost, the differential advantage of Tasmanian power, as compared with Victorian, has been lowered with the increased rates charged by the Hydro-Electric Commission. (27)

311. WOOL AND PROCESSED SKINS.

As the British Government arranged with the Commonwealth Government to acquire the Australian wool clip for the duration of the war and one full wool season after the cessation of hostilities it was not possible to obtain data from private wool brokers, and the Tasmanian State Wool Committee advised that special freight rates on wool were arranged by the Australian Wool Realisation Commission with the ship operators.

312. The arrangement with the British Government embraces all wool, wool tops, r. etc. and waste not required for use by Australian manufacturers. The principal conditions are as follows:-

- (1) The United Kingdom to pay 15.453126d. per lb. (Aust.) flat rate price for the wool in store at the oversea port of shipment.
- (2) The United Kingdom to pay 3/4d. (Aust) per lb. to cover all costs from store at port of oversea shipment to ship.

313. In Australia the scheme is administered by the Central Wool Committee (with subordinate State Committees) which controls the receipt of the wool into store, its appraisalment and shipment overseas. From the 1st July, 1942 the price paid to manufacturers was fixed by the Central Wool Committee according to a determination notified to it by the Commonwealth Prices Commissioner who determined the "appraised price" excluding cost of delivery and a special surcharge of 10 per cent.

314. A woolscouring, carbonising and fellmongery company calculated that total shipping costs incurred on both imported raw material and finished exports equal 5.66 per cent of total production costs.

315. TIMBER.

Representations were made to both the Tasmanian Timber Association and the Deputy Controller of Timber Supplies and although both sources admitted the existence of a detailed breakdown of timber production costs no such figures were forthcoming. Reference was then made to a sample of timber exporting companies.

316. The special timber rates charged per 100 super feet by the shipping companies are referred to in Chapter V. The total value of timber cut in 1938-39 was £706,756 of which £571,110, or 81 per cent, was exported (£18,954 overseas). In 1943-44, total

exports realised £812,326 all of which were shipped to the Mainland. Normally, the Tasmanian market absorbs 19-20 per cent of total surplus, and Victoria, as the main market, 60 per cent.

317. The Victorian millers could afford to reduce their prices below the landed cost of Tasmanian timber. Victorian timbers are sold at the same price as Tasmanian but the proportion going to profit so far as the latter are concerned is less the shipping costs payable per 100 super feet. Lower production costs of Tasmanian timbers do not entirely offset this disadvantage, but a lowering of the freight rate would not enable Mainland producers to sell in the Tasmanian market. Pre-war total shipping costs, including export and import wharfage, shipping freight (5/-), insurance, and stackage etc. on the Mainland, amounted to 6/6 ex Hobart or Launceston. The imposition of the war surcharge has lifted this pre-war figure to 8/7 per 100 super feet. The production costs of a normal mill run (28) of seasoned undressed timber delivered into Melbourne yards is approximately 37/- per 100 feet super. Using this figure as a base it is estimated that shipping costs now absorb 20 per cent of final selling price (approximately 16 per cent pre-war). A reduction of the pre-war rate will be necessary before markets can be extended under normal conditions of supply and demand. Such a reduction could possibly be achieved by the provision of a special timber ship and the installation of mechanical handling equipment at port terminals.

318. PLYWOOD.

The Tasmanian plywood industry is of comparatively recent origin and the final pattern of production is not yet stabilised as experimental work on different grades to be developed is still in progress. At present the Tasmanian market absorbs approximately 30 per cent and the Melbourne market 70 per cent of the total output. The competition for the available market in Victoria is mainly on the basis of product. The distributors of such products as masonite and caneite also incur shipping freight rates and/or rail freights mainly from Queensland.

319. The Tasmanian product is priced at the same level on an f.o.b. basis as the Mainland product f.o.r. However, to place the Tasmanian Plywood f.o.b. costs 3d. per 100 super feet more than the f.o.r. costs. Approximately 7 per cent of the final selling price is absorbed by shipping costs. Lower freight rates would assist the Tasmanian industry in competing with substitute materials. The present shipping services are said to be adequate but frequently stocks have had to be accumulated until space is provided.

320. NEWSPRINT.

The average annual output of the Boyer mills is 27,000 tons. The major raw materials used are wood, in log form, obtained from forest areas in the Derwent Valley and transported to the mills by rail, and unbleached sulphite pulp approximately 7,000 tons of which are imported annually from Canada.

321. The total output is sold in Australia the approximate distribution as between States being as follows:-

(28) Including all the main sizes cut.

(26) On these a higher margin of profit is obtained.

(27) The Commission took over the Launceston City Council power scheme under a recent agreement.

TABLE XVI.

State	Percent of total output.
Tasmania	1
Victoria	31
New South Wales	50
Queensland	5
South Australia	8
Western Australia	5

322. The company is required to pay on all Tasmania/Mainland trades the basic general cargo rate plus 50%, the loading being applied because of the space lost by the shipping companies due to the cylindrical shape of the rolls. Data for 1939 are not necessary as the Company was not operating pre war, the rates below (inclusive of 30% war surcharge) being those at present ruling, per ton weight:-

TABLE XVII.

Route.	Rate per Ton.
Hobart to Melbourne and Sydney.	39/-
Hobart to Adelaide.	45/6
Hobart to Brisbane.	78/-
Hobart to Fremantle.	102/4

323. A breakdown of shipping costs pre unit (roll) of product reveals that the sea carriage (incl. wharf handling) rate represents 74.6 per cent of the total cost, viz:-

TABLE XVIII.

Item.	Amount.	Percentage of Total.
Wharfage etc.	4. 0.	6.3
Sea carriage	47. 2.	74.6
Marine Insurance	7. 11.	12.5
War Risk	4. 2.	6.6
	63. 3.	100.0

324. The product is sold on a c.i.f. basis in accordance with a provision in the sales contract with purchasers. It is calculated that the shipping costs above represent on the average 11.5 per cent of the final selling price. This is fairly high but is to be explained in terms of the bulk nature of the product, difficulty of handling, and the fairly low price ruling. The main locating factor is of course, availability of material in the form of suitable pulpwood. The proportion which inward shipping costs bear to the purchase price of raw materials is 40 per cent and this increases total costs of production by approximately 10 per cent. On mainland markets the main rivals are Canadian manufacturers but no data were

available regarding the cost of landing overseas newsprint in Australia.

325. PATENT RACQUETS.

Normally the Alexander Patent Racquet Company is engaged solely in the production of sporting equipment, although during the war years sections of the plant were switched over to the manufacture of cable drums, switch boxes and munition boxes.

326. So far as sporting goods are concerned the bulk of the raw materials used in manufacture are imported including ash from England and Canada, cane from the Celebes and gut, binding, lacquers, paints, thinners, leather and tools from New South Wales and Victoria. A cheaper line of racquets is also made from Tasmanian timbers which are substitutable for ash.

327. It should be borne in mind that the location of the Alexander Company in Launceston was purely fortuitous and it is freely admitted that from an economic point of view it should be located in one of the mainland states. Alexander was a carpentry teacher who could not afford to pay the necessary £5 for a racquet. In making his own he invented a new method of manufacture. "Laminated" racquets made possible mass production and the division of labour now extends to 30 separate operations. A company was floated in 1926 and by virtue of the fact that a laminated racquet withstands high tension they soon broke in on the world's markets.

328. This Company also operates under a system of price equalisation and delivers goods free to any store in any capital city. So far as country districts are concerned the goods are consigned to agents who distribute to country areas and pass on the road or rail freight charges incurred. Tasmania absorbs only 3 per cent of total output, whilst the Mainland States absorb 75 per cent and 22 per cent is shipped overseas.

329. So far as freight costs on imported raw materials are concerned, the cost of importing English ash is raised about 47 per cent. The timber is transhipped at Melbourne, the cost of which represents nearly 3 per cent of total freight costs from Liverpool to Launceston. Losses are incurred in storing the timber because insurance for theft will not be accepted by insurance companies.

330. It is calculated that inward shipping costs increase the total average costs of production by 25 per cent or 6d. a racquet. The average cost of production of a racquet is £1. The outward shipping freight rate represents a further 2.5 per cent of production costs; where rail freight is necessary a further 3d. per unit (1.25%) is incurred.

331. The Alexander racquet's main rivals on Mainland and overseas markets are the Slazenger, Spalding, Dunlop, Brewer and Hedley. They are affected by rail freight rates to an extent and also by shipping freight rates so far as they sell in Tasmania, but the proportion of the Tasmanian output exported is greater than the proportion of Mainland racquets produced that are imported. Hence, the total shipping freight bill payable by the Alexander Company is greater. A lowering of freight rates would not increase sales, but would raise the profit margin under which the Tasmanian industry is operating. It should be noted that Governmental control of shipping space reduced considerably export trade in racquets over the war years and it is likely that a percentage of overseas business has been lost as a result.

332. To offset shipping costs, it was suggested that a Government subsidy should be made to industry based on some unit cost, or on a percentage basis according to total value of exports. Hence, shipping costs as a factor retarding production would be discounted. Actually, a subsidy of $2\frac{1}{2}$ per cent (outward shipping costs - inward are incurred by all Australian manufacturers equally with the exception

of minor items such as those on gut, tools, etc. from New South Wales and Victoria) would not overcome the disadvantage of Tasmanian location because of the difference in Commission charges (not included in the 2½ per cent above). Mainland companies, selling the bulk of their output on markets in close proximity to the factory incur fewer costs of commission than the Tasmanian industry. However, the offsetting advantage enjoyed by the latter is lower production costs.

333. WOODWOOL.

The actual position relating to the level of production and cost structure of the main firm engaged in this industry is obscure owing to the destruction of all plant and equipment by fire several years ago and a recent change of management. However, it is estimated that normal production would be equal to 22 tons a week, or approximately 1100 tons per annum. All raw materials and manufacturing accessories are obtained locally.

334. The distribution of output according to the markets in which it is sold is as follows:-

TABLE XIX.

Market.	Percent of Total Output.
Tasmania	Less than 1
Victoria	50
New South Wales	20
Queensland	26
South Australia	4

Woodwool is used mainly for packing glassware and fruit and was once used extensively in Tasmania for packing apples. Queensland produces large quantities of the product mainly for packing around pineapples during certain stages of growth.

335. The Tasmanian product is usually quoted f.o.b. Tasmanian ports although in some cases it is consigned to agents, e.g. in Victoria where the Company has established a firm agency system. Victoria provides the main market owing to the shorter sea route to be traversed and lack of serious competition. However, the Queensland market is the main factor in determining the stability of the Company's activities for unless at least a quarter of total output (275 tons) can be sold in that market the production would have to be curtailed with a consequent rise in costs and decline in the profit margin. The Tasmanian product has to compete with the Queensland product on the open market on both a price and product basis and an important factor in the former is the freight burden that has to be borne by the Tasmanian product. A factor inflating the actual freight charge that has to be paid is the cost of transhipping at Sydney.

336. It was not possible to obtain complete data relating to the financial operations of the Company for a normal year since to date no year can be described as normal. Instead, the researcher selected sample items from the year ending November, 1945 from the Company's books with the help of the accountant, viz:-

TABLE XX.

<u>Final Selling Price of Shipment To Victoria.</u>	<u>Commission (10%) (A).</u>	<u>Freight Rate Paid (B).</u>	<u>Marine Insurance (C)</u>
£1383	£138	£209	£6
£2206	£221	£258	£13
£4434	£443	£759	£15

337. Figures for minor items involved in exporting such as cartage and packing were not available but the three above are the most important expenses. (Note inclusion of marine insurance). In respect of the three shipments above the total of columns (A), (B), and (C) represents 25.52, 22.30 and 21.48 per cent. respectively of final (gross) selling price. The average percentage figure is 23.10. So far as Queensland shipments are concerned approximately 28 per cent of final selling price is absorbed by shipping costs. Such a high ratio of shipping costs to total costs (including profit) is to be explained by the low selling value per ton of woodwool and its relatively large bulk (of cement). The main variety (medium) is now selling at £12.10.0 per ton f.o.b. Pre war this same variety sold for £8.10.0. per ton f.o.b. but realising £10.0.0. on the Tasmanian market, where no shipping costs were involved. The Company stated emphatically that a lowering of rates would enable larger shipments to be placed on Mainland markets. Wartime rationalisation of shipping did not affect shipping space for woodwool as the product was granted a priority, large quantities being used for packing parachute supplies.

338. METAL LOCKS.

The firm investigated is the largest Australian manufacturer of locks. All metals are imported, including sheet and ingot brass, castings and keys. Locks represent an extreme case of a product, which is of low bulk but high selling value. Hence, shipping costs may not be expected to be a determining factor in the planning of output policies. New South Wales absorbs 50 per cent of total output the remainder being distributed among the Victorian, Queensland, South Australian and New Zealand markets. Only a negligible proportion is sold in Tasmania.

339. The locks are consigned direct and are sent package rate through a shipping agent who pays all shipping costs and charges the appropriate fee. Data relating to the proportion which shipping costs bear to the cost of raw materials purchased and final selling price are presented below for a year of average experience:-

(A)	Cost of Imported Raw Materials and Accessories.	£3,223.
(B)	Inward Freight Charges (Included in A)	180.
	Percentage of (B) to (A)	5.58%
(C)	Total Final Value of Output (Selling price)	£21,000.
(D)	Shipping Costs Incurred in Marketing Output (Included in C)	£120.
	Percentage of (D) to (C)	0.57%
	Percentage of (B) plus (D) to (C) (i.e. of total inward and outward shipping costs to price).	1.43%

Hence, insofar as shipping costs are a burden at all it is in relation to materials imported. That is, shipping costs represent

the price of locating at a distance from the supply of raw material not from the main markets. Competition, at present, is not keen enough to make the shipping cost item a factor affecting the firm's ability to place the product on the mainland market, although competition may be expected from American imports at a later stage..

340. CARBIDE.

The Tasmanian firm at Electra is bound, under its arrangement with the Commonwealth Tariff Board (being sole Australian manufacturers of carbide) to deliver carbide to all the main ports throughout the Commonwealth at approximately the same landed price, which is at present £31.1.11 per ton c.i.f. The average annual output 1939-42 was 9,000 tons, declining to 6,500 tons in 1943 owing to a reduction in the requirements of the services. The distribution of consumption as between states is as follows:-

TABLE XXI.

State	Consumption. (Tons)	Percent of Total.
Tasmania	100	1.3
Victoria	2,000	26.6
New South Wales	3,000	40.0
Queensland	1,500	20.0
South Australia	500	6.6
Western Australia	400	5.3

An overseas market existed prior to 1941, about 800 tons per annum being absorbed.

341. The average cost of landing carbide per ton capital cities is £3.8.2, the average f.o.b. value being £27.13.9 and average cost of production £23.3.9. Hence shipping costs represent 10.36 per cent of final selling price (£31.1.11), or 12.81 per cent of total production costs (including shipping costs).

342. Twenty years ago carbide was used for domestic purposes such as home lighting, but the demand was small and elastic. The main use now is in industrial processes, and this industrial demand is very inelastic. A reduction in the shipping costs incurred in marketing would lower selling price but the resultant effect on consumption would be negligible. However, freight costs would play a major role if Tasmanian carbide is to be marketed overseas. Again, inward freight costs on raw material are a considerable item. Anthracite imported from Wales at £2.12.3 per ton in 1938, now costs £9.11.0 per ton this sharp increase being attributed to higher landing costs. Interstate imports include 700 tons of steel sheets, 5,000 tons of coke and 130 tons of tar per annum.

343. CANNED AND FRESH FISH.

Reference was made to several firms engaged in the export of fresh and cooked fish to the Mainland but the data available was very unsatisfactory. In particular, the ratio of shipping costs to selling price varied widely from firm to firm, viz:- Melbourne, 12.5 to 1.75 per cent. Consequently, we shall be concerned solely with a new firm engaged in both the fresh and canned fish trades, Fish Canneries of Tasmania Ltd. Canned fish represents approximately four fifths of total output. The Company maintains five centres,

namely, at Dunnalloy, Flinders Island, Devonport, Launceston and Margate. A Commonwealth wide market is envisaged when the necessary production is achieved, but at present Victoria is the main market with Tasmania absorbing 10 per cent only of output. The decentralised nature of operations results in a somewhat complicated system of distribution. The Flinders Island catch is shipped to Launceston and thence transhipped to Melbourne, although occasionally a direct service may be available. Hence, total freight costs are as follows:-

Flinders Island/Launceston	£1. 8. 6.
Launceston/Melbourne	£1. 0. 0. plus 8/-
	transshipment and other charges.

343. The output from the Dunnalloy and Margate works is shipped via Hobart although a jetty is now being constructed at the latter centre to berth 1,000 - 1,500 ton vessels which will be able to lift the fish direct. All fresh fish from both Flinders Island and the Southern centres is shipped via Launceston.

344. The canned fish is sold direct to wholesalers at an average price of £95 per ton. Where transshipment costs are incurred the total shipping costs being £2. 18. 6d. per ton, the ratio of shipping costs to price is 3.1 per cent; where shipment is direct from Flinders Island or Launceston this figure is 1.6 per cent. Data relating to Hobart shipments are not available as the Dunnalloy and Margate plants are not yet working on a normal production programme. However, the figures above are sufficient to indicate the relative unimportance of shipping costs in the canning section of this industry. The marketing of fresh fish so far as this Company is concerned is secondary to canning and is the means whereby non-canning varieties included in the catch are disposed. Victoria is at present the main market owing to that State's proximity and superior handling facilities.

345. The Australian canned fish market has always been under supplied and, in any case, there will be a complete absence of competition for the next two years as U.N.R.R.A. will purchase all available supplies. Ultimately, serious competition from American imports must be expected though here the dollar question enters, and in respect of such a commodity as canned fish dollar purchases may well be limited to help ration out the available dollars for more essential purposes. Hence, the Australian (Tasmanian) industry may receive for a few years a certain degree of protection.

346. The problem of rail freight charges incurred in transporting fresh fish from Devonport and Burnie to Launceston should be noted. The rail freight rate from Hobart to Launceston is 35/- per ton; from Burnie to Launceston it is 45/- per ton and as a result no supplies are obtained from Burnie fishermen. The rate Devonport/Launceston is 32/- per ton and Devonport is the main source of supply for the Launceston works except in certain boom seasons when supplies are also obtained from Dunnalloy. At present fishermen receive £28. 0. 0. per ton for coota, the main canning variety. The cost of canning 1 lb. of fish is at present 10d. (also selling price). The rail freight cost is equal to .13d per lb. (or 1.3%) and is included in this total cost. Relative to the value of the finished product, the rail freight cost is insignificant. However, relative to the price of the raw material (3d. per lb.) the ratio is .13d: 3d (4.33 per cent).

347. FRUIT JUICES, WINES.

The two main companies engaged in this industry were approached and it is convenient to treat them separately, viz:-

(a) Lochiel Liquers. (Launceston).

- (i) This Company has only expanded to anything like its present productive level in the last few years and hence it is not realistic to refer to pre-war data. Actually, the liquor industry in Northern Tasmania commenced operations in the form of a hobby in a businessman's week-end cottage on the banks of the River Tamar. With an export market absorbing 85 per cent of a total output of 12,000 cases per annum the plant is not well situated at Launceston. Again, three-quarters of the raw materials and aids to manufacture are imported from the Mainland, including sugar from Sydney and bottles from Melbourne.
- (ii) The average price realised per case c.i.f. any capital city is £5.10.0. Shipping costs to the main markets in Sydney and Melbourne are 3/- to Western Australia 7/6 and to Brisbane 6/- per case. Respectively these costs represent 2.7 6.8 and 5.5 per cent of final selling price. Hence, the overall relation of shipping costs to (equalised) selling price is 5 per cent exactly. This fairly low figure is to be expected from the nature of the product. However, it is understated to the extent of insurance charges which are at a high rate to cover the effects of wharf pilferage, especially in Sydney (during the transshipment period.) Another concealed cost is the inability to ship direct to Brisbane and Perth thus preventing agents buying in large quantities of say 300 - 600 cases. At present direct boats run to Brisbane once every two months only and to Perth once every three months only.

(b) Port Huon Fruit Juices Pty. Ltd.

- (i) This Company commenced operations in 1940, the present annual level of production being as follows:-

TABLE XXII.

Product	Quantity (1944 figures)
Raw Fruit Juices)	210,000 gallons.
Fruit Syrups)	
Liqueurs	10,000 cases
Wine Cocktail	2,000 cases

Raw fruit totalling 1,500 tons annually is obtained from local growers, whilst sugar is imported from Sydney on a c.i.f. basis.

- (ii) Most lines are quoted f.o.b. except those exported to Victoria, which are quoted c.i.f. for competitive reasons. (Average Victorian production of wine and spirits is approximately 7,000 proof gallons annually).
- (iii) Berry syrups, cherry liqueur and other liqueurs are priced f.o.b. Hobart at 19/-, 110/6 and 135/6 per dozen. Total shipping costs to Victoria (main markets) equal 1/9 per dozen and hence shipping costs represent 8.4, 1.6 and 1.3 per cent respectively of selling price.

The main factor in marketing this product is not one involving transportation cost but the sales efficiency of agents. For example, the South Australian market for Port Huon fruit juices is an extensive one due solely to the vigorous selling policy of the firm's agencies. Wherever possible, shipments are sent direct from Hobart, but those for South Australia have to be railed to Launceston because of the lack of direct shipping contact between Hobart and South Australia. The shipping cost item of $\frac{2}{3}$ per dozen Launceston/Adelaide is, therefore, increased by $\frac{2}{2}$ per dozen to cover the rail freight. Using the same price data as before the proportion of selling price absorbed by shipping costs is 18.9, 3.8 and 3.2 per cent respectively.

(c) General.

A reduction in the ruling freight rates would almost certainly result in competition from Mainland manufacturers, who are only prevented from breaking in the Tasmanian market by the freight costs they would incur. So far as overseas markets are concerned, orders could not be accepted during the war but it is anticipated that shipments will soon be sent to Iraq, Africa, India and the East Indies. Availability of shipping rather than freight costs will be the determining factor, since the lines to be exported are the highly priced liquors.

346. JAMS AND CANNED FRUITS AND VEGETABLES. (29)

In order to arrive at an average distribution of the products of this important industry (or group of industries) as between local and export markets an average of five selected years has been calculated, viz:-

TABLE XXIII.

Market.	Percent of Total Output.
Tasmania	9
Victoria	30
New South Wales	27
Queensland	3
South Australia	2.5
Western Australia	1.5
Oversens	27

349. Only very limited data were available in respect of the relation of shipping costs to the cost structure of the industry but the largest concern (H. Jones & Co. Pty. Ltd.) submitted a figure of 3.5 per cent as the proportion of total cost of production absorbed by shipping costs. This 3.5 per cent is in excess of the 3 per cent gross profit margin (30) on which the Company operates. The present level of net profit is only $\frac{1}{2}$ per cent on that part of total output sold in Australia. Any rise in the present profit depends upon

(29) For obvious reasons it is more convenient to treat processed apples with fresh apples in the agricultural group.

(30) Out of which taxes are paid.

either a reduction of Company taxation, or a rise of final selling prices or a reduction in shipping costs.

350. Although, the Tasmanian industry has the advantage of long establishment and is able to exploit the economies to be derived from large scale production mainland factories situated at the source of supply for tinsplate, sugar, labour and all other factors (with the exception of berry fruits), are lowering their cost structure. Hence, it is likely that shipping costs will be a more important factor than in the past.

351. Before proceeding to our next section, a discussion of the effects of shipping costs on the Tasmanian mining industries, it is convenient to summarise the above data relating to the proportion of final selling price absorbed by shipping costs, (31) viz:

TABLE XXIV.

Commodity.	Reference Paras.	Percentage Relation of (Outward) Shipping Costs to Final Selling Price.
Cement	274 - 290	1938 (Average) - 20.19 1944 (Average) - 27.52
Chocolate and Confectionery	291 - 309	Normal average for all production - 6.5
Textiles	310 (a) & (b)	Patons and Baldwins:- Normal average - 2.85 Kelsall and Kemp:- Normal average - 1.84
Wool and Processed skins.	311 - 314	Shipping costs as a % of Production costs - 5.66
Timber	314 - 317	Present figure - 20 Pre-war figure - 16.
Plywood	318 - 319	Present figure - 7
Newsprint	320 - 324	Average figure - 11.5
Patent Racquets	325 - 332	Shipping costs as a % of Production costs (Average all lines) - 2.5
Woodwool	333 - 337	Victorian shipments - 23 Queensland shipments - 28
Metal Locks.	338 - 339	Normal average - 0.57
Carbide	340 - 342	Present figure (Fair average) - 10.96
Canned fish	343 - 346	Present figures - 3.1, 1.6 (Av. 2.35)
Fruit Juices and Wines.	347 (a) & (b)	Lochiel (Liquers). Vic. & N.S.W. - 2.7) Queensland - 6.8) Av. 5.0 W.A. - 5.5) Port Huon Fruit Juice P/Ltd. Vic. Berry Syrups - 8.4) Av. 13.6 Cherry Liqueur - 1.6) Av. 2.5 Other Liquers - 1.3) S.A. Berry Syrups - 18.9) Av. 13.6 Cherry Liqueur - 3.8) Av. 2.5 Other Liquers - 3.2) Shipping costs as a % of Production Costs - 3.5.
Jams and Canned Fruits etc.	348 - 350	

(31) Vide also Chapter VIII.

It will be observed that the above percentage figures range from 0.57 to 27.52. Of course, any average figure for the overall relation of shipping costs to final selling price would not be realistic, and, in any case, the data are not strictly comparable and hence not amenable to such treatment. We may, however, group the industries according to the percentage figure of shipping costs to final selling price, viz:-

Class I. (Over 20 per cent)

Cement - 20.19 to 27.52
Woodwool - 23 to 28.

Class II. (11-20 per cent)

Timber - 16 to 20.
Berry Syrups - 13.6
Newsprint - 11.5
Carbide - 10.96

Class III. (6-10 per cent)

Plywood - 7
Chocolate &
Confectionery - 6.5

Class IV. (2-5 per cent)

Wool and Processed Skins - 5.66
Lochiel Liqueurs - 5.0
James and Canned Fruits - 3.5

Class V. (less than 3 per cent)

Yarn (Patons and Baldwins)- 2.85
Port Huon Liqueurs - 2.5
Patent Racquets - 2.5
Canned Fish - 2.35
Woollen Cloth (Kelsal &
Kemp) - 1.84
Metal Locks - 0.57

It should be remembered that each of the above industries have one factor in common, namely, that the bulk of total output is exported to interstate or overseas markets. Of the six industries in Classes I and II, although shipping costs represent an important item of cost it is not likely they played a decisive influence in the location choice. But, with the sole exception of carbide, they do lower the proportion of final selling price available for profit and hence place the Tasmanian exporter at some competitive disadvantage. In respect of the eleven industries included in Classes III, IV and V it is only necessary to refer again to the problem faced by Cadbury-Fry-Paseall. There can be little doubt that the factory, from an economic point of view, should not be located at Claremont and the freight burden is one of the main costs of isolation.

352. It is now proposed to analyse the shipping cost problem in relation to the overall cost structure of the main Tasmanian Mining industries.

353. COPPER.

Tasmania is the chief source of copper in the Commonwealth, approximately seven tenths of total production coming from this State. The Mt. Lyell Mining and Railway Co. Ltd. at Queenstown operates the State's largest copper deposits at Mt. Lyell, in the West Coast Range, from which electrolytic copper is produced.

The only other producer is the electrolytic zinc company at Rosebery which treats complex ores containing a small percentage of copper.

354. The copper mined in Australia is sensitive to price movements. At the outbreak of war in September 1939 the price of copper in London was £.Stg.51 per ton. This was subsequently increased to £.Stg.62. Australia's annual production is between eighteen and twenty thousand tons of which Mt. Lyell produces 12,500 tons. Prior to the war Australia produced sufficient copper for her own needs and had an exportable surplus. Soon after the outbreak of war in September, 1939, the British Ministry of Supply expressed its willingness to purchase, under contract, any surplus electrolytic copper up to 7,000 tons but with expanded production in the munitions industries no quantity became available for export. In fact, the Commonwealth, during the latter war years, produced only 50 per cent of its total requirements.

355. In Australia the price was fixed at £A63.17.6 per ton on 19th December, 1939. Increased mining costs raised the price by various steps to £100 per ton plus a £5 bonus on all copper produced above the base tonnage set by the Commonwealth Controller of Minerals for each company.

356. Copper is marketed in different shapes and forms. On the London Metal Exchange unrefined copper is deliverable in slabs or bars, fire refined copper can be delivered in cakes, ingots and ingot bars, while electrolytically refined copper is deliverable in the form of cathodes, cakes, ingots, ingot bars and wire bars. These exterior forms of copper are mostly determined by the purpose for which the metal is used. Thus the cake is particularly suited for rolling copper plates, the wire bars for wire production, and the ingots for casting and the production of alloys.

357. Prior to the immediate pre-war years, when the Commonwealth began to consume the whole of Mt. Lyell's copper output, the Company exported to Great Britain and sold its copper on the London Metal Exchange in electrolytically refined wire bar, or as cathode copper. The course for either wire bar or cathode determined what course was adopted. A premium was allowed on wire bar above cathode copper. If wire bar was required for export, the cathode copper had first to be shipped to Port Kembla and there melted into wire bar by Metal Manufactures Ltd., a Company in which Mt. Lyell itself is largely a shareholder. From Port Kembla it was reshipped to London.

358. Factors entering into marketing, or what the Company calls realization, costs at this stage were:-

- (1) Freight charge to Regatta Point (Macquarie Harbour) per the Company's railway.
- (2) (a) Shipping and insurance charges to Port Kembla (32) together with handling expenses, if wire bar was required.
- (b) If not wire bar, but cathode, then shipping and incidental expenses to an Australian port where it could be picked up by an overseas ship.
- (3) Melting into wire bar at Port Kembla if (2)(a) operated.
- (4) Reshipping to England, together with insurance and handling charges.
- (5) Storage and marketing costs charged by the London Metal Exchange.

(32) Vessels plying the Strahan trade are of the "special purpose" class. They must be able to work Macquarie Harbour on a relatively shallow draft when loaded.

For that part of the copper which was required in Australia, numbers (4) and (5) do not apply. Realisation costs over the period 1921-39 were maintained at a fairly steady figure when accounting for approximately 9.6 per cent of total costs of production. It will be observed that item (1) above should not be included according to our definition of shipping costs but the available data do not separate out each item. However, it is not likely that the inclusion of local freight costs exaggerate to any great extent the ratio of shipping costs to total costs of production and/or selling price.

TABLE XXV. (33)

ANALYSIS OF COSTS OF PRODUCTION AND MARKETING OF COPPER PER TON(A.)

Item.	Av. 1916-21	1933	1935.	1936.	1937.	1938.	1939.
Mining	29	21.8	20.0	23.2	25.9	29.5	28.8
Treatment	33.5	14.8	14.0	14.2	15.8	18.2	19.2
Managoment	3	1.8	1.3	1.5	1.8	1.7	1.3
Realisation(A)	12	5.2	4.6	4.5	4.2	4.3	4.5
Total	77.5	46.6	46.2	43.4	47.7	53.7	53.8
Less Precious Metals and Pyrites.	-	4.9	6.5	6.7	6.3	7.2	7.4
Total Primary Costs (B)	77.5	41.7	39.7	36.7	41.5	46.5	46.4
Prospecting & Development.	5	2.3	2.0	2.5	2.2	1.6	2.0
Depreciation	4.5	2.2	2.5	3.5	3.8	4.0	4.8
Total Secondary Costs (C)	9.5	4.5	4.5	6.0	6.0	5.6	6.8
Total Costs (D)	67.0	46.2	43.2	42.7	47.5	52.1	53.2
London Price of Copper							
£A(E)	102.0	46.0	41.8	50.9	75.5	56.0	61.6
£A Profit or Loss per ton	±15.0	-0.2	-1.4	±8.2	±28.0	±3.9	±8.8
Percent of (A) to (B)	15.5	12.5	11.6	12.3	10.1	9.2	9.7
Percent of (A) to (B) plus (C)	13.8	11.2	10.4	10.5	8.8	8.3	8.5
Percent of (A) to (E)	11.7	11.3	11.0	8.8	5.6	7.7	7.3

It will be observed that the proportion of both total costs of production and selling price absorbed by shipping (realization) costs has steadily declined since 1933, and in 1939 represented 8.5 and 7.3 per cent respectively. Note, however that the market price of copper was often so low that the industry had difficulty in meeting total costs. During the war years total

costs have risen due to (1) the increased prices of factors entering into production and (2) an intensification of the scale of operations with the existing plant and a dwindling supply of labour. It is likely that costs are now approaching their previous high level for the 1916-21 period of £87 per ton. This is largely due to the diminishing returns arising from the geographical nature of the copper lodes (see(2) above). The factor of diminishing returns is the main determinant of the level of costs and the profit margin.

359. Since 1939 marketing procedure has changed somewhat. Mt. Lyell's copper is all shipped via Regatta Point to Port Kembla where it is melted into wire bar by Metal Manufactures Ltd. for the Commonwealth Government. This process is an expensive one. The Australian price for refined electrolytic wire was fixed at £100 per ton delivered buyer's premises. Just where the Commonwealth Government has required delivery is not known. Metal Manufacturers Ltd., acting as Agents, sell the copper to the Commonwealth Government receiving payment in full, and out of such deduct all marketing expenses, and remuneration for melting. The main difference is that price is, for the time being, no longer a fluctuating factor, and all copper goes to Port Kembla. The Commonwealth Government purchases the whole supply and export is banned.

360. ZINC.

Of the 163,386 tons of zinc produced in Australia in 1938, Tasmania contributed 25,366 tons from ores mined in the state, and produced 69,820 tons of refined zinc at the Risdon plant. The chief source of zinc in this state is zinc blende, a sulphide of the metal. These deposits contain silver, lead, copper and gold the recovery of which adds to the profitable working of the zinc. The best known deposits are those of the Reed-Rosebery field where reserves of 1,500,000 tons carry from 18.4 per cent to 21.3 per cent of zinc, 6.4 per cent of lead, 8.5 ozs of silver and 2.12 dwt. of gold per ton. The acquisition and final successful exploitation of the large zinc body came as a result of the successful refining of zinc concentrates to the pure metal by the Electrolytic Zinc Co. of Aust. Ltd., at Risdon.

361. From the point of view of the theory of the location of industries it is interesting to note briefly the following. In the pre 1914-18 war period such factors as cheap fuel, low labour costs, long experience and close control prevented Australia competing in the world market by treating her own zinciferous raw material. Further, in 1913, Australia was importing from 30,000 to 40,000 tons of brimstone from Sicily and Japan for sulphuric acid manufacture. Hence it became obvious that if Australia could treat her own zinc sulphide and recover the sulphur for superphosphate manufacture, for which there was a growing demand, zinc production would become much more profitable. North Broken Hill Ltd., South Broken Hill Ltd., and Zinc Corporation Ltd. became interested for the reason that they were anxious to find cheap treatment in this country for their zinc concentrates shipped overseas. By applying the electrolytic process to their sulphide ores, these companies developed a suitable way of treatment. The deciding factor in the choice of location for a treatment plant depended upon cheap electrical power. In this regard Tasmania had the outstanding advantage, for cheap hydro-electric power had already been developed by an extensive Government hydro-electric scheme (commenced in 1914.) The present Company now has a paid up capital of $3\frac{1}{2}$ million pounds and production has now reached the capacity of 200 tons of zinc per day, using approximately 42,500 H.P. of power (34). The works are situated at Risdon, five miles from

(34) Supplied by the Hydro-Electric Commission at a contract price of £2. per H.P.

Hobart on the banks of the River Derwent. Besides the production of Zinc, superphosphates fertiliser are manufactured from sulphuric acid recovered as a by-product. Another by-product is cadmium, small quantities of which are present in the zinc concentrate.

362. At present zinc concentrate supplies are drawn from Broken Hill (N.S.W.) and Rosebery (Tas.) in the approximate proportion of two thirds and one third respectively. Approximately, 70,000 tons of zinc and 175 tons of cadmium are produced annually together with a lead silver residue containing approximately 2,400 tons of lead and 211 ozs of silver. The approximate production of superphosphate fertiliser is 22,000 tons per annum.

363. The production and marketing of zinc may be summarised thus:-

- (a) Mining at Read-Rosebery.
- (b) Concentration at Rosebery.
- (c) Roasting or calcining at Zeehan.
- (d) Transport to Risdon.
- (e) Purchasing of Broken Hill concentrates and transport to Risdon.
- (f) Risdon Electrolytic treatment.
- (g) Marketing costs (Australia and overseas).

Item (a) above may only be considered the cost of locating in Tasmania in a limited sense, for transport costs of a similar kind would have been incurred wherever the plant was located.

364. The first transport phase is the conveying of the crude ores from the mines to the Rosebery reduction mill. The copper concentrate is railed to Burnie and shipped to Port Kembla where it is smelted, refined and melted into metallic copper. With the copper the greater part of the silver and gold is recovered. The lead concentrate is railed to Burnie and thence shipped overseas e.g. to the United States. This concentrate contains 35 per cent of lead. The production of these two metals is on too limited a scale to allow profitable treatment by the Company, and is therefore disposed of as indicated.

365. The third and final float, that of zinc, is railed to Zeehan for further reduction in the roasting plant which reduces the sulphur content by about 50 per cent. It is then railed via Burnie to the Risdon treatment float. This concentrate consists of 82 per cent zinc. It is understood that the Zeehan plant is to be superseded by a roasting plant at Risdon where it is hoped to make use of the sulphur. As the Electrolytic Zinc Co. is primarily a treatment company, it is concerned with the purchasing of additional zinc concentrates to allow economic treatment of its own ores whilst concerning itself with the production of electrolytic zinc.

366. The additional concentrates which form the bulk of the raw material are purchased from North and South Broken Hill and Zinc Corporation mines. The existing contract governing the purchase of this concentrate supply was made in 1930 and expires this year (1945). The price of the concentrate f.o.b. Port Pirie, or other Mainland port, is based usually on the average price of zinc received each year.

367. As mentioned earlier the deciding factor favouring the choice of Risdon was the availability of cheap electric power, essential for the metallurgical process employed in zinc manufacture. The required quantity of power (45,000 H.P.) is made available by the Hydro-Electric Commission for the low price of £2 per h.p. Two other locating factors should be noted. Firstly, Risdon's facilities for interstate and overseas shipping made it ideal for the shipping of concentrates from the mainland and for the exporting of refined electrolytic zinc to overseas and mainland markets. Secondly, Hobart was of sufficient size to supply labour (now approximately 1500 employees.)

368. No data were available in respect of production costs and hence it is not possible to compute the ratio of shipping costs to total costs. A dividend of 14 per cent was declared in 1939-40. We may, however, relate the shipping freight rates (only) ruling pre-war to final selling price, viz:-

(1) L.M.E. price (Aug.1939)	: £A25.8.9 per ton.
(2) Freight rate to England.	: 28/- per ton.
(3) Percentage of (2) to (1)	: 5.5
(4) Australian price (delivered buyers' works)	: £A20.0.0. per ton.
(5) Freight rates. (35)	
(Melbourne)	: 20/- per ton
(Sydney)	: 20/- per ton
Hobart to (Brisbane)	: 39/- per ton
(Adelaide)	: 28/6 per ton
(Perth)	: 52/6 per ton

(6) Freight rates (5) as a percentage of Australian price..

(Melbourne)	: 5.0
(Sydney)	: 5.0
Hobart to (Brisbane)	: 9.7
(Adelaide)	: 7.0
(Perth)	: 13.1

369. Although Tasmania ranks high as a producer of zinc concentrates, the output of metallic zinc output is small. This indicates that smelter accommodation has been provided cheaper elsewhere, principally in Belgium and Germany. The only plant operating in Australia is the Risdon works. The advantages of cheap power and water transport facilities have resulted in very low production costs. The capacity of the plant has increased during the war, and but for wartime difficulties production would have doubled. If the demand for zinc continues to remain firm it is likely that all zinc concentrates produced in Australia will find electrolytic smelting accommodation at the Risdon plant which will become one of the leading zinc smelter countries in the world.

370. SILVER LEAD.

Productive silver mines have generally been confined to the West Coast Range and the chief sources of extraction have been from galena, a silver lead sulphide mined at Zeehan, Dundas, North Mt. Parroll, Mt. Magnet and the Mt. Claude district, secondly from blister copper mined at Mt. Lyell and thirdly from complex zinc lead sulphide ores of the Read-Rosebery field. With the re-opening of this latter field by the Electrolytic Zinc Company in 1936 the zinc lead ores from that field then became easily the most important sources of silver in this state. Lead on the other hand, has been produced in joint supply with either silver or zinc or both. In 1939, 11,020 tons of lead were produced and 1,278,116 ounces of silver, being valued at £A173,670 and £118,310 respectively.

371. Transport costs first enter the cost structure of the Tasmanian industry in the carriage of the ore from mines to milling plant. A company's lease may be extensive, covering some hundreds of acres, or a company may mine several leases at varying distances from the reduction works. The reduction plant is placed so as to reduce costs of transport from all those points. Secondly, there is the transporting of the concentrate to the smelters. For this reason smelters are generally in close proximity to the reduction plant as at Mt. Isa. Where the output of a mine does not warrant the erection of a smelting plant, then the transport of the concentrate becomes necessary.

The Tasmanian companies, having no smelter accommodation must forward all concentrates overseas, and hence shipping costs are a large item of cost (reducing the selling price if sold f.o.b.)

372. For the reason that production of lead is too small to warrant local smelting, marketing for the Tasmanian producer finishes early. These producers are approximately 80 miles from the port of Burnie, and the freight cost over this distance approximates to about 10/- per ton for Rosebery and £1.5.0 for North Mt. Farrell. The foreign buyers sometimes purchase f.o.b. Burnie, and others require delivery to their smelters. North Mt. Farrell and Magnet concentrates are concentrated to about 70 per cent metal and, pre-war, were shipped to Belgium. Rosebery concentrates of 50 per cent metal have been sold principally to America. The disadvantages of transport are more than offset by the concentration of smelting in the low cost plants provided by continental and American interests. Further, as lead exports from Australia are very considerable, and even if smelting took place in this State, the bullion would still have to find overseas markets: the only advantage being that of shipping metal as against concentrates, which carry anything from 30-50 per cent of waste material.

373. The North Mt. Farrell Field.

After the ore is milled to a 75 per cent concentrate carrying approximately 88 ozs of silver to the ton, it is railed to Burnie at a cost of 23/- per ton. Prior to the war, a most remunerative market was found in Belgium for the concentrate, where there is also smelting accommodation. The wartime procedure has been to ship to the United States, where it is sold as a concentrate to smelting companies for approximately £18 net per ton calculated on the metal returns, although prices vary from month to month in America.

374. The wartime shortage of shipping space has meant that large quantities of the ore have had to be stored at the Burnie wharf in anticipation of a ship being available. Handling and wharfage charges total 8/- per ton. The American smelteries purchase the ore delivered at their premises. Such a procedure throws the burden of shipping and insurance on the Company. Insurance rates are 25 per cent of the declared value on all concentrates entering the country. Were it not for the dollar exchange ratio, which is now in favour of exporters, marketing in the United States would be uneconomic.

375. Rosebery.

This field is, of course, the chief source of lead and silver in Tasmania. However, the mine is mainly worked as a zinc mine and the continuance of the mines at Rosebery as silver-lead producers is largely dependent on the profitable production of zinc. Production costs are carried by a number of metals produced, but a serious fall in the zinc market could bring economic production to a close.

376. TIN.

Tasmania ranks equal with New South Wales as a source of tin in Australasia. Production has declined since 1918 although increasing slightly since 1938. The annual value of tin mined has also declined for some years, yet recent years have shown a material increase due to the high fixed prices for the product in this country.

TABLE XVII.

Item	Percentage of Total Cost.
Wages	53
General Stores	19
Water (Lease Rights and Races)	11.8
Power (Electric)	10
Administration	6.1
Renewals and Repairs	0.1

Freight and realisation expenses are normally deducted from gross profit (36) but on the basis of say 1/3d. gross profit per cubic yard of drift, freight and realisation expenses would not absorb more than 0.3 per cent of total production costs or 0.14 per cent of final selling price. (37)

381. Quite apart from the low absolute figure for transport costs they cannot be considered a factor having any bearing on entrepreneurial policy. Either high extraction or high reduction costs result in an over-all high cost structure. High extraction or reduction costs are due to a combination of the following factors:-

- (a) Insufficient mechanisation, scale and modernisation of plant.
- (b) The nature of the deposits worked, which are either of small extent or low content.

The hope of substantially reducing production costs can only come by:-

- (a) Better deposits.
- (b) Improved technical methods.
- (c) Increased mechanisation and modernisation of plant.
- (d) A reduced wage rate for operating labour.

It should be noted that the wartime increase in output was only possible due to the high pegged price of tin, resulting in former extra-marginal producing fields re-entering production and an influx of new and modern capital equipment.

382. Summing up we may say that the factor of transport (both rail and sea) looms large in the mining cost problem. Tasmania, however, is fortunate in that her mineral lodes are reasonably close to the ports, but there is the high cost of railway operation over difficult and wet terrain over steep grades.

383. Mineral ores are not only bulky and heavy but their value especially in the case of non-ferrous metals, is low relative to their weight. Copper and tin ores in Tasmania carry only a little more than 1 per cent metal, and zinc lead ores, although carrying 20 per cent zinc and 6 per cent lead, are proportionately lower in value.

(36) As also are the costs of prospecting, depreciation, incidental expenses and head office administration.

(37) In the case of scheelite the percentage of shipping costs to final selling price is a maximum of 0.5 per cent.

For non-ferrous ores particularly the close proximity of the reduction plant is important and in Tasmania all ores are concentrated by reduction plants at the mines. Transportation is the prime factor determining the location of crushing and concentration mills, with power considerations ranking high.

384. Smelting, refining and processing plants are determined by several factors. The size of plant with access to agents and energy resources is the most important. Transportation costs compel the location of smelters as near as is practicable after considering all factors to the place of reduction. Refining and electric smelting plants are primarily driven to cheap electric power resources. Hence, the reason why Tasmania was chosen as the location of copper refining, electrolytic zinc manufacture and aluminium smelting.

385. Finally, we must turn our attention to the primary industries nearly every one of which is dependent upon mainland and/or overseas markets. Hence, although transport costs cannot be considered a factor determining location, they are worth close study from the point of view of their effects on marketing and the net return to the producer.

386. MEAT.

As a result of the report of the Board of Enquiry appointed in 1933 to investigate the operations of the State Meat Board and questions relating to the Meat Export Industry, the State Government decided to repeal all legislation framed under the Meat Industry Encouragement Act, 1924, to 1932, and on the 22nd December, 1933, an Act was passed called "The Meat Industry Act, 1933". The Act provided for the establishment of a "State Meat Board" for the encouragement of the export of meat from Tasmania.

387. In November, 1937, the Act was amended to allow the Board wider scope and also to release the capital of the Board for use in developing the export industry. (38). The amendment provided that the Board may apply any moneys at its disposal for the purpose of engaging in and carrying on, any business in relation to the preparation, processing and marketing of meat for export. Prior to the Board, operators from private companies bought on the hoof. Such speculative guesswork is now eliminated for the grower is paid on the basis of a weighed and graded carcass at full export price.

388. In order to control the standard of exports the Board has agreements with private freezing works at Somerset, St. Leonards and Hobart. The conditions of the contract cover the receiving, processing, bagging, freezing and transport of the carcasses to the ship's side. Processing charges under the agreement are at the rate of 1d. per lb. dry weight for lambs and 7/8 penny for sheep.

389. The Board arrived at a definite cost of placing carcasses on the London market (1937-9), and the following figures give the actual cost of those exported from Somerset, viz:-

(38) Originally, the Act provided that after defraying liabilities, the liquid assets of the Board were to be invested in Commonwealth Inscribed Stock. Hence, the powers and functions of the Board were restricted to an advisory capacity.

TABLE XVIII.

Item.	Cost per case.		Cost per lb. out- turn weight.
	s.	d.	d.
Processing, Wraps, Storage etc.	3.	0.00	1.016
Wharfage	0.	1.19	0.034
Agency Charges	0.	0.48	0.013
Insurance	0.	5.46	0.155
Overseas Freight and Customs	3.	8.93	1.275
London Consolidated Charges	1.	2.68	0.418
Total Cost of Export	8.	6.74	2.911

The following figures show the actual amount realised on the Somerset export carcases :-

TABLE XIX.

Details	Per Carcase.		Per pound.
	s.	d.	d.
Gross Amount Realised, London	20.	6.58	6.996
Less London Consolidated Charges	1.	2.68	0.418
Net amount Received London	19.	3.90	6.578
Add Exchange	4.	7.86	1.642
Total Amount Received	24.	1.76	8.220

390. In summarising the above figures the following table (Table XX) shows the average value received by exporters from Somerset, viz:-

TABLE XXX.

Details.	Per carcase.		Per pound.
	s.	d.	d.
Total amount received	24.	1.76	8.220
Less Cost of Realisation (Local charges shipping etc.)	7.	4.06	2.493
Net export value	16.	9.70	5.727
Net Value Skins Sold	2.	8.39	0.920
Net Value to Exporter.	19.	6.09	6.647

Hence, the percentage of total costs of realisation to total amount received was 30.34.

391. Reference to Table XXXI below will show that the prices for Tasmanian export lambs in London have varied little over the five years 1933-34 - 1937-38. The lowest net price obtained was for the season 1935-36 while the highest net price was for lambs processed at the Somerset works in 1937-38, viz:-

TABLE XXXI.

161.

	Year.	Gross Price London per lb.	London Charges per lb.	Net Price London per lb.
Hobart Exports	1933-34	6.790	.500	6.290
	1934-35	6.037	.492	5.545
	1936-36	6.593	.502	6.091
	1936-37	6.960	.515	6.445
	1937-38	6.980	.510	6.470
Somerset Exports	1937-38	7.020	.380	6.640

392. The season 1931-32 was the commencement of processing lambs for export from Tasmania, and a total of 18,986 carcasses were shipped overseas. This quantity was not exceeded until the 1937-38 and 1938-39 seasons when 27,222 and 56,242 carcasses were exported. Average gross prices realised on the London market for the 14 different grades varied from 5.41d. per lb. to 7.07 per lb. giving a range of 1.66d. The overall average price (unweighted) was 6.17d. per lb.

393. Following the outbreak of hostilities, a contract for the sale, by the Commonwealth Government, of Australian meat to the British Ministry of Food was completed, covering the year ending 30th September, 1940. Under the contract, the United Kingdom authorities agreed to take a total of 240,000 tons, plus additional quantities should they be available for export and required in the United Kingdom.

394. The main clauses of the contract include the following:-

- (a) All meat for export to the United Kingdom to be consigned to the British Ministry of Food at fixed prices, f.o.b. Australian ports.
- (b) Ninety per cent of the contract price to be paid to exporters by the British Ministry of Food on shipment.
- (c) The remaining 10 per cent of the contract price to be retained and paid, subject to satisfactory delivery as to quality and weight, within 28 days after arrival of the vessel in a United Kingdom port, or due date of arrival on vessel being lost.
- (d) Overseas freight and marine insurance, including war risk to be paid by the British Ministry of Food.
- (e) All mutton and lamb carcasses shipped to the United Kingdom to be "telescoped" - the British Ministry of Food to compensate for this service at the rate of 1/6th of a penny per lb. (Stg.)

395. The prices fixed, as per quality and weight, for the various classes of Australian meat were based in the main on the average prices realised for Australian meat on the United Kingdom market during 1938, and provided a better return on the whole to the producer than that obtained by him during the 1938-39 season.

396. The contract was renewed for the year 1st October, 1940 to 30th September, 1941, and covered beef, veal, mutton, porker pork and baconer pork. Under this contract there were slight variations in some prices. Owing to an acute shortage of shipping the original contract quantity to be lifted by the British Ministry of Food had to be reduced from 249,000 tons to 144,000 tons, although the Tasmanian industry suffered little economic loss.

397. To meet the position which had arisen, the Commonwealth Government adopted plans with the objective of canning such surplus production of beef, mutton and pork for which shipping space was not available, and as regards lamb, of increasing the local demand for this product. As from 1st July, 1941, the Commonwealth Government introduced its Lamb Purchase Scheme which provides for the purchase of meat accepted for export at fixed f.o.b. prices, less costs (including 28 days storage). The Commonwealth Government's scheme has, in particular, given valuable protection to export lamb producers against those extraneous charges which have occurred during the war period, namely, storage costs and intra-state transfers of frozen lambs for shipment overseas.

398. The following table shows the prices which obtained for spring lambs during the 1944-45 season, (i.e. the prices at which the Commonwealth Government purchased from Tasmanian exporters), viz:-

TABLE XXXII.

Weight.	1944-45 Season Australian Currency.
<u>1st Quality.</u>	
20/28 lbs.	7.97d.
29/36 lbs.	7.89d.
37/42 lbs.	7.81d.
43/50 lbs.	7.34d.
<u>2nd Quality.</u>	
20/28 lbs.	7.58d.
29/36 lbs.	7.50d.
37/42 lbs.	7.03d.
43/50 lbs.	6.64d.
<u>3rd Quality.</u>	
20/28 lbs.	7.26d.
Over 28 lbs.	6.64d.

399. Charges made by the Board on lambs processed for export are now calculated at the rate of 1/10thd. per lb. This represents a charge of approximately $1\frac{1}{2}$ per cent upon the average net return to producers who deliver woolley skinned lambs for export. With the funds which have been so derived during the past five years the Board has directed its efforts toward the equalisation of returns to producers. Uniform processing charges have been maintained at the three processing centres. Prior to the implementation of the Commonwealth Lamb Purchase Scheme, the Board met the full cost of additional storage charges where lambs remained in Tasmanian stores for a greater period than the 28 days' storage, provided for in the processing charge to producers. Rail freights on frozen meat shipped from a port other than the port nearest to the processing works have been borne by the Board. Rebates of rail freight costs have been made to producers where their lambs during past seasons have been diverted to a works other than the works nearest to the point of production.

400. The following table presents data relating to the number of lambs treated for export during the past seven seasons, viz:-

TABLE XXXIII.

Works.	1938-9	1939-40	1940-1	1941-2	1942-3	1943-4	1944-5
Hobart	20,426	16,140	12,698	11,523	9,228	26,941	15,810
Somerset	35,817	39,078	30,363	33,190	31,634	36,396	12,440
St. Leonards	-	53,127	53,122	46,181	46,915	54,094	33,400
Total	56,242	108,346	96,183	90,803	87,777	117,421	61,650

401. DAIRY PRODUCE.

The Dairy Produce Export Control Act 1924-38, was introduced into the Commonwealth Parliament at the request of the dairying industry with the object of organising the oversea marketing of Australian dairy produce. A Dairy Produce Control Board was appointed, and was in existence from 1924-35. In the course of its functions the Board regulated shipments to ensure regularity and supply in the London market, controlled forward selling, obtained reduction in oversea freight rates and insurance rates, and participated in an advertising campaign in the United Kingdom.

402. The Dairy Produce Export Charges Act 1924-37, provides for the imposition of a levy on all butter and cheese exported from Australia to cover the administrative expenses of the Board, for advertising and other purposes. The rate of the levy is fixed by regulation.

403. Under State Legislation prior to the Dairy Produce Act 1933-35, regulating authorities fixed the proportion of the State's output to be sold within respective states. The Dairy Produce Act was passed by the Commonwealth Parliament to protect these quotas from the effects of interstate competition. A decision of the Privy Council in 1936 however, held that the Commonwealth had no power under its constitution to control interstate trade and the Commonwealth legislation is, therefore inoperative. The industry is now carrying on its stabilization plan on a purely voluntary basis, through the medium of the Commonwealth Dairy Produce Equalization Committee Limited. This is a Company, limited by guarantee, and includes producers in the States of Queensland, New South Wales, Victoria, Tasmania, and South Australia (cheese only). Its function is to equalise returns from manufacturers irrespective of the markets in which the commodity is disposed. The local market is preserved at a fixed price, and Great Britain absorbs the surplus. Pre-war, under open market conditions, the local price and the export price diverged widely and a tendency was set up for sellers to rush the high price, with a consequent instability in the returns to producers year by year. Under the voluntary equalisation scheme the individual factory obtains the average return declared, and hence it is a matter of indifference whether the commodity is sold on the local or overseas market. The average is struck of realisations from disposals, an allowance being made for administrative charges and expenses involved in exporting. Those charges common to all markets are not deducted. In respect of interstate marketing, transport charges between states are regarded as charges against the whole industry and borne by the whole industry. Hence, the Tasmanian producer does not incur any extra charges by virtue of the Island's insularity, for all transport costs are spread equally over all producers. In actual fact, the Tasmanian cost structure is lower than that for many mainland producers since heavy rail freight rates are not incurred in transporting the product long distances inland.

404. The original aim of equalisation was to maintain a high price in the home market, since such a price was not possible in respect of the overseas market where the world parity had to be accepted. At present the industry is operating under a 3-year wartime contract which terminates in 1948, the United Kingdom having contracted to purchase the butter and cheese export surpluses of Australia and New Zealand at firm prices. The future state of overseas markets is doubtful, and the most reliable information available would seem to suggest that the only difficulty in Europe at the moment is fodder, for the Germans did not slaughter herds to the extent originally thought. Hence, it may not be very long before European producers, with hand grown feeding, are in full production. Consequently, the present high price cannot be maintained. Owing to the cold climate in Tasmania during the winter months it is not possible to maintain full production throughout the year, and hence considerable quantities are usually stored. Such storage charges are borne by other members of the equalisation agreement. This represents a considerable saving to the industry in Tasmania.

405. POTATOES.

In Australia several different potato sales methods are used. Each State has developed its own methods, which have largely been dictated by local conditions, viz:-

(a) TASMANIA.

Growers in Tasmania have the option of selling to produce merchants at their port of shipment or of forwarding their consignments to Sydney to be sold by commission agents.

F.o.b. Sales: Tasmanian merchants purchase supplies from farmers largely in order to fulfil orders from merchants in Newcastle and Queensland ports. Experiences have shown that the requirements of these two Mainland markets can best be met by purchases rather than consignments. Frequently they have considerable local supplies and by purchasing to make up any estimated shortage over supply is avoided.

Some Tasmanian growers prefer to sell f.o.b. and merchants must be prepared to purchase at any time that the farmer has potatoes for sale. This means that they usually buy more than required for Newcastle and Queensland. These are offered to Sydney brokers or merchants and if unplaced they are forwarded to Sydney for sale on commission.

Sydney Commission Agents: This type of business commenced about 1906. The percentage of growers' consignments to f.o.b. sales is normally between 40 per cent and 60 per cent, but 90 per cent of Tasmanian shipments to Sydney would be on consignment. In order to sell growers' consignments at satisfactory prices, the Commission agent must have a clientele of buyers. As growers' consignments from Tasmania vary in volume, commission agents sometimes find it necessary to make purchases from Tasmanian merchants in order to be sure of having sufficient supplies for their Sydney customers.

Prices: Rather a unique system has developed for determining market prices for Tasmanian potatoes in Sydney. Normally, two ships arrive in Sydney each week carrying potatoes. At 10 a.m. each Monday morning the agents meet in their committee room. The Potato Marketing Board supplies the official figures relating to the shipment and carryover of Tasmanian potatoes on the wharves. The figures relating to local or other Interstate forwardings are collected for the meeting and after consideration of the quantity available and the estimated demand, prices are fixed by resolution. One agent has one vote provided that he has the necessary quota of 2½ per cent of the total Tasmanian shipment.

Prices arrived at are regarded as fair average prices, but is not possible to sell particular consignments at the price fixed, then agents use their discretion.

(b) NEW SOUTH WALES.

The main crop of N.S.W. potatoes sent to Sydney is sold principally at the Alexandria Goods Yards. The early Northern Rivers crop is sold from the North Coast wharves. The general system is to offer them by auction and if not sold they are disposed of by private treaty.

(c) NEWCASTLE.

Wholesale merchants in Newcastle and Maitland purchase their requirements from N.S.W., Tasmania or Victorian sources and distribute them from their stores. It is claimed that this system makes for a more regular supply and therefore steadier prices than would be the case if 'consignment' business was developed.

(d) VICTORIA.

For many years the bulk of the Victorian main crop sent to Melbourne was delivered to the railway goods yards, but the advent of motor trucks has considerably altered the system. It is doubtful today whether 50 per cent is sent to Melbourne by rail. These are offered by private treaty and each seller operates on his own idea of values. Supplies delivered by motor-truck chiefly go to the Victorian markets but quantities are also delivered to suburban produce stores and to retailers. In some cases the truck owner has turned potato merchant in order to obtain freight. In others, the buyer goes to the country and deals directly with farmers or country merchants and then arranges transport. These sales are made by private treaty.

Victorian forwardings to other States are usually on a f.o.b. basis. The growers' consignment trade has since been developed. Most leading merchants in Melbourne have their country agents and forward purchases from farmers and sales to Interstate merchants are quite routine business. Generally, Tasmanian growers do not favour forward selling.

(e) QUEENSLAND.

Brisbane trade in local potatoes (which includes Northern N.S.W.) is a mixture of purchase and consignment. The latter when forwarded by rail are submitted at the daily produce auction sales held at the goods yards. Trade requirements over and above local supplies are secured by Interstate merchants usually through brokers. In Coastal towns ^{business is} conducted similarly with the exception of auction sales. Inland towns secure supplies from merchants in the nearest port connected by rail. They rarely deal direct with other States.

(f) SOUTH AUSTRALIA.

Local supplies come chiefly from the Mills district around Adelaide and Mt. Gambier. The trade is conducted by merchants on a private treaty basis. Additional supplies are imported from Victoria and Western Australia.

(g) WESTERN AUSTRALIA.

The development of certified seed and irrigation has resulted in this State becoming self-sufficient in potatoes as well as having available an export surplus of 10,000 to 15,000 tons (usually November to January). In order to stabilise the home market experiments have been made with several schemes of voluntary control.

406. In general, there are four systems of wholesale selling, viz:-

- (a) Controlled selling; control by pool, board or Prices Commission (1939-45).
- (b) Private treaty; merchants determining their own scale of values.
- (c) Auction sales.
- (d) Agreed average values, as determined for Tasmanian potatoes by the Sydney meeting of produce merchants.

407. Auction has the advantage that it ensures quick disposal, and returns which more fairly approximate relative values of different classes or qualities of the same kind of goods, but may result in wide fluctuations from day to day. It does not contribute to a steady flow of deliveries.

408. The agreed average value system as used for so many years in the Tasmanian trade has helped to give growers a steadier price level than auction sales and steady prices have always been considered to be desirable by Tasmanian growers. A definite advertised wholesale price also makes for cheaper distribution. Only when prices are so controlled can they be used to regulate deliveries and to assist in achieving a measure of stability. On the other hand growers are not rewarded in strict accordance with the care they have taken to put up a quality sample.

409. Although practically no data is collected in respect of Interstate trade (other than Tasmania and Western Australia) figures are available of the Interstate movement of potatoes (up to 1940) viz:-

TABLE XXXIV.
Potato Imports and Exports - Various States.

Year.	N.S.W.		Victoria.		Queensland.		South Aust.		W.A.	
	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.
1935	69,264	818	Nil.	22,075	10,607	1,429	5749	888	1907	2318
1936	60,450	1,077	Nil.	11,231	16,111	116	7856	483	18	8307
1937	96,086	1,004	405	41,596	22,596	N.A.	5883	783	354	6995
1938	92,700	985	6,214	33,624	16,474	N.A.	6658	1043	3000	5062
				(a)		(x)				(x)
1939	71,914	815	Incom.	11,895	11,594	71	Incom.	394	Nil	94
						(x)				(x)
1940	93,738	933	17,123	7,874	21,056	29	Incom.	2,445	Nil	1004
Tasmania.										
Imports. Exports.										
1935	Nil.	54,452.								
1936	Nil.	66,792								
1937	Nil.	85,774								
1938	Nil.	73,702								
1939	Nil.	66,444								
1940	Nil.	91,280.								

- (a) Figures are for Year Ended 31st December.
- (b) Figures are for Year Ended 30th June.
- (c) Partly Estimated.
- (x) Overseas only.

These figures reveal the absolute dependence of the Tasmanian industry on export markets. The following table showing total production in tons brings the above data into relief, viz:-

TABLE XXXV.

Potato Production in Tons - Various States.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.
1934/35	46,033	109,329	21,627	19,377	19,162	70,018
1935/36	62,882	104,125	24,765	19,257	26,278	85,806
1936/37	66,255	196,623	14,826	20,923	22,916	138,557
1937/38	50,833	134,712	16,565	21,615	21,587	99,969
1938/39	39,385	81,415	19,183	18,487	26,532	89,330
1939/40	40,659	87,931	28,306	21,251	30,761	114,409
1940/41	50,562	216,568	21,745	25,583	31,487	114,041
1941/42	38,634	118,454	19,040	24,142	25,600	110,000
1942/43(x)	64,943	186,098	22,438	32,866	32,246	135,930
1943/44	60,802	209,799	37,329	31,099	33,265	199,141

(x) Control Inaugurated.

A five year pre-war average is computed as under:-

TABLE XXXVI.

State	Tons	Percent of Total.
N.S.W.	53,192	16
Victoria	125,242	37
Queensland	15,593	5
South Australia	19,932	6
Western Australia	23,295	7
Tasmania	96,736	29
Total	337,989	100%

410. The market needs of the various States have been calculated by the Potato Marketing Board on the basis of reasonable prices being maintained, which, whilst payable to growers are not unreasonable to consumers. The following gives the distribution of these market needs amongst the various States and also the needs per head of the population. -Average annual production (338,000 tons) is just below this level.

TABLE XXXVII.

State.	Total Market Requirements (Tons)	Requirements per head of population.	Estimated Average Production. (Tons.)
New South Wales	123,000	105	53,192
Victoria	120,000	146	125,241
Queensland	38,000	90	15,593
South Australia	25,000	100	19,932
West Australia	18,000	95	23,295
Tasmania.	15,000	145	96,736
Total	340,000	111	337,989

An average rather more indicative of normal pre-war experience is calculated at 364,000 being the average for the period 1928-1937. This makes the average production just above the total market demand.

411. Prior to 1930 the Sydney market was supplied approximately as follows:-

New South Wales Local Supplies	-	20% of total demand
Victoria and Other States	-	30% of total demand
Tasmania	-	50% of total demand

For the six years ending 1938 the position was approximately:-

New South Wales ³ Local Supplies	-	40% of total demand
Victoria and Other States	-	8% of total demand
Tasmania	-	52% of total demand

It is thus apparent that Tasmanian growers made a slight advance whilst other States lost heavily to New South Wales production.

412. For the year 1942-43 the Potato Marketing Board arrived at an average cost of production per acre based on a three ton crop, viz:-

TABLE XXVIII.

ITEM		£	S	D.
1.	Rent - average per acre	3.	0.	Od.
2.	Cultivating before ploughing		10.	Od.
3.	Seed - allowing for transport and loss by decay, etc.	9.	0.	Od.
4.	Fertiliser at quota limit (3 cwt. Super plus 1 cwt. Sulphate of Ammonia, Cartage, etc.)	1.	12.	Od.
5.	Ploughing (usual single furrow plough)	1.	5.	Od.
6.	Cutting and planting.		12.	Od.
7.	Sowing fertiliser		12.	Od.
8.	Harrowing 4 times @ 2/- per acre.		8.	Od.
9.	Discing twice @ 5/- per acre.		10.	Od.
10.	Scarifying twice @ 5/- per acre		10.	Od.
11.	Flat hoeing.	1.	5.	Od.
12.	Moulding		5.	Od.
13.	Digging @ 2/6d. per bag.	5.	12.	Od.
14.	Sacks - 45 @ 1/ld.	2.	5.	Od.
15.	Twine and Branding.		3.	6d.
16.	Carting (Average)	2.	5.	Od.
17.	Weighing		1.	Od.
18.	Unloading		3.	Od.
19.	Inspection and attendance		4.	6d.
Total		£30.	4.	Od.

413. The above sum of £30.4.0. represents the total cost involved to the point of export. An overall sum of £4.10.0 needs to be added to the above total in order to bring the figure up to the cost level ruling in 1945. For the year 1938-39 a figure of £27.4.0. would approximate to the average cost per acre of a 3 ton crop, costs rising by 10 per cent over the years 1938-39 - 1942-43.

414. The present level of shipping costs per ton Burnie/Sydney is compared with those ruling in 1938-39, viz:-

TABLE XXXIX.

Item.	1938-39	1944-45
<u>Port Charges - Burnie.</u>		
Insurance, stamps, bill of lading, and exchange.	1. 9.	1. 9.
Wharfage	1. 8.	1. 8.
Forwarding	1. 6.	1. 6.
Freight Rate	20. 0.	28. 7.
<u>Port and Other Charges - Sydney.</u>		
Sorting and Stacking.	3. 0.	3. 0.
Wharfage	4. 0.	4. 0.
Weighing and Loading	1. 9.	1. 9.
Insurance	3. 0.	3. 0.
Inspection	6.	6.
Exchange	8.	8.
Commission @ 5% on a £15 market (39)	15. 0.	15. 0.
Total	52. 10.	61. 5.

It will be observed that total shipping costs have risen by 8/7 per ton or 16.25 per cent over the period 1938-39 - 1944-45.

415. Relating the above figures to f.o.b. costs we can arrive at the cost of landing the potatoes per ton in Sydney markets, viz:-

TABLE XL.

Year.	F.o.b. cost.	Landing costs.	Total.
1938-39	9. 1. 4.	2. 12. 10.	11. 14. 2.
1944-45	11. 11. 4.	3. 1. 5.	14. 12. 9.

That is, shipping costs represented in 1938-39 and 1944-45, 22.6 and 20.9 per cent of the total cost of landing potatoes in Sydney. Hence, potatoes represent the unusual case of a declining freight burden over the war years due to a rapid rise in other costs.

416. The following table presents data relating to the unweighted averages of the weekly top prices for Tasmanian potatoes as fixed by the wholesale Produce Merchants' Association of New South Wales for the years 1935-36, 1936-37, 1937-38 and 1938-39, viz:-

TABLE XLI.

Year.	(Unweighted) Average Price.	Shipping costs as a Percentage of Selling price.
1935-36	£13. 6. 0.	16.9
1936-37	£12. 12. 0.	20.9
1937-38	£10. 0. 0.	26.4
1938-39	£18. 7. 0.	14.4

(39) The general rates of selling commission recognised by the N.S.W. Wholesale Produce Merchants' Association are 6% if selling price is £6.0.0. pgr ton and under, and 5% if selling price is over £6.0.0. per ton. Some firms charge a flat rate of 5%.

The net return to the grower in the immediate pre-war year of 1938-39 was £6.12.10, the Sydney market being under-supplied in that year. It should also be noted that the range of weekly potato prices per ton, Sydney market, 1930-39 was £16.5.0. (£24.2.0. - £7.17.0.).

417. Before proceeding to analyse the present relation between shipping costs and selling price it is necessary to refer briefly to the war-time marketing of potatoes. The Australian Potato Committee was set up under National Security (Potatoes) Regulations on 27th April, 1942 the purpose being to ensure that adequate supplies of potatoes would be available in Australia to meet the needs of the defence forces and civilian population. Production was increased substantially but fluctuated year by year, and with increasing demands, it became necessary to ensure that the acreage was maintained at a maximum. As pointed out earlier, production is closely related to price. The Committee first assured a reasonable price to growers by giving a guaranteed minimum price of £10.0.0. and allowing growers the benefit of the market price when it exceeded the minimum. In the second season of "control" this was altered to a fixed contract price. The guaranteed minimum frequently resulted in the most profitable market, being one to which potatoes should not be sent, either because of transport difficulties, cross traffic or the needs of a less profitable market. Under the contract system, the price to growers is fixed and supplies are directed according to needs rather than market rates. The fixed price for the two main varieties (Bismarcks and Brownells) (40) is £12.10.0. being constant at that level until early August each year when it rises at regular intervals to a maximum of £14.10.0, viz:-

TABLE XLII.

Period.	Price (f.o.b. Burnie).
13th August to 19th August.	£12. 12. 6.
20th August to 26th August.	12. 15. 0.
27th August to 2nd September.	12. 17. 6.
3rd September to 9th September	13. 0. 0.
10th September to 16th September	13. 5. 0.
17th September to 23rd September	13. 10. 0.
24th September to 30th September	13. 15. 0.
1st October to 7th October	14. 0. 0.
8th October to 14th October	14. 5. 0.
15th October and after	14. 10. 0.

418. Hence, shipping costs now represent from 19.6 to 17.5 per cent of final (gross) selling price, Sydney; the net return to the grower varying from 17/9 to £2.18.9 per ton.

419. It is not possible to obtain comparable figures for the cost of landing potatoes in Sydney from the several Australian potato growing areas. However, the table below does provide a fairly accurate basis for a comparison on a relative basis, viz:-

TABLE XLIII
Landed Cost of Potatoes, Sydney. (1945).

From: ALL PORTS TASMANIA - BY BOAT DIRECT.			
Freight	1. 8. 7.		
Sorting and stacking	3. 0.		
Wharfage	4. 0.		
Weighing and loading	1. 9.		
Inspection	6.	Total	£1. 17. 10.

(40) The price fixed for Snowflakes and all other varieties was £11, being raised early in 1945 to £12.

TABLE XLIII. (Continued.)

From:	<u>VICTORIAN RAIL STATIONS - based on Average Cost of Rail</u> <u>Freights.</u>	
	Freight	1.15.0.
	Weighing & Loading	1.6.
	Inspection	<u>6.</u>
	Total.	<u><u>£1.17.0.</u></u>
From:	<u>MELBOURNE BY BOAT</u>	
	Freight	1.9.9.
	Cartage Rail to Ship	
	Melbourne	5.0.
	Sorting & Stacking	3.0.
	Wharfage	4.0.
	Weighing & Loading	1.9.
	Inspection	<u>6.</u>
	Total	<u><u>£2.4.0.</u></u>
From:	<u>ADELAIDE BY BOAT</u>	
	Freight	2.0.6.
	Sorting & Stacking	3.0.
	Wharfage	4.0.
	Weighing & Loading	1.9.
	Inspection	<u>6.</u>
	Total	<u><u>£2.9.0.</u></u>
From:	<u>ADELAIDE BY RAIL</u>	
	Freight	3.2.3.
	Weighing & Loading	1.6.
	Inspection	<u>3.</u>
	Total	<u><u>£3.4.3.</u></u>
From:	<u>MOUNT GAMBIER RAIL DIRECT</u>	
	Freight	2.8.1.
	Weighing & Loading	1.6.
	Inspection	<u>6.</u>
	Total	<u><u>£2.10.1.</u></u>

TABLE XLIII. (Continued)

From:	<u>PERTH - BOAT FROM FREMANTLE</u>	
	Freight	2.15.11
	Cartage Perth to Fremantle	7.6.
	Inspection Perth	1.3.
	Sorting & Stacking	3.0.
	Wharfage	4.0.
	Weighing & Loading	1.9.
	Inspection	6.
	Total	<u>£3.13.11.</u>
From:	<u>BRISBANE BY BOAT</u>	
	Freight	1.11.0.
	Cartage to boat	3.6.
	Sorting & Stacking	3.0.
	Wharfage	4.0.
	Weighing & Loading	1.9.
	Inspection	6.
	Total	<u>£2.3.9.</u>
From:	<u>BRISBANE BY RAIL -SOUTH BRISBANE-SYDNEY DIRECT</u>	
	Freight	1.12.5.
	Weighing & Loading	1.6.
	Inspection	6.
	Total	<u>£1.14.5.</u>
From:	<u>ROMA STREET, BRISBANE VIA WALLANGARRA.</u>	
	Freight and Transshipping cost	2.6.6.
	Weighing & Loading	1.6.
	Inspection	6.
	Total	<u>£2.8.6.</u>

420. The state of over-production, likely to persist for some years, will inevitably result in a collapse of the present stable price level if, and when, control is lifted. The target acreage 1944-45 was 66,000 acres, the "normal" acreage being usually 35,000 acres. Hence, since demand is very sensitive to price, lower freight costs would enable prices to be lowered with a consequent widening of demand. Table XLIV shows the extent to which demand affects the wholesale price of potatoes, viz:-

TABLE XLIV.

Year.	Australian Production	Average Price.	Approximate consumption Ounces Per Head Per Day.
1937	461,141	£6.17.0.	5.7
1938	345,312	11.15.0.	4.0
1939	274,441	17. 4.0.	3.3

It should be noted that the light crop of 1939 restricted the supply by approximately 2½ ounces per head per day and made a difference of over £10 per ton in the average price. It is, therefore, safe to say that if sufficient advertising and publicity could be carried out to increase demand by 1 oz. per head per day it would add £3. to £4. to the wholesale price. The normal average rate of consumption in Britain is 9 ounces per day.

421. The two major problems facing the potato industry, namely,

- (a) Fluctuation in total production caused by seasonal conditions, which may result in a shortage one year and a glut the next,
- (b) A steady decline in the consumption rate per head of population,

appear to be common to all potato growing countries of the world. In Australia there is no doubt that a great improvement in consumer demand could be achieved if a greater degree of "standardisation" of both quality and price could be effected. Irregular price levels have discouraged several firms who are interested in the packaging of potatoes. It is interesting to note American experience. Washed potatoes such as "Nebraska Triumphs" are now regularly quoted on the wholesale markets. Machines have been developed for washing and drying potatoes and the process adds anything up to £2.0.0. per ton to the wholesale price. Attractive "consumer packages" of 7, 10, 15 and 50 lbs. of choice goods are being marketed under various trade marks.

422. Intermittent supplies and prices also react against consumption. Every time a rise in price causes people to buy less potatoes, they buy something else as a substitute. A part of that demand is permanently lost. Hence, the reason for the falling consumption per head for each ten year period in Australia. In other words high prices have more than a seasonal influence on consumption.

423. An ever-increasing range of foodstuffs to choose from will naturally tend to decrease potato consumption but it is difficult to find an adequate reason why consumption of potatoes in Australia is normally little more than half British consumption, and one-third to one-fifth of consumption in parts of Europe. The only way to increase consumption is by standardisation of quality at a uniform price, and by advertising. Investigation is needed to develop the potato by-product industries, e.g. starch, alcohol, potato poultry meal, potato flour, etc.

424. APPLES.

Representations have been made to the State Fruit Board for data relating to the costs of production and marketing of apples and the researcher was invited to meet the Board. Up to date a meeting has not been possible, and until a meeting has been arranged only very limited data (pre-war) are available.

425. Tasmania is dependent to a very much greater degree than any other on outside markets for the disposal of the apple crop. Local consumption of fresh apples is normally no more than 100,000 bushels per annum, or about half a bushel per capita. A somewhat larger quantity is normally sold to factories for various purposes and the balance (usually about 94 per cent of the crop) is exported to overseas and interstate markets. No other State gives rise to a comparable movement of apples into trade channels. Western Australia exports overseas a fairly high proportion of her crop but the total production is only one fifth that of Tasmania and her interstate exports are negligible. Victoria, New South Wales and South Australia export a much smaller proportion of their crops overseas.

and Victoria in particular is the source of a moderate interstate movement, but the Tasmanian crop is the dominating factor in the overseas market and the interstate markets of New South Wales and Queensland. The Tasmanian industry's dependence on interstate markets means that in the event of restricted overseas markets, or exceptionally heavy crops, leaving a large surplus both the home and Mainland price will collapse. It is, of course, arguable that in the event of intensive competition in the Australian market over a period, Tasmania, by reason of her relatively favourable production conditions might capture a large share of the markets in New South Wales, Queensland and possibly Victoria at the expense of the growers in these States. But advantages in production are largely offset by shipping costs and by inefficient marketing methods. Another factor working in the same direction is the wider opportunity in the more populous States for selling low grade fruit locally that is, with wider local markets and smaller volume of production, mainland growers are able to dispose of a larger proportion of their total crop. With a lower percentage of unmarketed fruit a better gross return is secured.

426. The Department of Agriculture has estimated that the average cost of production per bushel is normally 1/-; items such as spraying, manuring and pruning will vary widely with the type of tree and prevalence or otherwise of the various pests. Such being the case the cost of production per bushel may vary to about 2/6.

427. The overseas trade to England is limited by a quota system to $2\frac{1}{4}$ million bushels. The overseas export season commences at the end of February and continues until the beginning of June. During this period consignments averaging from 25,000 to 100,000 cases are loaded. The average prices received for good quality fruit vary from 8/- to 14/- per case according to variety and condition and the state of the market upon arrival. The latter is controlled largely by the quantity of English cool-stored fruit and that available from American and Canada.

428. The pre war costs of shipping fruit to the United Kingdom were as follows, viz:-

TABLE XLVI.

Item.	Cost per Bushel.
Export Wharfage etc.	2d.
Overseas Freight Rate	3/6d. & 2 $\frac{1}{2}$ d.
Insurance	1d.
London Charges	1/-d.
Selling Broker's Commission	6d.
Advertising Levy	$\frac{1}{2}$ d.
Total	5/6d.

Hence, the percentage of overseas selling price absorbed by shipping costs varies from 40 to 68 per cent. Despite this freight burden acreage was not decreasing in the pre-war decade whilst exports were actually rising. In any case the quality of the service rendered is more important than the rate charged.

429. In a normal system exports to interstate markets approximate 7,250,000 bushels, the Sydney and Brisbane markets absorbing four-fifths of this total. The war shipping costs were as follows:-

TABLE XLVII.

175.

Item.	Cost per bushel.
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Tasmania/Sydney.

s. d.

Export wharfage etc.	0 1.0
Freight Rate	0 10.0
Sorting and Packing	0 1.1
Inspection	0 0.8
Wharfage	0 1.5
Receiving and Delivery	0 2.5
Commission.	0 6.0

1 8.9d.Tasmania/Brisbane.

Export wharfage, etc.	0 1.0
Freight Rate	1 9.0
Sorting and Stacking	0 1.1
Inspection	0 0.8
Wharfage	0 1.5
Receiving and Delivery	0 2.5
Commission	0 9.0

3 0.9d.

The prices received in a normal season, when the market is not subject to a shortage of supply, or glut, range from 5/- to 15/- per bushel, the latter figure being obtained for fruit sold ex cold store, to which a charge of about 1/3d. per case must be added. Hence, the percentage relation of shipping costs to selling price varies from 12 to 35 per cent (Sydney); and from 20 to 62 per cent (Brisbane). It will be observed that no attempt has been made to arrive at an average price and relate shipping costs to it, for the price varies so widely with differences in the quality of the pack, the varieties sold and the seasonal period. The average figures computed in the case of potatoes are, to an extent, unsatisfactory for these reasons.

430. Because of the dislocation of markets with the outbreak of war, the Commonwealth Government promulgated the National Security (Apple and Pear Acquisition) Regulations on 14th November, 1939 to provide for the acquisition and orderly marketing of the 1940 crop. A Marketing Committee of the Australian Apple and Pear Board (41) was appointed to supervise the marketing arrangements. As from 1st March, 1940, the Commonwealth acquired all apples and pears in Australia.

431. Advances were made to growers at the rate of 2/- per bushel on apples and 3/- per bushel on pears on the basis of 75 per cent of their estimated production which was determined by an official assessment of the individual crops. In addition, growers received a further advance of 1/- per bushel on apples and pears of prescribed quality delivered to places or to agents of the Board. All advances in respect of compensation were on the basis of bare fruit the costs of cases and packing, freight, storage and all marketing expenses being met by the marketing authority. Agents have been appointed throughout Australia to receive and deal with apples as directed, and a system of distribution devised to meet the particular needs of

(41) Constituted under the Apple and Pear Organisation Act (December, 1938).

the domestic market in each State. Insofar as shipping space has been available, overseas shipments have been directed from those states having the largest quantities available for export.

432. The Acquisition Scheme was continued for the 1941 season but an Australian Apple and Pear Marketing Board was constituted under the regulations to administer the scheme. State Committees continued to assist in the administration of the scheme. Acquisition arrangements under the revised organisation provided that instead of making advances to growers at flat rates a unit system was adopted which provided for differential rates as between States, and as between varieties of apples and pears produced in each State. Again, the fruit had to be actually delivered to the Board before qualifying for advances except where delivery was not required for marketing.

433. In later seasons the Government has taken action to acquire the Tasmanian and Western Australian crops only. In all other States the growers are not now subject to any control by the Board, and are free to dispose of their fruit through the normal channels of distribution.

434. The nature of the by-product problem varies from industry to industry. In the Tasmanian apple industry it is chiefly concerned with the utilisation of the surplus and unexportable apples, the quantity of which varies from season to season. The pre-war average percentage of processed to fresh apples exported was 10. Of course, the demands of a war economy have wrought a vast change in the composition of the state's apple exports, nearly 1/3 of total exports in 1943-44 being in dried form. Whereas in 1938-39, 717,000 lbs of dried apples were exported in 1943-44, 4,032,990 lbs were exported.

435. Pre-war there were many reasons why an apple surplus should exist e.g., limits on overseas markets for fresh apples and the existence of a standard of quality for export apples. It follows that there was normally a surplus of apples on the growers' hands every season after the demands of the overseas, interstate and local markets had been satisfied. Utilisation of the surplus as by-products affords the grower some return towards costs of production and removes a possible liability from his hands.

436. So far as the various avenues for the utilisation of apples are concerned the production of dried apples forms the largest and most profitable market. It should be noted that a widening of the market for solid pack apple is likely in the future. In pre-war days the apple evaporating industry with an estimated capacity of 50,000 - 70,000 cases per season was merely a convenience to the grower. The maximum normal price which the evaporator could afford to pay the grower was not sufficient to induce the latter to grow good quality fruit. A higher price for dried apples would enable the evaporator to pay more for fresh apples. Increased consumption of dried apples is shown by the wartime increase. What are likely to be the permanent effects on demand? Here it should be noted that, on the average, Tasmania produces 90 per cent of the total output of dried apples in Australia. Unfortunately, none of the evaporators keep adequate costing systems. However, shipping costs are high enough to divert the bulk of the output to interstate exports. Dried apple in bulk realises a lower price than the same product packed in cartons - in the case of the former it is likely that the proportion of shipping costs to final selling price is 8 per cent and in the case of the latter only 5.5-6 per cent. Pre-war the industry needed complete reorganisation and modernisation both in respect of production and marketing methods for there was a latent demand in Australia to be exploited. It is not proposed to trace through wartime developments here as the

greatly increased output has been called forth under defence contracts and can have little bearing on the post war market. Modern plant and equipment, rigid grading, both as regards quality and colour and more cooperative advertising on the Australian market are necessary if the industry is to expand.

437. The changing nature of the form in which apples are being demanded is reflected in the expansion of activity in the canning section of the industry. Solid pack apple is now being used in increasing quantities by bakers, pastrycooks and restaurants particularly in Victoria. (42). The percentage of final selling price absorbed by (interstate) shipping costs is approximately 6.5. It is likely that when the post war overseas market is stabilised most of the low priced varieties will be exported in solid pack form thus lowering the freight burden which is as high as 68 per cent of selling price. (43) It will be first necessary, however, to lower production costs in order that prices comparable with Canadian and American producers may be quoted.

438. Finally, we may summarise briefly the results of our investigations into the relation of shipping costs to the exportation of Tasmanian primary products, viz:-

TABLE XLVIII.

Product	Paras.	Percentage Relation of Shipping Costs to Final Selling Price.
Meat	386 - 400	50.34
Dairy Produce	401 - 404	-
Potatoes	405 - 421	19.65 (Average 1935-36 - 1938-39)
Apples - Fresh		
Overseas	422	40-68
Interstate	to	12-35 (Sydney); 20-62 (Brisbane)
Apples - Dried		5.5-6
Apples - Canned	435.	6.5

Strictly speaking, of course, dried and canned apples are manufactured products but they have been included in this section in order to emphasise the lower freight burden as compared with apples in fresh form.

439. Reference has already been made in Chapter V. to the general cargo rates ruling on the Australian coast. So far as overseas rates are concerned somewhat different principles apply in rate making, viz:-

(42) Sales in this State are high (75% of output) because of consumer awareness and the absence of intense competition from tropical fruits (of Sydney).

(43) Vide para. 42.

- (a) Different rates are applied to different classes of cargo according to their ability to contribute to the fixed charges of ship operation. Some rates, e.g. on wheat and coal cover little more than the prime costs of transport, while others, e.g. on apples, butter, cover total costs with something to spare. If it were not possible to charge differential rates a very great deal of the low grade freight would not be moved at all because of its inability to bear its total cost of transport, and it is possible that rates for high grade freight would be even higher than under this "preferential" system (or the service less efficient).
- (b) What the traffic will bear depends on a number of considerations but mainly on the "spread" between f.o.b. costs and c.i.f. values, and on the nature of the commodity and the conditions of its production, which determine whether contraction or expansion of output can be achieved easily, and whether the demand for carriage is, in consequence, elastic or otherwise. In the case of meat and apples for example, these factors are all favourable to relatively high shipping costs to overseas markets. There is, on the average, a wide spread between f.o.b. costs and c.i.f. values. At the same time the demand for carriage is inelastic because production conditions are unfavourable to a rapid adjustment of output to price changes, and there is virtually no alternative to shipment overseas and/or interstate.

440. In Chapter VIII we shall be concerned with the relation of shipping costs to the decentralisation of industry in Australia with particular reference to the future of industrial development in Tasmania (44). The Commonwealth and State Governments are now committed (45) to a policy of decentralisation of secondary industry, and the Commonwealth, as part of its post war shipping programmes, plans to control the freight and charter rates, fares, routes of sailings of all vessels plying interstate trades. Subject to certain conditions those trades will be subsidised which serve industries located in decentralised locations.

(44) Compare the terms "industrial development" and "decentralisation of industry", the latter being applicable only to the States of New South Wales and Victoria where the movement is from the crowded metropolises to the country. In the case of Western Australia, South Australia and Tasmania the problem is to develop new industries. But a fuller discussion will be reserved until the following Chapter.

(45) Vide resolution adopted at the Premiers' Conference, August, 1945.

CONFIDENTIAL

APPENDIX "A"

The University of Tasmania.

DEPARTMENT OF ECONOMICS AND COMMERCE.

RESEARCH PROJECT.

1 9 4 5

An Examination of Shipping Costs and their Effects
upon Tasmanian Exporting Industries.

QUESTIONNAIRE (GUIDE ONLY)

1. Products manufactured and the relation of each to total output?
(If you do not wish to reveal actual production figures, would you please quote the percentage which each product bears to your total output. If your production is subject to wide annual variations and/or was affected by war time controls, please quote also figures for a normal pre-war year, e.g. 1938 or 1939).
2. The sources of raw materials for the manufacture of your product or products?
3. In what markets are your products sold, and the quantity (or proportion) which each absorbs?
4. What are the main items which go to make up the term "shipping costs" so far as your industry is concerned.
5. Which items (if any) do you consider to be unreasonable and disproportionate with the service rendered, and why? (e.g. Are the costs for loading and unloading vessels at the wharves out of all proportion to the work done?)
6. Which products do you quote "free on board" (F.O.B.) and which do you quote "costs, insurance, freight" (C.I.F.), and why? Do you quote any of your products "F.O.B. factory, freight allowed" (or allowed and prepaid)?
7. Which of the above items (question 4) are covered by the charge made by the shipping companies? (That is, does their charge cover cost of sea carriage only, or such items as loading and unloading - export and import wharfages - insurance etc.)
8. Freight rates quoted by the shipping companies for the transport of your products?
9. How do you contract with the shipping companies? (By special agreement for a stated period, guaranteeing a certain minimum amount of cargo; or do you simply book space for each particular voyage and pay the ruling rate?)
- 10.(a) What proportion do shipping costs bear to the price which you pay for imported raw materials? (Normal year)
- 10.(b) By how much per unit do the shipping costs which are involved in the importation of raw materials increase total production costs?

(11)

11. What are the effects of freight rates on the importation of plant and equipment? Do they greatly increase overhead costs?
12. With regard to the marketing of your finished product on mainland or overseas markets, what proportion of the final price obtained is absorbed by "shipping costs" as defined in question 4 above? (If you sell your products f.o.b. could you estimate figures for the above table by assuming you sell c.i.f.)
13. Who are your main rivals on mainland and/or overseas markets?
 - (a) with regard to your rivals' costs of production, are they affected by transport costs (rail or sea?) in obtaining supplies of raw materials? Could you roughly compare your relative positions with respect to costs of production?
 - (b) If shipping costs do increase the price at which your product or products have to be offered in order to realise a satisfactory return, how is your competitive position on mainland or overseas markets affected? (Or, alternatively, if you have to accept the home producers' price, is the percentage of price which goes to normal profits largely absorbed by shipping costs?).
 - (c) Could you compare the returns from a unit of your product (or products) sold on the various markets.
14. If one "overseas" market (e.g. Victoria) absorbs the bulk of your total output, could you state why? (e.g. Is it because it is nearest to Tasmania; is there less competition from the home producer in other States (compare effects of rail freights) or overseas producers; are the sea freights the most favourable on that voyage; is it because no transshipment is necessary; are your production costs lower than rival producers' etc?)
15. If shipping freights were lowered by shipping companies (with the help, say, of a Governmental subsidy) would mainland or overseas producers be able to export to Tasmania and compete with your product on the home market?
16. To place you in a "satisfactory" trading position on mainland and/or overseas markets, by how much would present and/or present war freight rates need to be lowered?
17. If they WERE lowered, would it be possible to sell your product not only in greater quantities on present markets, but also to extend to other countries?
18. If freight rates do represent a high proportion of total costs of production, and if you do export most of your output to the main centres of population on the mainland, why did you locate in Tasmania.
19. What are the possibilities of making a contract with the shipping companies at lower rates, if you could guarantee them an increased and steady quantity of cargo? (i.e. Economies of large scale transport).
20. Tasmania's export trade over the war period was affected not only by rising freights but also by direct Governmental control of shipping space. How has this control affected your industry in so far as your competitive position on overseas markets is concerned?
21. With a view to post-war output policy, what steps would you suggest should be taken to offset the disadvantages accruing to Tasmanian industry through the island's insularity? (e.g. the provision of "special purpose" rather than "general cargo" ships might lower costs for those commodities exported in large quantities).

