

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**Private Interests and Public Money:
The State Provision of Medicines in New Zealand
1938-1986**

A thesis presented in fulfilment of the requirements of the degree of
Doctor of Philosophy at Massey University

Astrid Theresa Baker

1996

Contents

Abstract	i
Preface	iii
Abbreviations	vii
1 Medicines, Politics and Welfare States	1
2 Setting the Rules 1936-1941	27
3 Producing the Medicines	52
4 Operating the System 1941-1960	74
5 Supplying the New Zealand Market	103
6 Paying the Price	128
7 Scrutiny and Compromise 1960-1970	153
8 Holding the Status Quo 1970-1984	185
9 Changing the Rules 1984-1986	216
10 Conclusion: Past and Present	246
Bibliography	255

Abstract

Provision for free medicines was one aspect of the universal health service outlined in Part III of Labour's Social Security Act 1938. The official arrangements made during the next three years to supply medicines under the Pharmaceutical Benefits Scheme were intended to benefit the ill, but also protected the interests of doctors and pharmacists. The Government's introduction of these benefits coincided with dramatic advances in organic chemistry and the subsequent development of synthetic drugs in Europe and the United States. These events transformed the pharmaceutical industry from a commodity business to a sophisticated international industry producing mainly synthetic, mass-produced medicines, well protected by patents. While no government in the early 1940s could have guessed at the cost of providing such products, no government committed to a public health service could deny these products once they were commercially available. Pharmaceutical benefits quickly became a crucial aspect of patients' rights to free medical care in general but, at the same time, represented income and profit to pharmacists, drug manufacturers and wholesalers, and an important aspect of doctors' professional and economic status. This tension between state commitments and private interests, still unresolved, is the central theme of this history.

Through its control of access to the New Zealand market, the Department of Health was in theory in a strong position to bargain with local producers over drug prices. But in practice it was powerless to confront individual companies which held the patents on behalf of their overseas parent companies. Indeed the policies of the Department of Industries and Commerce were crucial in promoting the prosperity and profits of this small local pharmaceutical industry so as to guarantee access to paid employment and conserve precious foreign exchange. New Zealand was not alone in grappling with such problems and conflicts of interest. Governments in the United Kingdom, the United States, Canada and Australia all had great difficulty controlling doctors' prescribing, and also had ambivalent aims when bargaining with local pharmaceutical manufacturers and importers.

This thesis contributes to many studies on collaboration and compromise in government policy. It vividly demonstrates Hecló and Wildavsky's claim that governments operate as a federation of departments each linked to client groups. More importantly, this New Zealand history of the state provision of medicines extends and modifies British, Canadian, United States and Australian literature on the politics of national health services. Because discussion of state-funded and state-organised prescription medicines schemes in these studies is dominated by the politics of the medical profession, pharmaceutical companies and pharmacists are often only a shadowy presence. This thesis, for the first time, brings together the history of the medicines themselves, and the way in which they came to mean different things to each different provider - to doctors, drug companies, pharmacists and the state itself. An understanding of the history of this one aspect of government health services also enriches our understanding of the wider history of the New Zealand welfare state.

Preface

When working on a history of Imperial Chemical Industries in London more than twenty years ago, I began to understand that, because of their industrial strength, certain firms could play a significant role in a national economy, and so form close ties with government departments. A key characteristic of such firms, of which ICI was a striking example even in the 1930s, was their local and international production of certain significant commodities. I spent only a short time researching ICI's war-time production of the anti-malarial drugs Mepacrine and Pamaquin. However, I could see that, although pharmaceuticals were undoubtedly chemicals, they seemed to be a commodity like no other. Furthermore, from studying the history of ICI's elaborate trading agreements with other major chemical producers in Europe and the United States, such as I.G. Farben and Du Pont, I could see that cartels had a long history in the chemical industry and could be a powerful force for holding prices at a certain level. Altogether, I remember thinking that one day it would be interesting to find out more about the history of medicines, and about the relationships of major producers with each other and with national governments. It was not until much later, while thinking about states and hospitals, that I began also to think about the intractable problems which confront governments when providing health services. Examining the history of the state provision medicines in New Zealand seemed to offer the prospect of bringing together, in one story, the history of the medicines themselves as well as the way in which these products came to mean such different things to different providers - that is, doctors, drug companies, pharmacists and the state itself.

This study is based mainly on the records of the former Department of Health and the Department of Industries and Commerce, subsequently Trade and Industry, the Ministry of Commerce and the Commerce Commission. These files are scattered in small groups arranged broadly by departmental function, for example the administration of social security pharmaceutical benefits by the Department of Health, or industry development and price control by the Department of Industries and Commerce. These files, though government archives, contained extensive

correspondence, submissions and reports on pharmaceutical manufacture, distribution and sales. I also found much important material on official inquiries, in particular by the 1938 National Health and Superannuation Select Committee, and by the Public Expenditure Committee in 1966-1967, stored in Legislative Department files. I also searched a small number of files of the Social Security Department and Inland Revenue, for records of the early administration of pharmaceutical benefits and for possible study of transfer pricing respectively. Because some aspects of this history are by no means unique to New Zealand, it has been enriched by the study of the records of official inquiries on drug costs in the United Kingdom, the United States, Canada and Australia.

A preface is also an opportunity to thank those whose ideas, advice and efforts contributed to this work. My chief supervisor, Professor Barrie Macdonald, maintained a good balance between direction of the research, and making clear all the time that it was under my own management. Thanks to him, I never lost a sense of momentum, a certainty that somehow I would eventually complete the project and, above all, a belief that it was really worthwhile. My other supervisors have been Geoff Fougere of Canterbury University, and Professor Nancy Kinross and, in the last two years, Dr David Thomson, both of Massey University. Because of his knowledge of pharmaceuticals in particular, and the problems of state health care schemes in general, Geoff Fougere's advice has helped in several ways to sharpen the major arguments of the thesis. Nan Kinross, with her personal knowledge of the workings of the Department of Health over many years, was able to make valuable comments on drafts of the thesis. I also benefited from David Thomson's knowledge of the history of the making and the dismantling of the welfare state in New Zealand.

I must acknowledge the vital assistance of a period of full-time work in 1992 on this thesis, made possible by a Massey University Research Award for Academic Women. I wish to thank Basil Poff for his help and encouragement over many years, Dr Pauline Norris for fascinating conversations about the history of pharmacists and dispensing under the Pharmaceutical Benefits Scheme, and Dr Jan Rogers for

fortifying advice in general. I would like to thank Dr Mervyn Probine for reading and commenting on drafts of several chapters, in particular Chapter 9. Tim Jackson helped me to clarify several points to do with patents. I am grateful to colleagues working in related overseas literature for advice on relevant material. Several people kindly granted me interviews. I am very grateful to Dr Tom Hayes, Ross Martin, Professor Michael Cooper, Peter Graham, Harry Burton, Cliff Beard, Sally Porter, Ken Swann, Jim Mauger and Ross Sanderson for talking to me and offering helpful insights on many complex issues.

I have benefited greatly from the decision by the Ministry of Commerce to make available in National Archives Auckland Regional Office, files recording the policy and practices of the Department of Trade and Industry on medicines price control during the early 1980s. I must acknowledge the polite and indispensable help of archivists at National Archives Head Office in Wellington, and at the Regional Office in Auckland. My husband Michael, whose father was a pharmacist in England for more than fifty years, managed never to look bored at the prospect of yet another discussion about prescription medicines. I thank him, each of our children, Clare, Miranda, Adrian and John, and also my mother, for their help in many different ways.

After a general introduction in Chapter 1, this study follows a more or less chronological path from the 1930s to the end of the 1980s. It weaves together the history of the administration of medicines by the Department of Health and the Department of Industries and Commerce. However, most chapters are dominated by discussion of the operations of only one department. Chapter 2 analyses the background to the eventual introduction of pharmaceutical benefits by the first Labour Government in May 1941, more than two years after the passing of the Social Security Act. Because an understanding of the structure and particular features of the world market for prescription medicines is crucial for the whole of the remainder of the thesis, Chapter 3 breaks into this New Zealand history to set out the main events in the growth of the pharmaceutical industry from the 1930s.

In Chapter 4 we turn back to the local scene, and the problems of operating the new Pharmaceutical Benefits Scheme under the compromises worked out by Labour in 1941. Chapter 5, *Supplying the New Zealand Market*, takes up the story of Industries and Commerce administration of government policy on local industry expansion, mainly through import restrictions. In this way, it traces the origins of a small-scale local pharmaceutical industry, owned and controlled by parent companies based in Europe and the United States. Chapter 6 discusses the establishment and operation of almost independent systems of government 'price control' of medicines - through Industries and Commerce cost-plus price 'stabilisation' of the economy, and through Department of Health negotiation of Drug Tariff medicine prices.

Some aspects of the history so far are re-examined in Chapter 7 through an analysis of all major official inquiries on drug costs instituted by New Zealand governments from the 1940s to the late 1960s. A discussion of the main conclusions of official inquiries on drug costs under national health care programmes in the United States, Canada, the United Kingdom and Australia shows how the New Zealand government faced similar problems as a provider of prescription medicines, and had similar conflicting interests as a sponsor and customer of local pharmaceutical producers. This chapter serves to emphasise the repetitive, going-nowhere nature of debates about pharmaceutical benefits. Chapter 8 takes the story forward through the 1970s and early 1980s; it consolidates the argument set out in the last few chapters about the unwillingness or inability of governments to change the status quo on pharmaceutical benefits. Chapter 9 sets the Commerce Act 1986 in the context of the 'reforms' of the fourth Labour Government and shows that, although important elements of the long-established administration of prescription medicines were changed under this legislation, the interests of professional and commercial providers remained the same.

Abbreviations

AJHR	Appendices to the Journals of the House of Representatives
NZPD	New Zealand Parliamentary Debates
NZOYB	New Zealand Yearbook

1 Medicines, Politics and Welfare States

Since their introduction in 1941, pharmaceutical benefits have been a central feature of the health care provisions of the welfare state in New Zealand. These benefits represented at one and the same time a cost to the state, income and profit to drug manufacturers, wholesalers and pharmacists, a crucial element of the professional and economic status of doctors and, to the ill, access to the means of cure or amelioration of illness. The resulting tension between state commitments and private interests is the central theme of this history of ambiguity in government policy. Despite various 'reforms' in the 1980s, this tension remains fundamentally unresolved.

John Martin has argued that policy making is not a 'Big Bang' process 'but the development over time of courses of action in response to problems in society defined and determined by the interaction of many parties within and external to the government'.¹ By studying political process and the shifting location of political power inside and outside central government, this history draws attention to the way in which the state is far from unitary, but comprises multiple agencies and agendas. State departments depend on the co-operation, overt or otherwise, of 'non-state' partners to implement policy, so that the boundaries between state and society and economy are always blurred. The official arrangements made to supply medicines under the Pharmaceutical Benefits Scheme in New Zealand were intended to benefit the ill, but also accommodated - and, indeed, were to promote - the interests of powerful professional and industrial providers. Each of these groups was closely drawn into alliances with government departments but, at the same time, fought for its own objectives and was successful in winning many concessions. In this way, public policy was built on private enterprise, confirming and rationalising those sectors.

¹ John Martin, *A Profession of Statecraft? Three Essays on Some Current Issues in the New Zealand Public Service* (Wellington, Victoria University Press for Institute of Policy Studies, 1988), p.2.

The story begins with the passing of the Social Security Act 1938 by the first Labour Government. The Prime Minister, Michael Joseph Savage, described the legislation as an attempt 'for the first time to provide, as generously as possible, for all persons who have been deprived of the power to obtain a reasonable livelihood through age, illness, unemployment, widowhood, or other misfortune'.² Thus the Government intended the Act's generous provisions to help those for whom paid employment was impossible. Therein lay a second objective: guaranteeing access to paid employment by stimulating the development of secondary industries was as central to Labour's policies as providing social security itself. Long-term government support of a national network of small pharmacies, and the fostering of a fledgling local pharmaceutical industry, were both aspects of this policy. In this way, the state as provider of free medicines, through the 'health' policy administered by the Department of Health, coexisted uneasily with the state as economic manager and guarantor of full employment. These conflicting roles complicated and compromised government negotiations for the purchase and supply of medicines.

Labour's provision for free medicines was just one aspect of the health service outlined in Part III of the Social Security Act 1938. Doctors as 'gatekeepers' were to be a central feature: their steadfast refusal to fall in with plans for a national health service eventually pushed the Government into a compromise fee-for-service system, thus sanctioning and confirming doctors' independence and delaying the introduction of pharmaceutical benefits until 1941. Henceforth, the Minister of Health would pay, from the Social Security Fund, for those medicines listed in a schedule called the Drug Tariff. In this way, free medicines became a key aspect of patients' rights to free medical care, bound up with issues of welfare entitlement as well as pain and illness. Doctors decided which drug to prescribe from the 'free list' for their patients but, because they were not constrained by official restrictions such as cost per patient or cost per annum, they had no need to be closely aware of drug prices. This absence of direct cost pressure on doctors and their patients worked to

² Barry Gustafson, *From the Cradle to the Grave: A Biography of Michael Joseph Savage* (Auckland, Penguin Books, 1988), p.223.

the advantage of drug manufacturers and the national network of pharmacists who dispensed the medicines. Because pharmacists were paid a percentage of the wholesale cost of drugs, the higher this cost, the greater their profit. Drug manufacturers had little to fear either from patient resistance to high prices or, indeed, from government resistance.

Despite these contradictions and overt concern about the size of the drug bill, the arrangements made in 1941 for the distribution of medicines proved remarkably difficult to alter once they had been established. For the next 45 years, governments of both major political parties firmly accepted the principles of the full-employment welfare state, which included a modern medical service, and refined and enlarged the ideas of the first Labour Government.

As official arrangements to provide medicines under the Pharmaceutical Benefits Scheme were slowly established in the 1940s, dramatic advances in organic chemistry and the subsequent development of synthetic drugs both in Europe and the United States began to transform the pharmaceutical industry. During the next 20 years, it developed from a commodity business to a sophisticated, world-wide industry producing mainly synthetic, mass-produced medicines, well protected by patents. These products soon dominated all prescribing. No government could have foreseen the cost of providing the products of this rapidly growing industry which, in its modern form, was almost non-existent in the 1940s. Yet, in practical and political terms, no government could withhold these products once they became commercially available.

Legal access to new drugs, at least before patents expired, could be gained only by importing the product, or by allowing the establishment of overseas-owned subsidiaries to produce drugs under licence and pay royalties - as New Zealand governments began to do from the 1960s. From this time, government import licensing began to push several major international firms into local production. Officials from the Department of Industries and Commerce granted import licences more readily to those firms applying to import equipment and raw materials for local

processing, than to those attempting simply to import finished goods. Departmental efforts to protect and to promote this small-scale production of pharmaceuticals fitted in with the broader government policy on local industry.

The Department of Health had at its disposal two methods of bargaining with manufacturers and importers over the cost and supply of drugs. It could use its power to include or exclude pharmaceuticals from the Drug Tariff as a lever to bargain over price and to limit the drugs it would provide free. It could also induce price competition among manufacturers by seeking to drive down the price of 'equivalent' drugs to that of the lowest-cost supplier. The Department saw its role as an efficient administrator, however, rather than a tough commercial negotiator. Such a stance was in accordance with the policies of successive governments, irrespective of party, which showed little inclination to take a hard line. Moreover, price control of medicines, that is, the setting of maximum prices and profit margins to New Zealand manufacturers, importers and wholesalers, was the function of the Department of Industries and Commerce which set prices in order to ensure the profitability of New Zealand-based producers of pharmaceuticals, rather than to minimise the cost of drugs to the state.

Conflicting state policies, the rapid extension of the range of drugs available on the Drug Tariff from the early 1940s, dramatic increases in the amount of scripts written by doctors, generous reimbursement to pharmacists based on the rising wholesale price of drugs, as well as patient expectations, combined to push up Department of Health spending on pharmaceutical benefits. The average cost per head of population of these benefits, expressed in 1986 dollars, increased from \$11.4 in 1943 to \$105.6 in 1986.³ Figure 1 shows this linear trend. During this time, the number of prescriptions priced per head of population increased from 2.1 to 9.1 per year.⁴ Pharmaceuticals absorbed an ever greater share of spending on all health benefits,

³ Coopers & Lybrand Associates, *Report on the Removal of Medicines from Price Control* (Wellington, Department of Health, 1986), Table 1.3.

⁴ 1943 was the first full year of pharmaceutical benefits, which were introduced on 5 May 1941. Department of Health Annual Report 1986, *AJHR* 1986-87, E.10, p.88.

1986 Dollars

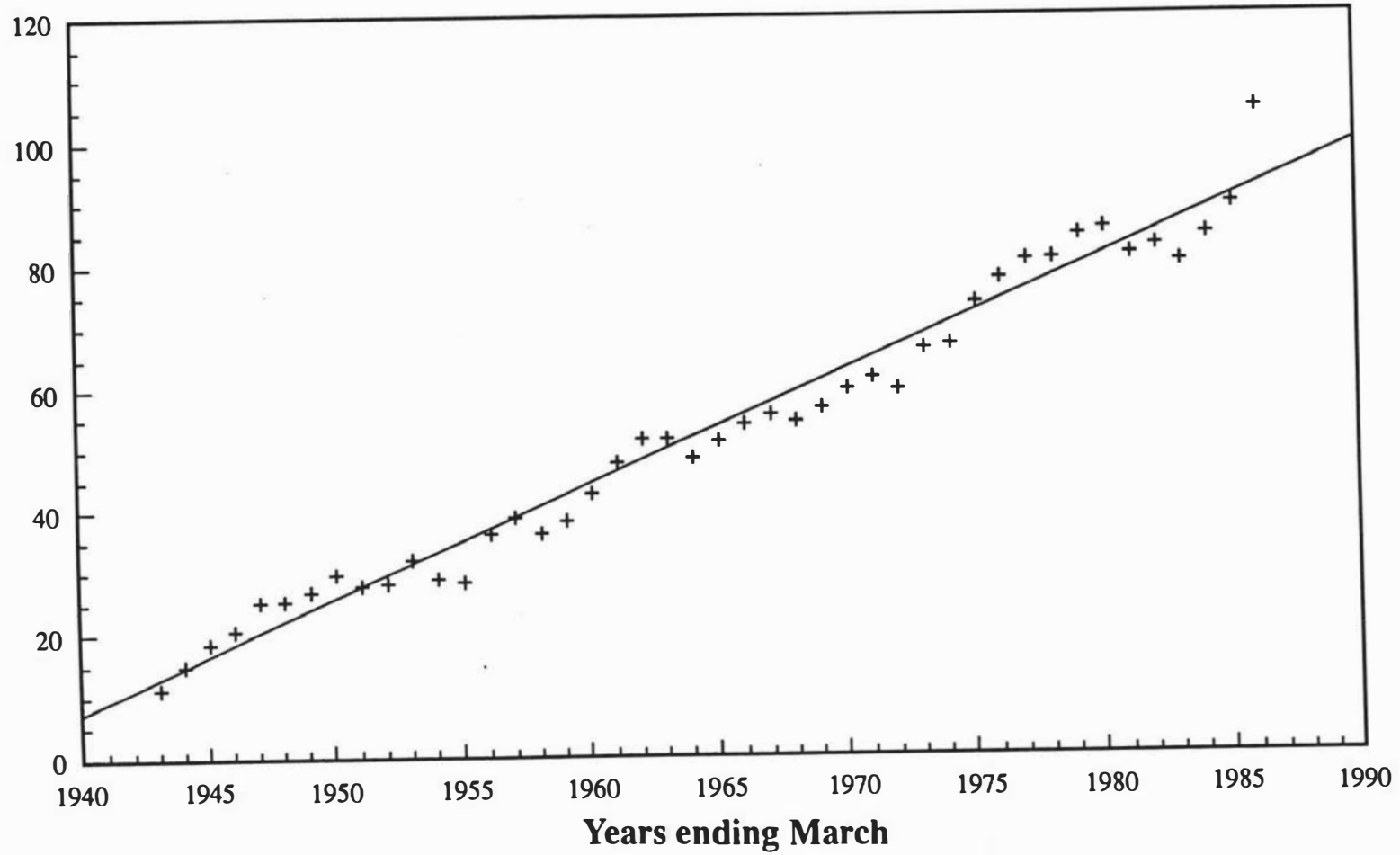


Figure 1. Pharmaceutical benefits per capita in constant 1986 dollars - linear trend.
Redrawn from Coopers & Lybrand Associates, *Report on the Removal of Medicines from Price Control*
(Wellington, Department of Health, 1986), Figure 1.2, Section I.

rising steadily from 15.1 per cent in 1943, to 63.1 per cent in 1986. This represents an increase from 0.17 per cent of GNP in 1943 to 0.81 per cent in 1986.⁵ Examining the spending record of pharmaceutical benefits, for example in relation to the consumers price index or GNP, is only a part of the story, however. The real issue, as this thesis will demonstrate, was the long history of conflicting policies within the government and the influence over the scheme of groups outside central government.

When the provisions of the Commerce Act 1986 lifted price control from medicines and swept away important parts of this long-standing administration, the Department of Health became the main purchaser of prescription medicines, its task no longer complicated by policies and practices of the Department of Trade and Industry. At the same time, however, the market power of the international pharmaceutical industry remained undiminished, along with the continuing relevance of policies and strategies of doctors and pharmacists. While government negotiation for the purchase of medicines could be strengthened by greater unity of state purpose and action, the fundamental conflict between government efforts to minimise the purchase costs of drugs and the concern of pharmaceutical companies to maximise their long-term profits remained unchanged. Doctors, moreover, continued to assert their independence from state controls, and pharmacists retained their status as protected small businesses.

The state provision of medicines in New Zealand strikingly illustrates a range of administrative problems faced by modern governments which must negotiate with powerful private commercial and professional interests in order to manage national economies and welfare states. In a broad sense, therefore, this history contributes to studies, in particular by British and Canadian writers, of patterns in the labyrinth of political interactions and decisions which we blandly term 'public policy'.

⁵ Calculated from Royal Commission on Social Security in New Zealand, *Social Security in New Zealand* (Wellington, Government Printer, 1972), Appendix 12, Health Benefit Expenditure since 1 April 1943, p.553 (adapted, supplemented and reproduced as Table 1, p.103, Chapter 4) and *NZOYB* 1988/89, pp.265, 812.

During the late 1930s in New Zealand, new government departments were taking shape to administer the social security commitments of the first Labour Government. and social security policy, so strikingly outlined in the Social Security Act 1938. These new departments relied on the co-operation and advice of an array of individuals and groups to establish and implement government policy. In a famous analysis of modern British politics and the capabilities of British governments, Beer called these organisations outside formal government 'producer groups'. At first he defined these broadly as producers of business, labour and agriculture.⁶ Subsequently, he went further to define these groups as trade unions, big companies, trade associations and professional organisations. Western governments, he said, had needed much more than the 'sullen acquiescence' of these critical groups in command of sectors of the economy, in pursuit of both specific objectives and the broad programmes of the managed economy.⁷ Pharmaceutical manufacturers and wholesalers, pharmacists and doctors were all 'producer groups' in Beer's terms; each had specialist knowledge, expertise or products which governments needed to provide pharmaceutical benefits.

In his analysis of policy making in the British welfare state, Ashford argued (like Beer) that governments would have difficulty performing without producer groups. Indeed, he said, influential groups who shared in the control of the welfare state, often with their own clients and following, had taken on a dual policy-making role, helping to formulate and define policies and, in turn, becoming beneficiaries and interpreters of policies. In this way, Parliament had lost control of public expenditure. Public and private sector groups, who had direct access to ministers and civil servants when crucial decisions were made, 'had little need' for members of Parliament to represent their interests. Indeed, these groups had almost total control of policies affecting their interests and were almost indistinguishable from the

⁶ Samuel H. Beer, *Modern British Politics: Parties and Pressure Groups in the Collectivist Age*, New Edition (London, Faber, 1982), p.395.

⁷ Samuel H. Beer, *Britain Against Itself: The Political Contradictions of Collectivism* (London, Faber, 1982), pp.13, 29.

administration. The British Medical Association, Ashford suggested, was typical of such groups.⁸

This idea of communities of major political and administrative actors - 'sometimes in conflict, often in agreement, but always in touch and operating within a shared framework' - was also explored by Hecló and Wildavsky in a less theoretical and much more entertaining study of modern British politics and the private bargaining behind public spending. Their picture of central government is that of a federation of departments each linked to its own client group. For this reason, they suggest, when trying to understand the day to day practice of government departments and decisions on the spending of public money, formal, abstract concepts of cabinet government and the 'unitary state' do not get us very far.⁹ Ham and Hill support this view. Policy, for them, can be seen as the consequence of a decision network, and a 'web of decisions taking place over a long period of time and extending far beyond the initial policy-making process'. In these coalitions or 'private worlds', in which detailed policies were worked out on particular issues, the boundaries between 'outside' interest groups and central government are often blurred.¹⁰

These definitions and explanations of policy processes are helpful for this New Zealand history of negotiation, alliance and compromise, in other words the private bargaining behind public spending. They serve to emphasise that many different agendas coexist within governments, and that formulating and implementing policy

⁸ Douglas E. Ashford, *Policy and Politics in Britain: The Limits of Consensus* (Philadelphia, Temple University Press, 1981), pp.6, 59, 269.

⁹ Hugh Hecló and Aaron Wildavsky, *The Private Government of Public Money: Community and Policy inside British Politics*, Second Edition (London, Macmillan, 1981), pp.lxv, 13-14.

¹⁰ Christopher Ham and Michael Hill, *The Policy Process in the Modern Capitalist State*, Second Edition (Hemel Hempstead, Harvester Wheatsheaf, 1993), p.12. Other studies of government structures similar to those in New Zealand confirm this view of policy making as a 'network' process. See J.J. Richardson and A.G. Jordan, *Governing Under Pressure: The Policy Process in a Post-Parliamentary Democracy* (Oxford, Martin Robertson, 1979), pp.73-74; A.G. Jordan and J.J. Richardson, *Government and Pressure Groups in Britain* (Oxford, Clarendon Press, 1987), pp.5-8; A.G. Jordan and J.J. Richardson, *British Politics and the Policy Process: An Arena Approach* (London, Allen & Unwin, 1987).

often requires close, bargained co-operation between state and non-state groups. What New Zealand governments did and did not do in managing pharmaceutical benefits can be seen as the outcome of successive political compromises among several groups, who were well represented both inside and outside central government. The Department of Health and the Department of Trade and Industry each administered separate, indeed increasingly contradictory, dimensions of the same broad welfare state policy. Each one established official standing committees and specialist departmental divisions, and maintained continuous links with particular professional and commercial interest groups and individual firms. In this way, each department functioned more or less autonomously within the government.

The state provision of medicines has been addressed in a number of studies of the politics of health care systems comparable to the one which developed in New Zealand from the late 1930s. These British, Canadian, United States and Australian studies suggest a number of important and interesting issues for a New Zealand historian of the state provision of medicines to consider. While insisting on remaining free of formal contracts and obligations to the state, doctors were the crucial gatekeepers to most health services, including pharmaceutical benefit schemes. In this way, they became the 'customers' of drug companies. Where a substantially state-supported medicines scheme was supplied by a strong home-based pharmaceutical industry, as in the United Kingdom, governments sought both to hold down drug prices and, at the same time, to ensure the profits and prosperity of local manufacture. Indeed the latter aim was sometimes paramount. In this way, drugs could be both a matter of health policy and, at the same time, a question of jobs and exports. As Evans suggested, national health services cannot be made to fit into any kind of demand-and-supply summary which treats them as commodities, 'analytically indistinguishable from litres of milk'. The state, intervening in a number of ways, influences the behaviour of both users and producers of health services, so that 'health' is far from the only consideration.¹¹

¹¹ Robert G. Evans, *Strained Mercy: The Economics of Canadian Health Care* (Toronto, Butterworths, 1984), pp.vi, 239.

Because doctors are both users and producers of health care, and because their co-operation is required in order to make any health scheme work, bargaining and conflict between governments and the medical profession dominates this literature. In a vivid case study of the relationship between the British Ministry of Health and leaders and officials of the British Medical Association, Eckstein showed how medical interests were well placed to influence government decision making, and how other parties such as the Treasury and the Cabinet only occasionally intruded into this 'closed network of relations'. Both sides were indispensable to each other, so that together they achieved 'smooth accommodation and effective compromise'.¹² Klein's analysis of the politics of Britain's National Health Service also emphasised a long history of bargaining between the state and the medical profession. He showed how general practitioners' independent contracts guaranteed their professional status, their financial security and, at the same time, their freedom to decide on all aspects of their patients' care. Consequently, from being the main *opponents* of the new National Health Service, doctors became the strongest force for maintaining the status quo. The irony of the National Health Service as established in 1948, and perpetuated since, was that it 'could exercise least control over the gatekeepers to the system as a whole: the general practitioners'.¹³

As Ham made clear in his analysis of British government health policy, doctors' independent status, and their 'clinical freedom' to treat every patient as they saw fit, posed peculiar difficulties for policy makers. The medical profession played a major role in a health policy community within which many issues were negotiated and agreed, either without or with only token reference to Parliament. Legislation was often little more than a record of the bargains already struck elsewhere. A great deal of British Department of Health activity was not in fact concerned with policy

¹² H. Eckstein, *Pressure Group Politics: The Case of the British Medical Association* (London, Allen & Unwin, 1960), pp.78, 90-91.

¹³ Rudolf Klein, *The Politics of the National Health Service* (London, Longman, 1983), pp.37, 57.

making but was aimed instead at continuing existing services and policies and maintaining good relationships with key interests.¹⁴

Because prescribing medicines is usually seen simply as part of a doctor's services, the industrial and commercial interests behind this state provision have appeared only as a shadowy presence in most studies of national health services.¹⁵ A number of writers make clear, however, that these other providers also had material investments and strong political and economic interests in state health benefits. Abel-Smith, for example, adviser to the British Secretary of State for Social Services in the 1960s and in the mid-1970s, acknowledged the central role of doctors who demanded and authorised the use of the bulk of health resources in state organised and financed health services. He also showed that the most common treatment doctors ordered was a brand-name drug, and that their 'clinical freedom' worked to the advantage of pharmaceutical companies so that these two groups formed a natural alliance. Most importantly, he explained, because governments and patients expected doctors to be guided solely by their professional knowledge and to prescribe the best preparation for their patients' needs irrespective of price, pharmaceutical companies competed for their doctor customers' preference by *product*, and new product introduction, rather than on the basis of *price*. The less price conscious doctors were, the less the industry needed to be concerned about what it charged for its products and the higher the margin between cost and price which could either be ploughed

¹⁴ Christopher Ham, *Health Policy in Britain: The Politics and Organisation of the National Health Service*, Third Edition (London, Macmillan, 1992), pp.15, 36-37, 127-128. New studies have shown how the British Conservative Government subsequently challenged this professional power in several contexts. Indeed, the Government's determination to reshape the National Health Service has meant that the medical profession has by and large been squeezed out of much direct consultation - but remains de facto enormously powerful and influential. See John Mohan, *A National Health Service? The Restructuring of Health Care in Britain since 1979* (London, Macmillan, 1995), pp.31, 32, and Ben Griffith, Steve Iliffe and Geof Rayner, *Banking on Sickness: Commercial Medicine in Britain and the USA* (London, Lawrence and Wishart, 1987), pp.141-145.

¹⁵ See, for example, Ham, *Health Policy*, p.144: Ham mentions the set of interests made up of the companies supplying goods, equipment and services to the NHS, including the pharmaceutical industry, dominated by multinationals.

back into further research or sales promotion, or taken as profit.¹⁶ In short, to quote Davis, 'this is no ordinary product and it is traded in no ordinary market'.¹⁷

Most importantly, the local presence of major world producers in some countries strongly influenced government policies on prescription medicines. Those governments purchasing from these firms faced conflicting aims concerning price and investment.¹⁸ Governments sometimes sought both to hold down drug prices and, at the same time, to ensure the profits and prosperity of local manufacturers. Several studies show the working out of such dilemmas in Britain, the United States, Canada, and Australia. This discussion gives a clear picture of an increasingly powerful pharmaceutical industry by the 1960s, dominated by multinational, patent-holding firms, which were well organised on an international and national scale, with formidable local lobby groups. Long-term recognition of patent rights on each new drug strengthened the monopoly provided by a successful brand name. Because patented drugs were available only under their manufacturers' trade names, patent holders could keep tight control on distribution and sale of their drugs through an intricate web of ownership ties and licensing agreements. Governments that sought, in various ways, to reduce significantly the price of medicines purchased from major local firms in this industry, risked losing large-scale investment.

The cost of medicines to the British National Health Service has been a constant concern to successive governments since the 1940s. At the same time, as a number of writers have made clear, British governments have also taken an ambivalent

¹⁶ Brian Abel-Smith, *Value for Money in Health Services: A Comparative Study* (London, Heinemann, 1976), pp.77-78, 81, 87.

¹⁷ Peter Davis, 'Pharmaceuticals and public policy', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), p.2.

¹⁸ Brian Abel-Smith, *An Introduction to Health: Policy, Planning and Financing* (London and New York, Longman, 1994), pp.129-130. Norway, barely an exporter, limited the number of products that could be sold in Norway to 1,000; drugs could be authorised for sale only for a 'genuine medical need' and any new drug must be shown to be more effective than any already on the market. This compares with 36,000 brand names on the market in Switzerland, and 15,000 in the United Kingdom and Germany.

stance toward the flourishing local pharmaceutical industry. Lang's sharp dissection of the politics of prescription medicines showed how the British Labour Government was subdued by a well organised and efficient lobby group, the Association of the British Pharmaceutical Industry, which represented local manufacturers including ICI, Glaxo and Beecham, as well as foreign-owned subsidiaries such as Bayer, Squibb and Parke Davis. Much of this group's influence stemmed from its close ties with the Department of Health and Social Security, and from the latter's conflicting roles as the local industry's sponsoring and regulating body. As a major earner of foreign exchange, the British pharmaceutical industry wielded substantial influence with government. An important victory for the industry was the Minister of Health's acceptance in 1957 of a price control scheme of the Association's own design, the so-called Voluntary Price Regulation Scheme, which made explicit the partnership basis of policy on drugs.¹⁹ The scheme's objective was to control the cost of drugs to the National Health Service, while allowing for a satisfactory return on capital.

Hancher showed how this official system of drug price negotiation failed to hold down drug price rises. Under this scheme, company profits earned from the National Health Service were scrutinised. Manufacturers seeking prices for new products, or price rises for existing drugs, were to deliver certain details of their product costs to the Department of Health and Social Security. However, because the Voluntary Price Regulation Scheme was indeed voluntary and informal, the Government had no means of enforcing this obligation. For example, it had no powers to request access to the books of parent companies or foreign suppliers. In short, Hancher said, the scheme amounted to little more than a 'loosely worded declaration of intent'. Although each side promised 'reasonable' behaviour, a combination of a 'freedom period', the world-wide patent system, and the absence of formal powers to

¹⁹ Ronald W. Lang, *A Comparative Pressure-Group Study of the Canadian Pharmaceutical Manufacturers' Association and the Association of the British Pharmaceutical Industry, 1930-1970* (Farnborough, Saxon House, 1974), pp.34-46. See also Chapter 11, 'The ABPI and Parliament', pp.257-292.

investigate costs, all conspired to ensure that the pharmaceutical industry was at best only honour bound to deliver its side of the bargain.²⁰

Against a backdrop of national trade deficits, the remarkable exporting success of domestically owned firms continued to strengthen the industry's bargaining position. Nevertheless, the themes of excessive prescribing and over-pricing were pursued in the press and in Parliament until 1982 when the Thatcher Conservative Government was forced to institute yet another official inquiry on pharmaceuticals, this time on effective prescribing. And once again, the Government drew back from implementing proposals for drastic change in the management of spending on prescription medicines. A proposal to allow pharmacists to substitute generic or unbranded versions of brand-name drugs particularly concerned the Association of the British Pharmaceutical Industry. A behind-the-scenes campaign by manufacturers, aimed at the Department of Health and Social Security and the Cabinet, succeeded in averting such a change. It could not persuade the Government against introducing a limited list of drugs available on the National Health Service in 1985, however, which was an indicator of changing official attitudes toward doctors' clinical freedom.²¹ In the event, the list proved no threat to the industry, but it demonstrated the Government's limited power to regulate doctors' prescribing in this way. The Government reversed the cuts made to industry profits in 1983, largely without parliamentary or public attention. As a consequence, by the early 1990s, the British pharmaceutical industry was experiencing one of its most prosperous periods of operation.²²

²⁰ Leigh Hancher, *Regulating for Competition: Government, Law, and the Pharmaceutical Industry in the United Kingdom and France* (Oxford, Clarendon Press, 1990), pp.82-82. See further, pp.84-88; 191-192.

²¹ Griffith, et al., *Banking on Sickness*, pp.141-146. See also Justin Greenwood, 'Producer interests in medicines policy: the role of the pharmaceutical industry', in *Social Pharmacy: Innovation and Development*, ed. G. Harding, S. Nettleton and K. Taylor (London, The Pharmaceutical Press, 1994), pp.144-158. For further detail on the limited list see Frank Lesser, 'Turning on the drug companies', *New Scientist*, 105:1438 (1985), pp.10-11.

²² Greenwood, 'Producer interests', pp.148-149. See also the useful discussion of the British market in James Taggart, *The World Pharmaceutical Industry* (London and New York, Routledge, 1993), pp.232-315. Taggart showed how Wellcome, for example, could overcome

In spite of the post-war growth of social entitlements, including health care, there has been no sustained commitment to a welfare state in the United States, and no national programme to cover the cost of prescription medicines.²³ Nevertheless, as Silverman et al. clearly showed, the substantial number of prescriptions paid for under the Medicare and Medicaid programmes meant that the Federal Government was one of the largest single drug purchasers in the world by the late 1960s, and had a long history of paying for health care with tax funds.²⁴ At the same time, the pharmaceutical industry also had a long history in the United States.²⁵ Although its profits have been the subject of vigorous public examination and criticism by the Government Food and Drug Administration, especially from the 1960s, its power and prosperity have remained undiminished.²⁶ Indeed, United States companies represent an important growth industry and a significant national asset by virtue of their contribution to health care, provision of alternative employment opportunities, and strong and growing positive balance of payments.²⁷ As in other countries, the close relationships between private power, as wielded by professional interest groups and the pharmaceutical industry, and separate departments of the United States Government, worked in favour of the industry.²⁸

the problem of the limited list: it removed its cough suppressant, Actifed, from the list and developed the product in the over-the-counter sector and resorted to heavy public advertising (p.235).

²³ See in general the substantial history of the American health care system by Paul Starr, *The Social Transformation of American Medicine* (New York, Basic Books, 1982). It concentrates on how doctors increased their control until it extended over virtually every aspect of health care, and how they began to lose it with the gradual growth of 'managed care', but pays little attention to the drugs they prescribed.

²⁴ Milton Silverman, Philip R. Lee and Mia Lydecker, *Pills & the Public Purse: The Routes to National Drug Insurance* (Berkeley and London, University of California Press, 1981), pp.4-6. See Chapter 11, 'The American Experience', for a survey of the various programmes.

²⁵ The best discussion of the early history of the United States drug companies such as Eli Lilly, Parke Davis and Upjohn, and their close partnership with the medical community, is Jonathan Liebenau, *Medical Science and Medical Industry: The Formation of the American Pharmaceutical Industry* (London, Macmillan, 1987).

²⁶ *Ibid.*, pp.10-11.

²⁷ Taggart, *World Pharmaceutical Industry*, p.154.

²⁸ Griffith, et al., *Banking on Sickness*, p.212.

As Lang showed, the Liberal Government in Canada took a pragmatic approach to the local industry, in order to force competition in drug sales. It could do this, Lang argued, because Canada had no equivalent of the British National Health Service, which proved to be a guarantee against radical government action, and because the Canadian pharmaceutical industry was entirely controlled and dominated by American and European corporations, which undertook little research and development locally.²⁹ Later writers took this Canadian story into the 1980s, and showed how the conflict was not so simply resolved. By the early 1980s, dismayed at the lack of investment by a high-technology industry, the Canadian Federal Government was forced to reconsider the position of the pharmaceutical industry. It gradually made domestic industrial expansion a principal policy objective. The Government's only serious option was to make major public concessions to the industry: the trade-off was a promise of increased industry investment for an effective end to the granting of compulsory licences to local generic companies to produce low-cost equivalents of patented products.³⁰

The Australian historical literature on state health services serves to emphasise that whether ostensibly a public 'command' system (the NHS) or a private system with substantial state subsidy (Australia) exists, close links develop between state and professions, and between state and commercial and industry groups, which shapes policy outcomes. In Australia, as in other countries, the medical profession appeared to many to be a producer cartel which dominated the health industry in its own interest.³¹ Hunter showed how government efforts to reform Australian state health services from the 1940s to the 1970s sharpened the determination of the local

²⁹ Lang, *Politics of Drugs*, pp.4-5, 9, 27-28.

³⁰ Michael M. Atkinson and William D. Coleman, *The State, Business, and Industrial Change in Canada* (Toronto, University of Toronto Press, 1989), p.123. See also Myron J. Gordon and David J. Fowler, *The Drug Industry: A Case Study in Foreign Control* (Toronto, James Lorimer, 1981), pp.14-15, 33-40. For the implications of the Canadian amendment to the Patent Act in 1969, see further Thomas K. Fulda and Paul F. Dickens III, 'Controlling the cost of drugs: the Canadian experience', *Health Care Financing Review* (Fall 1979), pp.55-64.

³¹ Mark Considine, *Public Policy: A Critical Approach* (Melbourne, Macmillan, 1994), pp.34-35.

Medical Association to resist any threat of state control of doctors' work and, most importantly, the establishment of contractual obligations. In spite of much acrimonious debate, the principle of free enterprise, private medical practice prevailed. This negotiation and compromise between governments and doctors, Hunter suggested, provides a clear parallel with the British experience described by Klein and by Eckstein. For example, senior Australian departmental officials joined in a 'cooperative partnership' with the medical profession and the voluntary insurance organisations during the 1950s and 1960s. This network had much in common with the 'intimate' relations between the British Medical Association and the Ministry of Health so clearly identified by Eckstein.³²

Gillespie's more recent analysis confirmed Hunter's suggestion of a 'private government' of the health scheme by a long-standing, intimate, medical-departmental network. Although cost control was a Treasury 'obsession', Australian governments anticipated and accommodated the wishes of the doctors' powerful lobby group on every score. Indeed, because Sir Earle Page, Minister for Health in the Menzies Liberal-Country coalition Government which took power in 1949, was himself a surgeon and long-time member of the Medical Association, the latter could push for close collaboration in policy making on the health service.³³ In this way, the medical benefits scheme introduced in 1953 reflected the view of the Australian Medical Association that there should be the very minimum of official interference with medical practice. As government intervention in social services increased in Australia, and then gave way to cost-cutting and partial withdrawal of services from the early 1970s, particularly in decreasing state support for health services, confrontation with the medical profession and the struggle over who decided and

³² Thelma Hunter, 'Pressure groups and the Australian political process: the case of the Australian Medical Association', *Journal of Commonwealth and Comparative Politics*, 18:20 (1980), pp.191, 195, 198. See also Thelma Hunter, 'The Politics of National Health', PhD thesis (Australian National University, 1969); see further Thelma Hunter, 'Medical politics: decline in the hegemony of the Australian Medical Association?' *Social Science and Medicine*, 18:11 (1984), p.980, for a useful brief summary of health insurance and Australian governments 1923-1983.

³³ James A. Gillespie, *The Price of Health: Australian Governments and Medical Politics 1910-1960* (Cambridge, Cambridge University Press, 1991), pp.253-256, 265.

who controlled, intensified. Doctors' perception of the threat of a fully salaried medical service continued to rankle.³⁴ Because of fundamental shifts in health insurance policy in Australia, especially following changes in government in the 1970s and 1980s, state health services and private health insurance continued to be the focus of much political activity.³⁵ At the same time, as Willis made clear, the dominant, independent position of doctors was never threatened.³⁶

The Australian Medical Association had influenced the details of the national scheme for free medicines introduced in 1950 under the Coalition Government. These benefits quickly became the largest single element in the cost of the Australian National Health Scheme, giving rise to official misgivings on the prices charged by local, foreign-owned, drug companies. The Government confined universal provision of pharmaceutical benefits to drugs of a 'life-saving and disease preventing nature' although a more extensive list of drugs was quite free to special groups, in particular eligible pensioners. Just as in New Zealand, the Federal Government regularly consulted representatives of groups with an interest in providing medicines - the Australian Medical Association, the Federal Pharmaceutical Service Guild, and the Australian Pharmaceutical Manufacturers' Association.³⁷

An especially interesting theme in Gillespie's story of 'muddling through' was the Treasury's constant concern to prevent a repeat in Australia of the 'cost-blowout' of

³⁴ Ann Daniel, *Medicine and the State: Professional Autonomy and Public Accountability* (Sydney, Allen & Unwin 1990), pp.14, 21; Hunter, 'Medical politics', pp.973-980.

³⁵ Health has been a major political issue in Australian Federal elections since 1969. George R. Palmer and Stephanie D. Short, *Health Care & Public Policy: An Australian Analysis*, Second Edition (Melbourne, Macmillan, 1994), pp.59-60.

³⁶ Evan Willis, 'The medical profession in Australia', in *The Changing Medical Profession: An International Perspective* (New York and Oxford, Oxford University Press, 1993), pp.107-108. Willis outlined the introduction of a national health insurance scheme in Australia, Medibank, by the reformist Whitlam Labor Government, then the return to private health insurance under the Fraser Liberal-National party coalition (subsequently modified form by the Hawke Labor Government on its election in 1983); neither scheme, he said, affected doctors' autonomy.

³⁷ Hunter, 'Politics of National Health', pp.207-208, 296; Thelma Hunter, 'Pharmaceutical benefits legislation, 1944-1950', *The Economic Record*, 41 (1965), pp.412-425.

the New Zealand Pharmaceutical Benefits Scheme, already apparent by 1944. Nonetheless, by 1951 the costs of the universal scheme had increased above all estimates. Finding a system of financial control satisfactory to both Treasury and the Medical Association proved to be impossible, however. As Gillespie made clear, however, right from the start the Government accepted the important principle of a restricted, official list of medicines universally available as pharmaceutical benefits, to be compiled and regularly revised by a joint committee of medical practitioners and departmental officials. Doctors, however, were still free to specify any brand name version of these medicines they wished and, just as in New Zealand, manufacturers and wholesalers in practice were able to set their own prices for costly imported drugs, such as the antibiotic Aureomycin (chlortetracycline hydrochloride). Furthermore, patient pressure to have drugs prescribed at no or low cost, and the wish of doctors to go along with this, established powerful incentives to use and extend the listed drugs. In spite of these problems, the Minister of Health, Sir Earle Page, resisted his Department's calls for stricter regulation, thus leaving matters in the hands of the pharmaceutical industry and the Medical Association. Just as in New Zealand, therefore, in the absence of effective regulation, the Government fell back on moral exhortation to persuade doctors to cut back on prescribing. In this way, spending on both the Pensioners' Medical Service, as well as the limited universal medicines scheme, was out of anyone's direct control. Political pressure grew to expand the limited scheme from a narrow range of life-saving drugs, so that from 1960 it covered the full range available. By widening the formulary in this way to match the pensioners' scheme, and adding a co-payment of 5 shillings per script, the Australian Government hoped to bring costs under control.³⁸

Gillespie also showed how the Australian Government, determined to cut costs, began to concentrate on the providers at each end of the medicines schemes, the national network of pharmacists and local drug importers and manufacturers. Like the Chemists' Guild in New Zealand, the Australian Pharmacy Guild proved to be a powerful lobby group which defended pharmacists against radical change in the

³⁸ Gillespie, *Price of Health*, pp.256-261. See also Palmer and Short, *Health Care & Public Policy*, pp.127-129.

original arrangements for dispensing. At the same time as it attempted to confront the pharmacists, the Australian Government began to exploit its position as a major purchaser of prescription medicines in order to drive a hard bargain with the local subsidiaries of international drug companies, many of which had established local operations during the 1950s and 1960s.³⁹

These companies responded to falling profits on their Australian operations by abandoning local research and development and limiting production to formulation and packaging only. As a result, drug exports fell while imports rose. During the 1980s, the Federal Labor Government sought to revive the local pharmaceutical industry under a five-year plan designed to encourage research and development and increase employment opportunities, as well as investment, production and exports. To reward firms that committed themselves to increasing exports from Australia, and to spending on local research and development, the Government would pay higher Pharmaceutical Benefits Scheme prices. To avoid an increase in the total cost of medicines under the Pharmaceutical Benefits Scheme, however, the Federal Government introduced increased patient contributions on prescriptions, which provoked criticism from pharmacists and consumers, particularly pensioners.⁴⁰

New Zealand historians have discussed pharmaceuticals, if at all, only as an adjunct to doctors' services, rather than as an important aspect of political and economic history in their own right.⁴¹ Detailed studies of other aspects of health services,

³⁹ James A. Gillespie, 'Midlife Crisis? The Pharmaceutical Benefits Scheme turns forty', *Current Affairs Bulletin*, 67:9 (1991), pp.4-11.

⁴⁰ Ann Capling and Brian Galligan, *Beyond the Protective State: The Political Economy of Australia's Manufacturing Industry Policy* (Cambridge, Cambridge University Press, 1992), pp.136-137. In this study, Capling and Galligan concentrate on government initiatives, or 'bringing the state back in'. They do not mention the success of the Australian Pharmaceutical Manufacturers' Association in bringing pressure to bear on the Federal Government to modify its pricing guidelines so as to support local production. See Palmer and Short, *Health Care & Public Policy*, p.130.

⁴¹ A start has been made in Astrid Baker, 'Setting the rules: pharmaceutical benefits and the welfare state', in *For Health or Profit?*, ed. Davis, pp.18-35; see also Astrid Baker 'Paying the price: pharmaceutical benefits and government policy-making, 1938-1986', in *New Countries and Old Medicine: Proceedings of an International Conference on the History of*

however, provide important background for this thesis. Belgrave showed that the economic and social status of the New Zealand medical profession was already firmly established by 1938. Doctors, working from private practices and governed by a system of professional ethics, already controlled the major medical institutions, and dominated other groups in the medical hierarchy and the medical 'market', including pharmacists.⁴² Furthermore, doctors were becoming a coherent professional group, well able to defend their interests against any possible encroachment by the Labour Government and, in general, the increasing power of bureaucracies and the state. At the same time, doctors were, by 1941, 'indispensable agents of the state'.⁴³ After some rivalry and hostility, doctors and pharmacists had formed an effective, close, working relationship, each to some extent dependent on the other. Most importantly, for this thesis, Belgrave explained the special, 'comforting ritual' of the doctor patient relationship and how, 'for an ever increasing number of patients the doctor was becoming the very incarnation of progress'.⁴⁴

The stormy beginnings of the general practitioner service established under the Social Security Act, and the long quarrel between the first Labour Government and the New Zealand Branch of the British Medical Association, has been described in detail by Lovell-Smith. He showed how Arnold Nordmeyer, the Minister of Health, and Walter Nash, the Deputy Prime Minister, turned to a fee-for-service scheme as a way out of the impasse.⁴⁵ The long-term result was an obligation on the medical profession 'to keep its house in order', because, as Lovell-Smith said, one is 'hard

Medicine and Health, ed. Linda Bryder and Derek A. Dow (Auckland, Pyramid Press, 1995), pp.118-124.

⁴² See, in general, Michael Belgrave, 'Medicine and the rise of the health professions in New Zealand, 1860-1939', in *A Healthy Country: Essays on the Social History of Medicine in New Zealand*, ed. Linda Bryder (Wellington, Bridget Williams Books, 1991), pp.7-24.

⁴³ Michael Peter Belgrave, '"Medical Men" and "Lady Doctors": The Making of a New Zealand Profession 1867-1941', PhD thesis (Victoria University of Wellington, 1985), pp.3,6.

⁴⁴ *Ibid.*, pp.332-335, 422.

⁴⁵ J.B. Lovell-Smith, *The New Zealand Doctor and the Welfare State* (Auckland, Blackwood & Janet Paul, 1966), p.132.

put to it to think of any other instance where any similar body of people has been entrusted with public funds with so little supervision'.⁴⁶

Lovell-Smith describes how the Government quickly made available such 'mundane' items as purgatives, paraffin, aspirin and aspirin compounds, tonics and cod liver oil on the 'free list' of medicines available as pharmaceutical benefits. By the mid-1940s almost all drugs in everyday use were obtainable free on a medical prescription. Because patients began to demand the latest drug treatments available,

it was a help to the doctor to be able to prescribe what he believed best for his patient, without considering whether the patient could afford it or not. Those unfortunates who needed some fairly costly remedy for long periods, or perhaps for life, such as diabetics, found it a boon.⁴⁷

In a study of the origins of the New Zealand Social Security Act, and the main issues in negotiations between the Labour Government and the British Medical Association over health proposals, Hanson confirmed the Government's willingness to compromise with doctors in order to introduce the universal general medical practitioner scheme.⁴⁸ This state intervention and support for general practitioner services also promoted all other health care initiated by doctors.⁴⁹ In other words, as Fougere explained, the new health service had greatly increased access to existing medical services and, at the same time, provided a guarantee to pay for future increases in demand for these services. Most importantly, general practitioners

⁴⁶ Ibid., p.205. See also D.G. Bolitho, 'Some financial and medico-political aspects of the New Zealand medical profession's reaction to the introduction of social security', *New Zealand Journal of History*, 18:1 (1984), pp.34-49. Bolitho added some important detail, in particular on the influence of Dr J.P.S. Jamieson, the local Medical Association spokesman. Jamieson represented the group of specialists and semi-specialists who assumed control of New Zealand medicine during the 1930s. This support, combined with Jamieson's leadership and his active campaign to gain the support of country doctors, was sufficient to dominate the small-scale social group which comprised the New Zealand medical profession of the period.

⁴⁷ Lovell-Smith, *New Zealand Doctor*, p.184.

⁴⁸ Elizabeth Hanson, *The Politics of Social Security: The 1938 Act and Some Later Developments* (Auckland, Auckland University Press/Oxford University Press, 1980), pp.121, 124-126.

⁴⁹ Iain Hay, *The Caring Commodity: The Provision of Health Care in New Zealand* (Auckland, Oxford University Press, 1989), p.122.

'could practice where they chose, as they chose, for the prices they chose, while being able to draw on extensive state subsidy of their fees and of the resources, especially pharmaceuticals, that they used in their practice of medicine'.⁵⁰

Although historians have shown clearly how the Labour Government confirmed the independent economic and professional status of doctors, the arrangements made for dispensing the medicines they prescribed have attracted little attention. Labour had a number of options open to it for making prescription medicines available, for example through hospitals as dispensing points throughout the country, but it chose to build on the existing network of privately owned small pharmacies for this service. In a number of sociological studies of the changing nature of pharmacy in New Zealand, Norris showed how the Labour Government ensured the commercial survival of hundreds of small pharmacies, already threatened by Boots' entry to the market. In this way, Labour's policy of protection and promotion of independent small businesses coincided with its commitment to provide a national network of dispensing centres to provide the medicines supplied under the Pharmaceutical Benefits Scheme. As Norris says, although pharmacists had no control over the level or kind of prescribing, because their income from dispensing was based mainly on the wholesale cost of drugs, they reaped large profits from the dramatic increase in the number of prescriptions, as well as the increasing availability on the market and, on prescription, of more expensive drugs.⁵¹ Pharmacists themselves still compounded most medicines they dispensed in the 1940s. But from this time the discovery and synthesis of new drugs, particularly antibiotics, began to change the role of community pharmacists. Economies of scale in research manufacturing, and marketing of the new drugs meant that pharmacists lost much of their small-scale

⁵⁰ Geoff Fougere, 'Struggling for control: the state and the medical profession in New Zealand', in *The Changing Medical Profession: An International Perspective*, ed. Frederic W. Hafferty and John B. McKinlay (New York and Oxford, Oxford University Press, 1993), p.117.

⁵¹ Pauline Toni Norris, 'The Negotiation and Re-negotiation of Occupational Control: A Study of Retail Pharmacy in New Zealand 1930-1990', PhD thesis (Victoria University of Wellington, 1993), pp.127-132, 150-151, 154-155.

manufacturing and began increasingly to dispense ready-packaged, mass-produced drugs.⁵²

These drugs were imported from Europe and the United States by wholesale and manufacturing chemists and, increasingly, by local subsidiaries of overseas drug manufacturers, such as Abbotts, Glaxo, May and Baker, and Merck Sharp and Dohme. Encouraged by government policy, some of these firms established local pharmaceutical production in New Zealand. This particular industry is touched on only briefly, if at all, in studies of New Zealand's economic history. However, it is an example of a number of final processing and finishing industries which grew up in the post-war years, behind the shelter of government import licensing and strict controls on foreign exchange.⁵³

Government efforts to stimulate the growth of New Zealand industry have been examined by a number of historians. They raise several issues which are important for this history of the development of a small-scale local pharmaceutical industry. According to Sutch, 'rapid industrialisation' would make use of the country's raw materials and developing skills, and provide the finished capital and consumer goods New Zealand could not buy abroad because it had insufficient foreign exchange.⁵⁴ As Hawke pointed out, the passing of the Social Security Act more or less coincided with the Labour Government's introduction of tough import licensing and controls on foreign exchange. These measures were prompted in the short term by a balance

⁵² Pauline Norris, 'The changing role of pharmacists and the distribution of pharmaceuticals in New Zealand', in *For Health or Profit?*, ed. Davis, p.36. See also Reg. Combes, *Pharmacy in New Zealand: Aspects and Reminiscences* (Auckland, Ray Richards for the Pharmaceutical Society of New Zealand, 1981), pp.227-228.

⁵³ Roderick S. Deane, *Foreign Investment in New Zealand Manufacturing* (Wellington, Sweet & Maxwell, 1970), pp.122, gives a brief introduction to the establishment of a small-scale, local chemical industry, including pharmaceutical production, under the stimulus of government controls on import licensing. He pointed out that, because no basic chemical industry existed in New Zealand, many local producers of chemical products had to import the bulk of their materials and applied only a few relatively simple processes to them.

⁵⁴ W.B. Sutch, *The Quest for Security in New Zealand 1840 to 1966* (Wellington, Oxford University Press, 1966), p.342.

of payments crisis at the end of 1938, but became part of Labour's long-term policy to foster local industry and employment.⁵⁵ Hawke showed how governments could manipulate licences to foster particular industries, both by ensuring that their equipment and materials could be imported, and by excluding competing finished products. In this way, local industry gained haphazard protection for the next 30 years. The proportion of imports requiring licences varied from time to time, declining in importance until their abolition in 1984. Both Labour and National removed licensing from capital equipment and materials, but the system continued to prevent the importing of most finished goods. In spite of these government efforts, however, most industry was based on the processing of imports for the local market, and most units remained small. As Hawke pointed out, import licences conferred monopoly powers on their holders who could raise prices, confident that they would not be undercut by competitors.⁵⁶ In short, manufacturers were willing to invest freely in local industry because it was protected, and because they were confident that governments would maintain high levels of demand for their products. As Hawke suggested, however, although the idea of 'manufacturing in depth' gained support both from government and manufacturers, in practice it seemed little more than indiscriminate promotion of industry with slight regard to the cost of this protection.⁵⁷

The long-term consequences of Sutch's advocacy of 'manufacturing in depth', and a government 'conviction that the economy could be managed in precise detail by the state', have been summarised succinctly by Oliver:

the government acquired a massive, and in the end unmanageable, armoury of controls - over exchange transactions with other countries, over the disposal

⁵⁵ G.R. Hawke, *The Making of New Zealand: An Economic History* (Cambridge, Cambridge University Press, 1985), p.163. See also Gary Hawke, 'Economic trends and economic policy, 1938-1922', in *The Oxford History of New Zealand*, ed. Geoffrey W. Rice, Second Edition (Auckland, Oxford University Press), p.412. See further, Keith Sinclair, *Walter Nash* (Auckland, Auckland University Press/Oxford University Press), pp.170-172.

⁵⁶ See in general, Hawke, *Making of New Zealand*, Chapter 13, 'Protected industry and sheltered services'.

⁵⁷ *Ibid.*, p.332.

of export earnings, over domestic credit and interest rates, and over incomes and prices.⁵⁸

This thesis provides a vivid case study of how, in spite of the existence of this 'armoury of controls' to manage the full-employment welfare state, local subsidiaries of international pharmaceutical companies still operated according to their own policies and objectives. Because these local firms were part of a global network of affiliated companies, the expectation of both Labour and National governments that even a small New Zealand equity holding in foreign-owned subsidiaries could somehow act as a control, indeed that the holders of New Zealand equity would somehow act in the 'national interest', and that policy decisions would be in the hands of New Zealand management and not determined from overseas, proved to be remarkably misplaced. The flow of profits, as well as capital payments for raw materials, royalties and various fees, from New Zealand to parent companies in Europe and the United States defeated the government's purpose of conserving foreign exchange but did not entirely defeat its purpose of providing employment.

Because the state provision of medicines depended on professional and commercial providers - doctors, drug importers and manufacturers, and pharmacists, as well as official administrators and policy makers - its history provides a rich picture of the welfare state in action in New Zealand from the 1930s. It draws together the history of government policy making, departmental administration, local industry development, foreign investment, the political and economic interests of doctors and pharmacists, as well as the development of the international pharmaceutical industry.

⁵⁸ W.H. Oliver, 'Social Policy in New Zealand: An Historical Overview', in Royal Commission on Social Policy, *Report*, Volume I, *New Zealand Today* (Wellington, The Royal Commission on Social Policy, 1988), pp.26-27.

2 Setting the Rules 1936-1941

Labour was elected in 1935 with a commitment to maintain full employment and to establish a broad system of social security. The new Government fulfilled this last commitment largely through its passing of the Social Security Act 1938, which spelt out principles and a framework, leaving to appropriate ministers the responsibility for implementation. The local branch of the British Medical Association fiercely opposed the planned new health service, particularly a proposed general contract for doctors based on an annual payment. A prolonged dispute delayed the introduction of the proposed pharmaceutical benefits until 1941. Under the compromise that finally emerged, the Government offered doctors a fee-for-service agreement and made a commitment to fund both doctors' services and such medicines as they thought appropriate to prescribe. The effect of this decision was that expenditure on pharmaceutical benefits would be driven on the one hand almost exclusively by the prescribing habits of doctors (who, like their patients, neither had to know nor were concerned with the cost of the medicines) and, on the other, by the constant innovation in drug therapies produced by the pharmaceutical companies. Similarly, pharmacists became key players in a process in which their profits were directly related to the volume and cost of the medicines they dispensed. They, like doctors and their patients, had little incentive to limit the volume of prescriptions or to seek cheaper alternatives. These concerns were vested in the Department of Health which tried to prevent this situation being exploited for profit by pharmaceutical companies. In undertaking these responsibilities, however, it often found itself in an uneasy relationship with the Department of Industries and Commerce which had a responsibility to encourage the development of local industry and to minimise demands on precious foreign exchange.

The Labour Government's 1935 election manifesto had spoken of distributing production and services so as to guarantee 'to every person able and willing to work an income sufficient to provide him and his dependants with everything necessary

to make a "home" and "home life" in the best sense of the meaning of those terms'.¹ The new Government's first preoccupation was employment, along with housing and education. Aware that many New Zealand industries were small and scattered, Labour aimed to standardise methods of production in existing industries, and to encourage the growth of new industries. In 1936, it passed an Industrial Efficiency Act 'to promote the economic welfare of New Zealand by providing for the promotion of new industries in the most economic form'.² The Act gave to the Minister of Industries and Commerce power to regulate particular industries, such as the motor tyre industry and pharmacies, by a system of licences.

At about the same time, the Government began serious preparations for a social security scheme. As Minister of Finance, Walter Nash appointed an interdepartmental committee of civil servants to investigate the Government's proposed pension and superannuation scheme, while Peter Fraser, the Minister of Health, appointed a National Health Insurance Investigation Committee from among the Labour Caucus to advise the Government on the establishment of a comprehensive health scheme. This latter committee came to be known as the McMillan Committee after its chairman, Dr D.G. McMillan, a general practitioner who was the Member of Parliament for Dunedin West. Because of his medical training and practical interest and experience in community health service, McMillan played an important role in shaping Labour's plans for health care reform. His committee held hearings throughout the country, and collected views from representatives of doctors, hospitals, friendly societies, chemists and dentists. Apart from the New Zealand branch of the BMA, which represented the country's doctors, all these groups supported the idea of a new national health scheme of some kind. The BMA opposed any change in the traditional form of direct fee payment by patient to doctor, except to provide free medical service to the very poor. Firm opposition to any form of state salary to doctors, and thus the possibility of state

¹ Elizabeth Hanson, *The Politics of Social Security: The 1938 Act and Some Later Developments* (Auckland, Auckland University Press/Oxford University Press, 1980), p.37.

² *The Statutes of the Dominion of New Zealand*, 1936, p.407.

regulation, continued to dog the Government's plans for a free general practitioner service, the central feature of its proposed national health scheme. The medical profession's leaders wanted a public health system to provide no more than those modern diagnostic services, such as X-ray, which were beyond the capacity of individual practitioners. In short, they wanted the best of both worlds - private enterprise medical practices subsidised by publicly funded services.³

Despite this opposition, in 1937 the McMillan Committee recommended to Cabinet the establishment of a national health service based on a universal free general practitioner service, free hospital treatment and free medicines on the prescription of a doctor. This report, with a few modifications, was to provide the basis for the health provisions of Labour's far-reaching Social Security Act.⁴ Before its submission, however, McMillan privately warned the Prime Minister that, under a national health scheme, the consumption of medicines would increase sharply, 'probably 300-400 percent'. The 'simplest method of paying for medicines under a national health scheme', he suggested, was for the Government to pay pharmacists the wholesale price of the drugs, plus a dispensing fee. McMillan correctly pointed out that the Government could make large savings if it set up its own importing department and provided chemists with the drugs at cost. Why should 'a small group of wholesalers levy a toll on all medicines used by New Zealanders in order to pay fat dividends on watered capital?' he argued. Because the great increase in consumption of drugs would be 'due' to the Government's 'establishment of a national service', if the Government would not set up its own importing department, 'it should at least own 50% of the capital in a combined importing and wholesaling

³ The conflict between the New Zealand Branch of the British Medical Association and the Labour Government has been closely analysed by a number of historians. Important studies are the near contemporary account by Douglas Robb, *Health Reform in New Zealand* (Christchurch, Whitcombe and Tombs, 1947); J.B. Lovell-Smith, *The New Zealand Doctor and the Welfare State* (Auckland, Blackwood & Janet Paul, 1966); Hanson, *Politics of Social Security*, pp.100-107, 124-126; D.G. Bolitho, 'Some financial and medico-political aspects of the New Zealand medical profession's reaction to the introduction of social security', *New Zealand Journal of History*, 18:1 (1984), pp.34-49; and Iain Hay, *The Caring Commodity: The Provision of Health Care in New Zealand* (Auckland, Oxford University Press, 1989), pp.83, 94-96, 99-122.

⁴ Hanson, *Politics of Social Security*, pp.63-64.

department'.⁵ With his medical training and political experience, McMillan was well placed to advise on the implications of plans for health care reform. His ideas were also in accordance with Labour's philosophy of establishing and promoting local industry. However, his advice on drug purchase was ignored as the Government continued to push for a universal free health service as part of a broad social security system, and for the support of doctors and pharmacists upon whom such a service would depend. Free medicines were not seen as a controversial issue in the debate leading up to the passing of the Social Security Act in 1938, but simply a logical part of the scheme as proposed.

The next important planning stage toward the Social Security Act was marked by the work of the National Health and Superannuation Committee, a Select Committee of Parliament, appointed in March 1938 and chaired by Arnold Nordmeyer, then a member of caucus and a future Minister of Health. The principles of a general practitioner service, free medicines, free hospital treatment and free maternity treatment were as carefully considered by the Select Committee as by the McMillan Committee. During the hearing of submissions from representatives of doctors, pharmacists and friendly societies, it examined existing arrangements for the provision of medical services with a view to building on these.

By the 1930s, New Zealand already had a long history of organised, but limited, provision of medicines prescribed by doctors. Until this time, about 30 friendly societies levied their members and, by arrangement with doctors and hospitals, offered free or partially free medical and hospital treatment, including medicines. For a separate levy or 'medicine fee', which averaged eight shillings per annum in the 1930s, members could claim medicines prescribed by a doctor. Although only about 113,000 people were paid-up members of friendly societies, most lodge contracts covered members' dependants up to the age of 16 years. (Therefore, if the average family had four members, about 28 per cent of the population was covered.) Everyone else met their own costs for hospital and medical treatment as and when

⁵ McMillan to Savage, 13 December 1936, p.1. IC 1 49/1, Part 1.

the need arose.⁶ The Labour Government proposed that the provision of hospital care, doctors' visits and prescription medicines would be free of such cash payments and would be universally available.

Just what the Government meant by 'free medicines' was not yet clear, however. In his written evidence, C.H. Farquharson, a pharmacist who represented the Pharmacy Board of New Zealand, the Chemists' Service Guild of New Zealand and the Chemists' Defence Association, pointed out some ambiguities in official proposals: 'all medicines' could mean *all* medicines ordered by a doctor, he said. On the other hand, 'all medicines' could mean that the public would secure 'merely the title to "free medicine" in accord with some restricted scheme to be set out in the proposed Act and subsequent legislation'. The limit decided upon in the term 'free medicines' had a 'very important bearing on pharmaceutical services and administration', particularly in connection with the adequacy of government funds, the future of pharmacy as a vocation, and the method to be followed in devising a schedule of approved drugs and a scale of service fees.⁷

Farquharson warned the Government about the seriousness of a commitment to provide free medical and hospital care, including free medicines. Unique as such an 'all in' scheme would be, he said, the fact remained that a community with limited financial resources must consider whether it could afford to provide all these benefits, 'or whether it must be content to concentrate on one or more of them - leaving the rest to be secured wholly or partly by the individual'. He emphasised that current regulations governing treatment and prescribing might well be outmoded 10

⁶ NZOYB 1939, pp.625-626. See also Notes of Evidence given before the National Health and Superannuation Select Committee, Dominion Council of Friendly Societies, April 1938, pp.Z 1, Z 15-16. Le 1/1938/10 Vol 3 Box 897; Joshua Weisstein, 'The Medical and Pharmaceutical Aspects of New Zealand's Social Security System: A Survey of their Development and Present Status and Some Discussion of Possible Improvements', MA thesis (Victoria University of Wellington, 1951), pp.201-202; Department of Social Security, *The Growth and Development of Social Security in New Zealand* (Wellington, Government Printer, 1950), pp.201-202.

⁷ Notes of Evidence given before the National Health and Superannuation Select Committee, Social Security and National Health Scheme, April 1938, p.2B 7. Le 1/1938/10 Vol 3 Box 897.

years later. Some treatments now commonplace had been unknown 10 or 15 years previously. At the time of the First World War for example, thyroid was almost the only glandular preparation prescribed, but the position was 'very different today', he said. The increasing use of other glandular preparations, insulin, liver extract and concentrates, as well as various vitamins and synthetic organic chemicals all tended to raise the average drug cost per prescription. Farquharson described the Government's predicament as a result of such largesse: the 'intelligent use of standard types of such preparations' could not be withheld, especially if a scheme claimed to provide a full pharmaceutical service. In spite of economies, therefore, within a few years the total cost of such a service, including drug costs, would increase mainly because of gradual increases in the total population insured, and the more costly and complex drugs available for prescription.⁸ During the Select Committee hearings, members failed to address these crucial issues and instead questioned Farquharson about the meaning of 'ethical' products, about pharmacists' overheads and about medicine containers. When the members did discuss costs of health care in general, they focused on hospital costs only.

The vigorous representative of the doctors in the quarrel with the Government, Dr J.P.S. Jamieson, raised the issue of a restricted list of medicines. He asked whether doctors would be confined to the British Pharmacopoeia (an official publication listing drugs with standards of purity, formulation and directions for use), or have 'complete freedom to prescribe exactly what medicines they liked'. He was told that there would be a list from which doctors 'would not be expected to depart', so that they would not have 'complete freedom'.⁹ This crucial issue of government control over doctors' prescribing was to remain unresolved, however. The Select Committee's subsequent report firmly supported the basic principles on health care

⁸ Notes of Evidence given before the National Health and Superannuation Select Committee, Social Security and National Health Scheme, April 1938, pp.2B 12-13. Le 1/1938/10 Vol 3 Box 897.

⁹ Notes of Evidence given before the National Health and Superannuation Select Committee, Social Security and National Health Scheme, British Medical Association, April 1938, p.2M 8. Le 1/1938/10 Vol 3 Box 897.

provision already put forward by the McMillan Committee, namely the establishment of a comprehensive, free, national health service, including free medicines.¹⁰

With these issues unresolved, Labour passed its far-reaching Social Security Act. This land-mark legislation was intended to bring together monetary benefits and health services into a comprehensive social security scheme to be financed from a new social security tax of one shilling in the pound, payable on all incomes.¹¹ The Act included arrangements for a minimal universal superannuation payment at age 65, and a national health service available to all persons normally resident in New Zealand, irrespective of their financial position. It was divided into three main parts covering, respectively, cash benefits, financial provisions and health benefits. Part III of the Act provided for a general practitioner service, available to every person in the community, along with maternity benefits, hospital benefits and pharmaceutical benefits.

Section 89 of the Act defined pharmaceutical benefits as 'the right of every person entitled to claim such benefits' to be supplied with what was ordered 'by any medical practitioner in the course of providing any medical benefits or other benefits in accordance with this Part of the Act'. Therefore it limited pharmaceutical benefits to the supply of medicines on the order of a doctor providing medical benefits under the Act. Section 90 indicated general arrangements for the supply of pharmaceutical benefits by pharmacists, under contract with the Minister of Health, or by 'any other person that is competent and willing to undertake the supply of the same in accordance with terms and conditions fixed by the Minister'. The Minister of Health had the power to determine the prices the Government would pay for medicines, drugs, materials and appliances covered by pharmaceutical benefits, as well as the

¹⁰ Report of the Select Committee on National Health and Superannuation, *AJHR* 1938, 1-6, pp.6-12. On the work of the select committees in general, see Hanson, *Politics of Social Security*, Chapters 6 and 7.

¹¹ The Social Security Tax was subsequently raised to 1s 6d in the pound, and in 1968 merged into income tax. In 1964, the Social Security Fund, which was never more than notional, was merged with the Consolidated Fund.

terms and conditions of their supply. The Act also approved any supplementary benefits necessary to ensure the effective operation of all these provisions.¹²

The Government had enacted little more than a broad legislative framework which allowed a good deal of freedom to individual ministers whose departments would administer the various provisions. For example, the Government had the options of leaving the dispensing of medicines to doctors, to pharmacists or, indeed, of establishing some kind of state dispensing system. From the start, however, it preferred to build on existing arrangements for the provision of medicines, based on doctors' prescribing, and a national network of pharmacists dispensing. Therefore an important phase of preparatory work for the Department of Health was consulting with representatives of doctors and pharmacists, in order to fix the terms and conditions of formal contracts for their services. When the Social Security Act came into operation on 1 April 1939, however, these negotiations were still far from complete.

The general practitioner benefit of the Social Security Act was the central feature of Labour's new national health scheme. Most other health benefits of the Act, especially pharmaceutical benefits and maternity benefits, would be provided as part of this service. In his address in reply to Parliament in 1938, McMillan described the universal general practitioner service as 'one of the very fundamental planks of any health insurance scheme, one from which we dare not depart....It is the foundation upon which the whole service will be built, and if that foundation is incorrectly laid the harm done will be irreparable'.¹³ This attitude emphasised doctors' (and especially general practitioners') already privileged position in the provision of health care.

¹² *The Statutes of the Dominion of New Zealand*, 1938, pp.116-117.

¹³ *NZPD*, 251 (1936), p.93. Thirty-six years later the same view still prevailed. A 1972 report on social security in New Zealand stated firmly that the general practitioner was 'clearly the keystone of any medical service and should have all necessary ancillary services at his command'. Royal Commission on Social Security in New Zealand, *Social Security in New Zealand* (Wellington, Government Printer, 1972), p.402.

In spite of prolonged negotiation between the Labour Government and the New Zealand Branch of the BMA, however, doctors remained steadfastly opposed to the proposed new health service. When it had framed the health benefits of the Social Security Act, the Government had assumed that doctors would sign a general contract of some kind. In February 1941, the new Minister of Health, Arnold Nordmeyer, offered doctors 'capitation' contracts, based on an annual payment-per-person for each patient registered, similar to those held in Britain.¹⁴ In the view of the local branch of the BMA, however, an annual fixed total fee paid by the state was equivalent to a state salary, and implied some degree of state control. For its part, the Labour Government continued to be firmly opposed to any scheme which meant the payment of a fee by patient to doctor.

A general election was due late in 1941 and the long-promised introduction of the new general practitioner service was still impatiently awaited by the general public. Yet the Government still refused to coerce the doctors to co-operate in its original capitation scheme.¹⁵ In August 1941, as an interim measure, the Minister of Health reluctantly proposed a fee-for-service plan to the New Zealand Branch of the BMA, in other words a fee charged each time a doctor provided a service. Doctors would not be obliged to accept the proposed fee as full payment for their services, however, and could charge an amount over and above this sum. In this form, the Government's proposal became law as an amendment to the Social Security Act.¹⁶ The amendment allowed it to introduce the general practitioner, or general medical

¹⁴ Department of Health Annual Report 1941, *AJHR* 1941, H.31, p.7. For further details see Watt, Director-General of Health to Minister of Health 21 December 1939, pp.1-3. H 1 208-25 23207; Department of Health, Social Security Act, 1938, Medical and Allied Benefits, Circular Letter to Medical Practitioners, Appendix, Scope and General Arrangements for Benefits, pp.3-10. H 1 208-25 23207.

¹⁵ *NZPD*, 259 (1941), p.610.

¹⁶ *The Statutes of the Dominion of New Zealand*, 1941, pp.153-160. The Social Security Amendment Act, 1941 was itself subsequently amended the following month, to raise the doctors' statutory fee for service. See Lovell-Smith, *New Zealand Doctor*, pp.147-150.

services benefit, in November the same year.¹⁷ The Medical Association had not, at least publicly, altered its official view, but some doctors were now willing to consider a fee-for-service plan. During what remained of 1941, many doctors accepted the Government's social security scheme and signed the Medical Benefits Application and Agreement cards for families.

A crucial consequence of this compromise with the doctors, in particular the Government's failure to get them to accept general contracts, meant that it also had to modify its original intention to establish strict control over prescribing. Whether doctors signed capitation or fee-for-service contracts, the Government had originally proposed that a definite total sum be fixed in advance each year to form a fund for the remuneration of doctors - that is, a General Practitioners' Fund. The Minister of Health had also proposed to ensure, by contract or by regulation, that a doctor had 'some responsibility' to ensure that 'an excessive cost' was not 'imposed on the fund by reason of the character or quantity of drugs or appliances ordered by him'. Pricing bureaux would statistically analyse prescriptions received to control 'unnecessarily expensive or excessive prescribing'.¹⁸ Instead, by 1941 the Government had effectively taken on an unlimited liability to provide all doctors' services, including the medicines they prescribed, whether they had signed any form of contract or not. At the same time, the introduction of the health benefits of the Social Security Act had no immediate effect on doctors, apart from limiting periods of treatment or supply under one prescription. They had no obligation to the Department of Health to prescribe in a particular manner, to use any standard form, or in any way to approve or otherwise the new order.

¹⁷ Department of Health Annual Report 1942, *AJHR* 1941-1942, H.31, p.5. Any medical practitioner who provided any general medical service was entitled to receive 7s 6d for each consultation.

¹⁸ The annual total of this central fund could be the product of a 'predetermined capitation fee' and the 'estimated mean for the year of the number of persons eligible to receive medical benefits under the general arrangements for these benefits'. Department of Health, Social Security Act, 1938: Part III, Medical and Allied Benefits, Circular Letter to Medical Practitioners, 1939. Appendix, Scope and General Arrangements for Benefits, pp.7, 10, 12. H 1 208-25 23207. See also Notes of a Conference of Representatives of the Pharmacy Board of New Zealand, the Chemists' Service Guild of New Zealand, Pharmacy Plan Industrial Committee, and the Department of Health, 13 March 1941, p.2. H 1 208-25 23207.

Both Labour and National seemed to agree on the fundamental right of a patient to be provided, free of charge, with whatever medicines doctors prescribed. This bipartisan attitude was well summed up by Sydney Holland, the Leader of the Opposition, speaking in Parliament in 1941:

Any prescription by doctors operating under the provisions of the Act should be supplied by the Department. There should be no differentiation between a patient requiring a common prescription and another with a complaint for which a prescription not on the pharmaceutical list was required. In the long run, the cost to the Fund might well be considerably lower and the patient cured in far shorter time or given real benefit when the older formulae had been outmoded by new methods not yet covered by the scheme.

A doctor should be free to choose what would do the most good without the thought at the back of his mind that the person might be called upon to meet the expense himself if instructed to use something not on the Social Security list.¹⁹

Statements such as this show that, in the minds of at least some politicians, the intentions behind the scheme had changed from the original premise that doctors' prescribing should in some way be strictly under government control. The refusal of most doctors to take up capitation contracts with the Government meant that pharmaceutical benefits could not be introduced under the appropriate provisions of the Social Security Act. The Government had originally intended that free medicines would be an adjunct to treatment by general practitioners. As things stood, however, patients on the lists of the few doctors operating on a capitation basis would receive medicines prescribed by these doctors, while all others would be required to pay for their own.

When some kind of agreement with the doctors was at last in sight, the Government began to press on with arrangements to provide the medicines they prescribed. Unlike doctors, pharmacists took a positive attitude toward the Government's proposed new health service. The Social Security Act had provided for pharmacists approved by the Ministry of Health to contract to supply medicines 'at the prices and

¹⁹ *NZPD*, 260 (1941), p.656.

in accordance with the terms and conditions fixed by the minister'.²⁰ The terms and conditions negotiated by pharmacists under the Act had been strongly influenced by their parlous condition in the 1930s.²¹ Under its policy of encouraging industrial and commercial development, the Government was concerned to ensure pharmacists' commercial viability through the 'sale' of dispensing for which it had provided under the Pharmaceutical Benefits Scheme.

Just two years earlier, an impending 'invasion' by the British retail chain of Boots the Chemists (NZ) Ltd, a 'menace' which threatened serious competition to New Zealand pharmacy, had prompted a parliamentary inquiry.²² Boots proposed to establish a much larger chain of pharmacies in New Zealand than already existed, and even to erect a factory if the proposed new shops were allowed. In protests to the Government, pharmacists presented Boots as a large, foreign firm aiming to displace small, New Zealand, owner-operated businesses solely to increase its already large profits.²³ The Government was sympathetic to the pharmacists' plight, preferring not to support an overseas take-over of local small business.²⁴ The parliamentary select committee, charged with investigating the issue, agreed with Boots' representatives that the firm could open no more than two shops pending a full state inquiry.²⁵ At the same time, the Government recognised the need for fewer, more efficient pharmacies with lower overheads, more substantial financial

²⁰ *The Statutes of the Dominion of New Zealand*, 1938, Section 90(2), p.117.

²¹ Memorandum to Bureau of Industry: Provisional Plan for the Reorganisation of the Pharmacy Industry, Section III p.3, 28 October 1937. IC 1 49/1, Part 2. See also Pauline Toni Norris, 'The Negotiation and Re-negotiation of Occupational Control: A Study of Retail Pharmacy in New Zealand 1930-1990', PhD thesis (Victoria University of Wellington, 1993), pp.124-128.

²² See 'Pharmacy Inquiry', Department of Industries and Commerce Annual Report 1936, *AJHR* 1936, H.44, pp.27-28 and, further, Stevens, Chairman PPIC, memorandum to Minister of Industries and Commerce, 21 August 1950. H 1 208-3 23180.

²³ Notes of Evidence given before the National Health and Superannuation Select Committee, April 1938, pp.M 2-5. Le 1/1938/10 Vol 1 Box 896.

²⁴ Norris, 'Retail Pharmacy in New Zealand', pp.126-128.

²⁵ Department of Industries and Commerce, Annual Report 1936, *AJHR* 1936, H.44, p.27.

resources to allow larger-scale stock turnover and, in turn, more advantageous buying from wholesalers, more attractive shops and more up-to-date methods.

Under provisions of the Industrial Efficiency Act 1936, the Minister of Industries and Commerce appointed a Bureau of Industry composed of representatives of manufacturing, farming, labour, and government departments. The Bureau's main function was to license entry into specific industries, such as the manufacture of cement, or into specific occupations, such as pharmacy, in order to regulate the number of individual enterprises and their geographical location.²⁶ No pharmacist could commence business except by licence granted by the Bureau of Industry. The licence was personal to the holder and specified the address at which the pharmacy could be conducted.²⁷ The Bureau would not grant such a licence unless the applicant's main business was the compounding, dispensing and sale of medicines, and the sale of patent foods, surgical appliances, toilet requisites or photographic requisites. In this way, the Government could control the holding of multiple shops by one pharmacist, and thus the growth of chain pharmacy in New Zealand.²⁸

A further, more constructive policy underlying the Industrial Efficiency Act related to the preparation of industry 'plans' to regulate standards and prices, and the administration of these by industry committees. In consultation with pharmacy interests, the Bureau of Industry prepared a Pharmacy Plan during 1937, with the primary purpose of serving the public interest while, at the same time, being of

²⁶ Department of Industries and Commerce Annual Report 1938, *AJHR* 1938, H.44, p.21. See also J.B. Condliffe, *The Welfare State in New Zealand* (London, Allen & Unwin, 1959), p.238.

²⁷ Industries and Commerce Memorandum, Pharmacy Amendment Act 1954, December 1954, p.34. IC 1 file 3/31, Accession W709.

²⁸ Provisional Plan for Reorganisation of the Pharmacy Industry, 28 October 1937, Section VI Reorganisation, Licensing of retail pharmacies, p.6. IC 1 49/1 Part 2. See also, Norris, 'The Negotiation and Re-negotiation of Occupational Control', p.100. The new licensing regulations impeded, but did not entirely stop, the growth of the Boots chain. By 1954, Boots had opened another four pharmacies.

distinct benefit to those engaged in the industry.²⁹ Indeed, the underlying intention of the Pharmacy Plan was the economic 'rehabilitation' of retail pharmacy, based on the principle of individual ownership.³⁰ It was to be implemented by a Pharmacy Plan Industrial Committee, which had 'the duty of caring for the general welfare and survival of individual retail pharmacy'.³¹ For example, the Pharmacy Plan Committee proposed to confine to pharmacists the retail sale of all medicines other than proprietary or 'patent' medicines. Furthermore, when establishing uniform prescription pricing for all pharmacists, the Pharmacy Plan Committee followed Bureau of Industry recommendations that charges be based on a fixed dispensing fee and an official drug tariff which would specify prices of all drugs used, after allowing for a substantial 50 per cent 'on cost' or profit margin to the pharmacist.³² Nevertheless, when consulted by the Government, the Pharmacy Plan Committee insisted that social security dispensing would be a 'burden' to pharmacists, because few could survive on the profits of dispensing alone. Indeed, the Committee felt

that it cannot too strongly emphasise the poor condition of pharmacy generally, and particularly the inability of the "small" man, who will bear the burden of Social Security dispensing, to stand even a slight reduction in dispensing prices without some compensatory benefit.³³

²⁹ Provisional Plan for Reorganisation of the Pharmacy Industry, 28 October 1937, Section I, pp.1-2. IC 1 49/1, Part 2. The Plan specifically provided that the extension of Company Chain Pharmacy (Boots) be limited, so as to ensure the continued existence of individual pharmacists (p.4.).

³⁰ Stevens, Chairman of Pharmacy Plan Industrial Committee, Memorandum to Minister of Industries and Commerce, 21 August 1950. H 1 208-3 23180.

³¹ Myers, Chairman, Pharmacy Plan Industrial Committee, Memorandum, National Health and Superannuation Select Committee, 29 April, 1938, p.2. Le 1/1938/10 Box 899.

³² Schmitt and Woodward, Chairman and Secretary, Bureau of Industry, Department of Industries and Commerce, Memorandum to Minister of Industries and Commerce, 8 September 1937, p.1. IC 1 49/1, Part 1.

³³ Myers, Pharmaceutical Benefits under the Social Security Act, Pharmacy Plan Industrial Committee, Department of Industries and Commerce, Submissions on Social Security Dispensing to Commissioners on Pharmacy Act 1939, July 1939, p.17. (In 1939, 70 per cent of 'one-man pharmacies' had a turnover of £1500 or less.) H 1 208-25 23207.

In view of this attitude, the Government would have no hesitation adopting, when the time came, a pricing and profit system for social security dispensing, which ensured generous profit margins for pharmacists.

In 1939, the Pharmacy Plan Industrial Committee issued its Official Schedules and Rules for Prescription Pricing under the authority of the Industrial Efficiency (Pharmacy) Regulations. These Rules had in turn been derived from the Pharmacy Board's official Drug Tariff and Dispensing Price List issued in 1937.³⁴ They were designed to provide a uniform scale of prices for the medicines doctors prescribed, and to establish a guaranteed profit margin for pharmacists. Each of the three classes of drugs, classified according to their frequency of use, carried profit margins, based on wholesale costs, ranging from 50 to 100 per cent. (Unclassified drugs simply had a flat 50 per cent added to their wholesale cost.)³⁵

Labour's passing of the Pharmacy Act 1939 added to the commercial and professional strength of pharmacists by giving them a monopoly of the sale of all drugs apart from proprietary or patent medicines. The latter, such as Anacin tablets, or MacLean Stomach Powder, were excluded from the monopoly, so that other traders were free to sell these remedies.³⁶ Boots and the United Friendly Societies Dispensaries could continue to operate, but their expansion was restricted because all pharmacies had to be owned by a pharmacist either individually or in partnership.

³⁴ N.Z. Official Drug Tariff and Dispensing Price List, January, 1937, Issued by Authority of The Pharmacy Board of N.Z. IC 1 49/1 Part 1.

³⁵ Myers, Memorandum to Minister of Health, Pharmaceutical Benefits under the Social Security Act, Submissions on Social Security Dispensing, 5 July 1939, pp.9-14. H 1 208-25 23207.

³⁶ *The Statutes of the Dominion of New Zealand*, 1939, pp.454-56; Richmond, of Webb, Richmond & Bryan, Barristers and Solicitors, to the Minister of Health, 27 June 1952, p.2. H 1 182-3 24816.

The Pharmacy Plan Industrial Committee continued to shore up the commercial and professional status of pharmacists. During 1940, for example, the Committee ran a six-month 'goodwill advertising' campaign to inform the public

that a chemist's dispensing service forms only a minor proportion of his total turnover necessary to keep the pharmacy in operation, and that in order to maintain the dispensing and general emergency services, particularly in suburban and country places, public support is urged in respect of the business in general household drugs and medicines, toilet articles, and chemists' sundries.³⁷

In spite of these advantages, however, pharmacists were still 'in the hands of wholesalers', who quoted 'various prices to different chemists for the same drugs'. Moreover, large groups such as Boots and the Friendly Society Dispensaries could buy on much more favourable terms than struggling individuals. A number of wholesalers, including Kempthorne and Prosser, Sharlands, Stevens, the Auckland Drug Company and the Canterbury Drug Company, imported drugs. (The last two were co-operatives run by pharmacists.) All wholesale firms charged different prices to different pharmacists, according to their financial standing; if a man was 'into their ribs' they could charge what they liked.³⁸

In 1941, the Council of the Chemists' Service Guild, acting on behalf of more than 500 pharmacists (almost 90 per cent of the total), signed individual contracts with the Minister of Health for the dispensing of medicines covered by pharmaceutical benefits.³⁹ According to Myers, Department of Health representatives had discussed pharmacy problems 'in the frankest possible way without any suggestion of coercion or antagonism, but on the contrary with sympathetic appreciation of the fact that the

³⁷ Department of Industries and Commerce, Annual Report 1941, *AJHR* 1941, H.44, p.13.

³⁸ Myers, Notes of Evidence given to the National Health and Superannuation Select Committee, pp.L 17, M 9. Le 1/1938/10 Box 896.

³⁹ Department of Health Annual Report 1943, *AJHR* 1943, H.31, p.6. See also Social Security Act, 1938, Pharmaceutical Benefits, Terms of Contracts between the Minister of Health and persons supplying medicines and drugs in relation to pharmaceutical benefits under the Social Security Act, 1938, pp.1-7. H 1 208-25 23207.

chemist has his problems'.⁴⁰ The Pharmacy Plan Industrial Committee had already assured the Government of its full co-operation in the launching of pharmaceutical benefits when the time came. The Minister of Health gratefully acknowledged this support: 'Were we to start off from scratch our task would be very heavy but starting on the basis adopted by the Pharmacy Plan Committee the difficulties ahead will not be by any means formidable', he told pharmacists' representatives. Therefore, when arranging the introduction of pharmaceutical benefits, the Minister of Health, acting on advice from Farquharson as the Department's Advisory Pharmacist, proposed that the Government adopt the Pharmacy Plan Industrial Committee's Official Rules for Prescription Pricing in order to determine the fees and prices to be paid to pharmacists. He hoped pharmacists would 'thrash out' the details with officers of the Department.⁴¹ Yet the Department of Health was not represented on the Pharmacy Plan Industrial Committee, and had had no part in determining what would become the system of government payment to pharmacists. The effective voting strength on a Committee with one of its functions being to protect pharmacy was in the hands of the pharmacists themselves.⁴² Nevertheless, the Committee was, in the view of the Government, 'the most competent body to fix prices'.⁴³ In this way, the Chemists' Service Guild secured generous terms for social security dispensing: pharmacists would be paid a fixed dispensing fee, a 'breakage' fee (to compensate for any waste once a new pack of drugs was opened) and a substantial 'on-cost' of 50 per cent or more on top of the wholesale cost of the drugs.

⁴⁰ Myers, Memorandum to Minister of Industries and Commerce, Pharmaceutical Benefits, 21 April 1941, p.2. H 1 208-3 15804.

⁴¹ Nordmeyer, Minister of Health address to a Conference of Representatives of the Pharmacy Board of NZ, Chemists' Service Guild of NZ, Pharmacy Plan Committee and Department of Health, 13 March 1941, p.1. H 1 208-25 23207.

⁴² Maclean for Director-General of Health, Memorandum, Pharmaceutical Supplies Benefits, 14 July 1944, p.2. H1 208 17977.

⁴³ Keisenberg, Secretary to the Department of Health, Conference of Representatives of the Pharmacy Board, the Chemists' Service Guild, Pharmacy Plan Industrial Committee, and the Department of Health, 13 March 1941, p.9. H 1 208-25 23207.

The principles of these Rules for Prescription Pricing had already been established in 1937, expressly to boost the prosperity of pharmacies as small business enterprises at a time when dispensing represented, at most, about 20 per cent of a pharmacist's turnover but about 55 per cent of income. This pricing system had been 'the sheet anchor' of the Pharmacy Plan, and was 'closely interwoven with the economics of pharmacy as a whole', as Myers explained.⁴⁴ Profit margins for pharmacists had been deliberately calculated at a high figure to enable prescriptions to be charged at prices that would compensate for lower profits on the remaining 70 per cent of turnover, gained in face of competition from grocery stores, Woolworths, and Boots.⁴⁵ The Pharmacy Plan Committee had assumed that increased prescribing would simply take the place of counter prescribing and sale of patent medicines, and would have little effect on total turnover.

A new problem ahead for pharmacists, however, was the probability that

the department officially administering the benefits would soon come to the conclusion that they could take over the fixing of drug prices.... There will be two naturally opposing points of view. The Plan Committee is primarily concerned with the economic rehabilitation of pharmacy...whilst the Health Department will be concerned with ... expenditure of Government funds.⁴⁶

This difficulty was just one of a series of tensions inherent in the new scheme.

With arrangements for dispensing more or less complete by mid-1941, the Government could introduce the long-awaited pharmaceutical benefits provided by the Social Security Act. Section 101 of the Social Security Act had given the Minister of Health discretionary power to introduce supplementary benefits, as well as the principal benefits. In this way, the first Social Security (Pharmaceutical

⁴⁴ Myers, Memorandum to Minister of Industries and Commerce, Pharmaceutical Benefits, 21 April 1941, p.1. H 1 208 15804.

⁴⁵ Memorandum, Pharmaceutical Costs, initialled 'DC' (Duncan Cook, Director-General of Health?), undated, circa 1945, p.4. H 1 208 17977.

⁴⁶ Myers, Memorandum to Minister of Industries and Commerce, Pharmaceutical Benefits, 21 April 1941, p.1. H 1 208-3 15804.

Supplies) Regulations were introduced in May 1941.⁴⁷ The regulations provided for pharmacists to dispense, under contract to the Minister of Health, prescription medicines to all who were entitled to receive pharmaceutical benefits under the Social Security Act. Because pharmaceutical benefits had been introduced quite independently of the medical (general practitioner) benefits of the Act, the Government had to specify as concisely as possible the range of drugs that could be obtained at the cost of the Social Security Fund. Regulations provided that government reimbursement to pharmacists would be restricted to a schedule of medicines approved by the Minister of Health, which would constitute a Drug Tariff based on the British model. The Tariff would specify both the preparations covered and those excluded from pharmaceutical benefits, set certain limits on the quantities of drugs that could be supplied on any one prescription, and establish the principles to govern payment to pharmacists for fees and reimbursement for materials.⁴⁸

The first two-page Drug Tariff, issued in April 1941, cited the Official Schedules and Rules for Prescription Pricing, originally established by the Pharmacy Plan Industrial Committee in 1939, as the basis of government payment to pharmacists.⁴⁹ Instead of applying to the general public, these pharmacists' prices would now apply to one main customer - the Government itself. Pharmacists would be paid the total price of ingredients in each prescription, as shown in the First Schedule to the Drug Tariff; a dispensing fee as set out in the second schedule (11 pence at the commencement of benefits but reduced to 10 pence soon after); a 'breakage' fee and a container fee. When pharmacists dispensed items not listed in the first schedule of the Drug Tariff, that is less commonly prescribed items, they would be paid a 50 percent 'on-cost' or margin on top of the wholesale price of ingredients. The

⁴⁷ *Statutory Regulations*, 1941, pp.240, 426.

⁴⁸ These regulations did not apply to medicines prescribed for in-patients of public hospitals. When Hospital Boards supplied medicines prescribed for out-patients, the Department of Health would pay Hospital Boards on the same basis as for contracting chemists. *Statutory Regulations*, 1941, pp.240-247. See also Department of Health, Annual Report 1942, *AJHR* 1941-1942, H.31, p.4 for a useful summary.

⁴⁹ Department of Health, Drug Tariff Under the Social Security (Pharmaceutical Supplies) Regulations 1941, 24 April, 1941. H 1 208-25 23207.

dispensing fee and the substantial on-cost payment were intended to cover the cost of labour and overheads and to provide a fixed rate of net profit to pharmacists. Thus pharmacists, like wholesalers, stood to gain from keeping the prices of ingredients high. Every price increase would give the pharmacist an automatic increase in profit.⁵⁰

Current wholesale prices shown in the First Schedule of the Official Schedules and Rules were the starting point of calculations of pharmacist reimbursement. Yet, in arriving at these prices, the Pharmacy Plan Committee was 'in the hands of the Wholesale Druggists' Association, whose members met together and fixed on the prices'. Therefore, the Committee could begin to 'control or influence prices' only from the time of a sale to a pharmacist by a wholesaler.⁵¹ Department of Health reimbursement would not necessarily be tied to the actual cost of drugs to pharmacists, for they were still free to buy, as many did, at discounted prices from wholesalers, and so make further profits.

The Government proposed originally to discount the Pharmacy Plan Committee's medicine prices by 10 per cent, assuming that pharmacists would profit from increased turnover when they began dispensing under the new scheme. However, the Committee succeeded in persuading the Government that this discount was too steep, because any increased turnover in dispensing would be balanced by no (or only small) sales of patent or proprietary medicines.⁵² The Government's prediction of increased turnover as a result of social security dispensing proved to be correct, but at the time it bowed to pressure from pharmacy interests and agreed to a much smaller discount of 2.5 per cent on the price to be paid to pharmacists by the

⁵⁰ Department of Health, Memorandum on Pharmaceutical Costs circa 1947. H 1 208 17977.

⁵¹ Myers, Director of Pharmacy, Pharmacy Plan Industrial Committee, to Wise, member of the Price Investigation Tribunal, 5 July 1939. IC 4 22/1 Vol 1.

⁵² Dodds, pharmacist to Myers, Director of Pharmacy, Pharmacy Plan Committee, Department of Industries and Commerce, 12 April, 1941, p.2. H 1 208 25470.

Department of Health - another victory by pharmacists in setting the rules for pharmaceutical benefits.⁵³

The Drug Tariff set out only in general terms the medicines that could be charged to the Social Security Fund. The scope was liberal: in effect, any doctor's prescription for a drug for which a formula was published in an official pharmaceutical publication, namely the current editions of the British Pharmacopoeia and the British Pharmaceutical Codex, could be presented to a contracting pharmacist and become a charge on the Fund. Specifically excluded were serum, vaccines, anti-toxin, wine and 'spiritous liquor'. Much more significantly, the Drug Tariff followed the precedent of friendly societies by also excluding from 'pharmaceutical requirements' any preparation prescribed by reference to a trade name, that is proprietary or patent preparations, whether these products were actually prescribed by brand name or the ingredients specified in detail. All tablets and pills made by manufacturing chemists which were not identical in composition with a drug for which a formula was published in the British Pharmacopoeia or the British Pharmaceutical Codex would not be paid for under the Social Security Fund. Examples were Beecham's Pills for bilious and nervous disorders, indigestion and 'female complaints', or Morrison's Powders for neuralgia, sciatica, rheumatism and lumbago.⁵⁴ The Department of Health was aware that this ruling would mean excluding a number of drugs which were 'recognised to possess valuable therapeutic properties', and planned to investigate the possibility of 'including some of these ethical proprietaries within the scope of the benefits'.⁵⁵ The pharmacist was not expected to question any prescription, but to dispense exactly as the doctor ordered. 'It is important that contracting chemists and dispensers should appreciate the full

⁵³ Sullivan, Minister of Industries and Commerce to Nordmeyer, Minister of Health, Pharmaceutical Supplies Benefits, 11 September 1944, p.1. H 1 208 17977.

⁵⁴ See Reg. Combes, *Pharmacy in New Zealand: Aspects and Reminiscences*, Chapter 13, 'Patent medicines' (Wellington, Ray Richards for the Pharmaceutical Society of New Zealand, 1981).

⁵⁵ Director-General of Health, Memorandum, Drug Tariff under Social Security (Pharmaceutical Supplies) Regulations, 9 April 1941, p.1. H 1 208-25 23207.

significance and status of official synonyms', the Department of Health warned in a circular to pharmacists.⁵⁶ If a doctor prescribed a proprietary or brand-name product, for example Chloretone, the Department of Health would pay only the price of the equivalent non-proprietary preparation (chlorbutol) as listed in the official publications. Patients would have to pay any excess price as a part-charge. This charge came to be known as an 'extra for proprietary' or 'E.F.P.' charge.

The Government did not intend the 1941 Drug Tariff to be final and unchangeable, however. Under the regulations, the Minister of Health had the power to amend it by adding new drugs as they came on to the market. Indeed, official use of the British Pharmacopoeia and the British Pharmaceutical Codex to define the basic range of drugs available from the Social Security Fund would mean that, as these publications were amended so, too, was the New Zealand Drug Tariff. In this way, proprietary or brand-name drugs, so carefully excluded from the scope of pharmaceutical benefits in 1941, were soon to dominate the whole scheme.

By late June 1941, just two months after the introduction of the scheme, difficulties had already arisen in the administration of Pharmaceutical Supplies Benefits, mainly as a result of the sheer volume of prescribing and dispensing. Instead of making a charge when dispensing a prescription, pharmacists simply obtained the patient's signature, then sorted scripts according to the prescribing doctor with details of the formula and quantity. Pharmacists sent these bundles to one of four pricing offices for individual 'pricing'.⁵⁷ A 'pricer' added together ingredient costs, dispensing and

⁵⁶ Department of Health, Social Security Pharmaceutical Benefits, Departmental circulars and information for circulars to contractors, 1 October 1942. H 1 208-4-4 35239 Box 22, Accession W2676.

⁵⁷ This 'full pricing', i.e. pricing in detail of every prescription on each prescription form, followed the pattern of pricing in England until shortly before the introduction of the National Health Service there in 1948. During the first year of the NHS, doctors wrote approximately 200 million prescriptions. Pricing bureaux staff were unable to cope with the full pricing of this number. They simplified the procedure to include some degree of averaging of each pharmacist's scripts. Prescription Pricing Scheme - National Health Service, undated, unsigned. H 1 208-3 23180.

container fees, to reach a total price for each script.⁵⁸ After 12 months' operation, half a million scripts had accumulated in arrears.⁵⁹

'A New Era Dawns? Chemists Get Headaches Administering Free Pharmaceutical Scheme', announced the editorial in one newspaper. 'Mr. Citizen' could now take his doctor's prescription to a chemist and carry home a bottle of medicine without paying the usual price. He was 'on velvet because nobody really wants to spend money on medicine when he can spend it on tobacco'. The paper correctly pointed out that not all medicines, however, were on the 'free list' - so that the chemist would have a 'grandfather of a head-ache', and would need to 'add legal to his pharmaceutical training'.⁶⁰ In 1939, the average number of prescriptions dispensed in a year by each pharmacy had been 3,000.⁶¹ However, in just a few weeks of the new scheme during May 1941, one pharmacist in the United Friendly Societies' Dispensary in Dunedin was handling 1,000 scripts per week.⁶² Some pharmacists were reprimanded for 'stunt advertising' of free Social Security dispensing.⁶³ 'It will interest you to note that our April [1942] turnover was £1,000 of which 60% was return for prescriptions', one wrote to Myers the following year. 'It may be...the less said about profits on dispensing the better', he added.⁶⁴

⁵⁸ Pharmaceutical Supplies Benefits, Pricing Office Procedure, Lesson 6, 1941. H 1 208-26 35390.

⁵⁹ Richardson, recounting his experiences over the past 20 years, undated. H 1 208 28200.

⁶⁰ *New Zealand Observer*, LXI:39 (11 June 1941), p.6.

⁶¹ Dodds, Notes for the Review of Dispensing Fees, 31 March 1951, p.1. IC 4 22/2/1, Accession W3852. For detailed calculations on 'one-man' pharmacies see Myers, Pharmaceutical Benefits under the Social Security Act, Pharmacy Plan Industries Committee, Department of Industries and Commerce, Submissions on Social Security Dispensing to Commissioners on Pharmacy Act 1939, July 1939, p.12. H 1 208-25 23207.

⁶² Race to Myers, 27 May 1941, p.1. H 1 208-25 23207.

⁶³ Director of Pharmacy to Sarney, Chemist, Victoria Avenue, Wanganui, 6 August 1941, p.1. H 1 208 25471.

⁶⁴ Race to Myers, 4 May 1942, p.1. H 1 208 25472.

This chapter has shown how the first Labour Government's commitment to ensure the survival of a national network of independent pharmacies, and to provide generous social security and health benefits, including a free general practitioner service and free medicines, meant that it was willing to make significant compromises with doctors and pharmacists. The Government's compromises with these powerful interest groups for the supply of medicines began with the agreement reached with the local branch of the British Medical Association in 1941, in order to secure doctors' immediate co-operation to implement the general practitioner benefit of the Social Security Act. As a result of its failure to pin doctors down to general contracts to govern the terms of their services in some detail, the Government had to abandon its original aim of confining the cost and extent of prescribing. Instead, the compromise reinforced doctors' independence from state control.

Doctors would not necessarily need to have much contact with pharmacists, who contracted with the Department of Health to dispense medicines covered by pharmaceutical benefits. Pharmacists either compounded medicines themselves or increasingly purchased drugs from wholesalers. Labour's second compromise with a powerful interest group was its agreement to allow the Pharmacy Plan Industrial Committee (dominated by pharmacists) in effect to control pharmacists' returns and profits. Written into pharmacists' contracts was a profit margin or 'on cost' based on a percentage of the wholesale cost of drugs. The cost-plus element in the total reimbursement to pharmacists by the Department of Health meant that as wholesale prices rose, so would pharmacists' incomes. Government payment to pharmacists (composed of the wholesale drug price, a profit margin based on that price, dispensing fees, container fees and breakage fees) together made up the cost of pharmaceutical benefits to the Department of Health. Yet this Department, which was responsible for the administration of the Pharmaceutical Benefits Scheme, had no part in deciding or even checking these elements of cost, which were taken over from existing schedules established as part of an entirely different policy, namely Labour's support of pharmacy as small business enterprises. Once established in 1941, then combined with a revolution in pharmaceutical production yet to come,

these arrangements with doctors and with pharmacists for the distribution of medicines proved remarkably difficult to alter.

3 Producing the Medicines

The history of pharmaceutical benefits in New Zealand is closely bound up with the growth and development of the modern international pharmaceutical industry. In 1941, when pharmaceutical benefits were introduced, large numbers of drugs existed, but few could cure diseases. Pharmacists still compounded many medicines themselves, producing generally standard preparations from naturally occurring drugs such as morphine, digitalis and quinine. Only a small number of important synthetic compounds were available, including aspirin, the barbiturates and salvarsan. However, at about this time chemists in Europe were making dramatic advances in organic chemistry. The discovery of the antibacterial property of the red dye Prontosil in 1935 had heralded the start of a pharmaceutical revolution. The family of sulpha drugs that followed radically altered the prognosis for common and often fatal infections such as pneumonia and meningitis. Then the demand created by the Second World War pushed many drug companies in Europe and the United States into producing penicillin on a large scale. Other powerful antibiotics followed. These companies extended their research efforts from infectious diseases to look for therapies to treat a wide range of other disorders. Patents ensured monopoly rights within long time limits for their holders. Patent-holding companies could negotiate licensing agreements with other manufacturers to divide up the world market. The technology available for producing drugs, as well as the monopoly afforded by patents, encouraged many pharmaceutical companies to extend their operations abroad, thus giving rise to the international nature of the industry. A parent company could be based in one country, but control associate companies around the world. By the 1960s, most major European and United States firms were nationally owned, but organised on a global scale. These international developments form the back-drop for this New Zealand story. In particular, the organisation of pharmaceutical research, production and marketing on a multinational scale, which was of crucial significance for all future profitability, explains much about the central issues of this thesis.

The modern pharmaceutical industry, which was to transform New Zealand's Pharmaceutical Benefits Scheme, can be traced to the nineteenth century wholesale druggist and patent remedy business. In the United States, by the beginning of the 1930s, several companies, including E.R. Squibb, Smith Kline, Eli Lilly, Parke Davis and Pfizer, had expanded from small manufacturing pharmacies to proprietary or patent medicine packaging centres, and then to bulk chemical wholesalers. These companies usually sold a full range of the ingredients pharmacists needed to compound and dispense doctors' prescriptions, which they advertised in newspapers and magazines. They continued to perfect large-scale production and distribution processes, such as those needed to produce insulin, and began to specialise in narrower ranges of products. An important influence in their success was their loyal clientele among the medical profession as well as among the general public. For their part, doctors recognised the importance of drugs as the most effective means of reinforcing their professional position as scientifically advanced practitioners, and acknowledged the manufacturers' role as suppliers of up-to-date pharmaceutical information.¹

Because most major European pharmaceutical companies, such as the Swiss and German Bayer, Hoechst, Ciba, Geigy, Sandoz and Hoffmann La Roche, were originally manufacturers of dyestuffs, they had a long history of research experience in organic chemistry.² By the beginning of the 1930s, several of these companies were operating on a very large scale, extracting essential ingredients for the synthesis of a variety of products, in particular valuable dyestuffs, in substantial chemical factories.³ Because some of the earliest international cartels bound together various

¹ Jonathan Liebenau, *Medical Science and Medical Industry: The Formation of the American Pharmaceutical Industry* (London, Macmillan, 1987), pp.5-7, 126. As Liebenau points out (p.137), 'patent' medicines were rarely patented; they relied on secret remedies to protect their markets.

² Indeed, Sandoz, Roche and what is now Ciba-Geigy still have plants near Basle in Switzerland, an important centre since the middle ages of trade and commerce in textiles, upon which dyestuffs manufacturers depended.

³ M. Weatherall, *In Search of a Cure: A History of Pharmaceutical Discovery* (New York, Oxford University Press, 1990), Chapters 2, 6.

groups within the chemical industry, these companies were, moreover, already accustomed to market-sharing, price-fixing and specialisation of production.⁴ The most striking example of a new German cartel was the Interessen Gemeinschaft Farbenindustrie AG, or I.G. Farben, a chemicals trust formed in 1925. The combine relied heavily on research to develop new products.⁵ Among its component companies were Bayer, Hoechst and BASF. The experience of German and Swiss companies in research and development for new products was far ahead of that of the chemical industry in England. By the 1930s, however, a number of companies in England, in particular ICI Dyestuffs Division, May and Baker, and Allen and Hanbury, were also conducting research in organic chemistry which provided the impetus for drug development and manufacture.

The network of these and other pharmaceutical companies began to extend around the world as their small domestic markets proved to be too restrictive. Hoffmann La Roche, already aware of the importance of pushing down costs through economies of scale and pushing up prices through advertising, established offices and agents in Paris, Milan, Vienna, London, St Petersburg and Yokohama between 1896 and 1911.⁶ The early expansion of Glaxo from a base in England took place mainly in countries still part of the Commonwealth - Ireland, India, Australia, Canada and South Africa.⁷ May and Baker's large export trade led the company to form subsidiaries in India, Canada and Australia during the 1920s, although they were mostly tentative ventures into the packaging of products exported from Dagenham.⁸

⁴ Kurt Rudolf Mirow and Harry Maurer, *Webs of Power: International Cartels and the World Economy* (Boston, Houghton Mifflin, 1982), pp.119-148.

⁵ Raymond G. Stokes, *Divide and Prosper: The Heirs of I.G. Farben under Allied Authority 1945-1951* (Berkeley, University of California Press, 1988), Chapter 1.

⁶ Matthew Lynn, *The Billion-Dollar Battle: Merck v Glaxo* (London, Mandarin, 1992), pp.36-37.

⁷ David Tucker, *The World Health Market: The Future of the Pharmaceutical Industry* (London, Euromonitor Publications, 1984), pp.32-33.

⁸ Judy Slinn, *A History of May & Baker 1834-1984* (Cambridge, Cambridge University Press, 1984), p.163; see also pp.100-102 for early links with the French Poulenc.

All the leading German chemical companies, such as Hoechst and Bayer, had established American subsidiaries or at least employed local agents in New York from the late nineteenth century.

In 1935, research on the antibacterial properties of dyestuffs for the Bayer division of I.G. Farben revealed that the red dye Prontosil could kill streptococcal infection in mice. Other chemists at the Pasteur Institute in France soon discovered that the dye was broken down in the body to aminobenzene sulphonamide, or sulphanilamide, and that this substance was responsible for the antibacterial activity of Prontosil. Sulphanilamide, the first of what was to be a remarkable series of 'sulpha' drugs, could successfully treat staphylococcal, streptococcal and other bacterial infections, such as puerperal fever and scarlet fever.⁹ Because of the large number of types of bacterial infection, and their differing susceptibility to antibacterial drugs, drug companies began to search for agents effective against as many types of infection as possible. Once the antibacterial properties of the basic sulphonamide structure had been clearly established, other sulphonamide molecules could be synthesised by molecular modification. One of the early successes was May and Baker's discovery of a further antibacterial, M & B 693, a cure for the killer disease bacterial pneumonia. A whole family of diuretics to treat heart disease and hypertension eventually arose from such modification of the original sulphonamide.

The Second World War was the stimulus for the first commercial development of penicillin, the first 'antibiotic' - that is, an antibacterial derived from a micro-organism. Some companies, such as Pfizer and Bristol in the United States, made large profits from the wartime demand for this drug.¹⁰ Complex production processes, requiring many highly trained staff, transformed these companies. At the same time, many other companies began to prepare and screen several thousand new penicillin derivatives in search of bacterial activity. By 1944, 19 different United

⁹ Hillas Smith, *Antibiotics in Clinical Practice*, Third Edition (Tunbridge Wells, Pitman Medical, 1977), p.138.

¹⁰ Ned McCraine and Martin J. Murray, 'The pharmaceutical industry: a further study in corporate power', *International Journal of Health Services*, 8:4 (1978), p.576.

States companies were producing penicillin, although the largest five, including Squibb and Pfizer, accounted for 88 per cent of the total.¹¹ Many different sellers, together with severe price cutting by efficient manufacturers, meant that prices for penicillin fell sharply throughout the 1940s and 1950s; by the mid-1950s its wholesale cost had dropped to a fraction of the original price. Penicillin had ceased to be a rare and expensive drug and had become a common commodity. United States manufacturers even referred to unpatented antibiotics as 'distress merchandise'.¹²

The first mass production of penicillin coincided with the discovery in 1943 of the antibacterial properties of streptomycin by the soil microbiologist Selma Waksman of Rutgers University. The drug was of great value because it could attack microbes which were insensitive to penicillin, especially those which caused tuberculosis. The drug was also effective against other infections, including septicaemia and pneumonia. The American company, Merck, based in Rahway, a few miles from Rutgers, had given financial support to the research at Rutgers, and followed developments closely. Merck subsequently devised an economic method to produce this antibiotic in bulk.¹³ The commercial successes of penicillin and streptomycin led other pharmaceutical companies to screen soils, dusts and moulds from every part of the world, searching for yet more useful micro-organisms which could attack bacterial infections. During the 1940s and early 1950s, these companies introduced further new antibiotics such as chloramphenicol (Parke Davis), chlortetracycline (Lederle) and erythromycin (Eli Lilly), with a broader and more certain action

¹¹ Peter Temin, 'Technology, regulation, and market structure in the modern pharmaceutical industry', *Bell Journal of Economics*, 10 (Autumn 1979), p.435.

¹² Paul M. Hirsch, 'Organizational effectiveness and the institutional environment', *Administrative Science Quarterly*, 20 (September 1975), p.334. The price of bulk penicillin dropped from \$2.50 to 21 cents per milligram between 1951 and 1960. Brian Abel-Smith, *Value for Money in Health Services: A Comparative Study* (London, Heinemann, 1976), p.88.

¹³ For the story of the development of this drug and ensuing legal wrangles, see Chapter 8 'Streptomycin and the Conquest of Tuberculosis' in Milton Wainwright, *Miracle Cure: The Story of Penicillin and the Golden Age of Antibiotics* (Oxford, Blackwell, 1990).

against many micro-organisms.¹⁴ At the same time, they extended their research efforts from infectious diseases to look for therapies for the treatment of heart disease, gastric ulcers, mental disorders, fertility, infertility, arthritis, allergies and cancer.¹⁵

Faced with devastating price competition, and with steadily increasing expenses of getting even one new drug to market, pharmaceutical companies claimed that they could not continue to risk such large investments without being awarded a period of monopoly in which to recoup these costs. Innovating companies were learning the importance of international acknowledgement of patents, namely the recognition of rights to a legal monopoly granted for a specified number of years. Because penicillin and streptomycin were based on a naturally occurring substance (a mould), no patent had originally been allowed on these drugs. Merck had granted licences to other companies to manufacture the drug, and had also sold it to packagers and distributors in competition with these other companies.¹⁶ In 1947, for example, Merck reached an agreement with the British firm, Glaxo, for the production of streptomycin under licence, in return for the payment of royalties for the next 15 years.¹⁷ Because of many agreements such as these, streptomycin appeared on the market in the same way as penicillin had done, produced by many firms and sold under its chemical name; in the same way it, too, became a highly competitive product.

In 1948, the United States Patent Office ruled to protect the *method* or technique used to develop streptomycin. This decision was a landmark for the pharmaceutical

¹⁴ See in general Smith, *Antibiotics in Clinical Practice* and Wainwright, *Miracle Cure*.

¹⁵ C.W. Thornber, 'The pharmaceutical industry' in *The Chemical Industry*, ed. C.A. Heaton (London, Blackie, 1986), p.169.

¹⁶ Joseph M. Jadow, 'A summary and critique of economic studies of the ethical drug industry: 1962-1968', in *Issues in Pharmaceutical Economics*, ed. Robert I. Chien (Lexington, Mass., Lexington Books, 1979), pp.19-20. See also Richard Harris, *The Real Voice* (New York, Macmillan, 1964), p.23.

¹⁷ R.P.T. Davenport-Hines and Judy Slinn, *Glaxo: A History to 1962* (Cambridge, Cambridge University Press, 1992), pp.180-181.

industry because it established that the chemical modifications required to enable streptomycin to be purified created a new product, and a new process, *both* of which could be patented. In this way, Merck obtained a patent on streptomycin. The United States government granted the patent on streptomycin for that specific product, however, which would provide no protection against competition from a close substitute.¹⁸

The original intention behind the patent system had been to encourage innovation and capital investment in new lines of research which might appear unprofitable if many competing producers embarked on these at the same time.¹⁹ In practice, the system served the interests of the pharmaceutical industry much more than the individual discoverer. Most national governments supported this principle, however, although different governments followed different practices in granting patents. Modern British patent law, upon which most Commonwealth law, including New Zealand's law, was based, dates from the Patent Act 1949. The Act enabled new chemical compounds to be patented, as well as processes for their manufacture for a period of 16 years. Henceforth, drug companies could gain patent protection on a specific drug and on a specific process. Furthermore, the chemical modification of an existing patented drug could produce a 'new' drug, with the same or possibly improved properties. This modification would fall outside a competitor's patent protection and might even be patentable in its own right.²⁰

The establishment of these principles of patent protection during the late 1940s was a crucial stage in the development of the international pharmaceutical industry, and influenced the way in which companies would compete with each other. Each product, no matter how closely similar to another, could be clearly differentiated by

¹⁸ Peter Temin, 'Technology, regulation, and market structure in the modern pharmaceutical industry', *Bell Journal of Economics*, 10 (Autumn 1979), pp.429-446.

¹⁹ Committee to Examine the Patent System and Patent Law (Banks Committee), *The British Patent System, Report*, Cmnd 4407 (London, HMSO, 1970), p.1.

²⁰ Myron J. Gordon and David J. Fowler, *The Drug Industry: A Case Study in Foreign Control* (Toronto, James Lorimer, 1981), p.22.

a patent as well as a brand name. Each product patent conferred a monopoly on the manufacturer by preventing rivals from marketing an identical product for a period of up to 20 years. Pharmaceutical products protected by a patent, either in bulk material or in semi-finished dosage form, could be made only by the patent holder or, with that company's permission, by a licence holder who usually paid a royalty. Because the patent-holding company was the sole supplier, it could vary the price and level of sales in order to maximise profits.

Major patent-holding companies could use licence agreements to bargain with competing producers in order to regulate the distribution in different national markets of their most profitable drugs, and also to fix the price of bulk supplies to licensees.²¹ In this way they could divide up the world market for a particular drug on territorial lines. Such agreements could have many different terms. A licence sometimes granted full rights to manufacture and sell a drug, sometimes only to package and sell in dosage form, with the licence-granting company supplying the drug in bulk form. Alternatively, a patent-holding firm with a well-established position in a particular national market might grant a local firm a licence allowing it a set share of that market.

In 1949, for example, Hoechst granted the United States firm Upjohn an exclusive licence for five years to sell a Hoechst drug in finished form, under the Hoechst trade mark or brand name, in United States territory. This licensing agreement was renewed in 1954 and again in 1959. The second renewal provided that Hoechst or its subsidiaries could sell the products specified in the agreement in the United States, although only under the Hoechst trademark and in finished form, thus making Upjohn's licence for that market no longer exclusive. The same renewal of the original 1949 agreement also tied Upjohn to Hoechst for bulk supplies, at a mutually agreed price. An example of a drug governed by a broad agreement of this kind to

²¹ A licence is an agreement that allows one party to use an industrial property right in exchange for payment to the other party. In a typical arrangement, the party giving the licence (the licensor) will allow the other party (the licensee) to use a patent, a brand name or proprietary information in exchange for a fee or royalty. Typically, a licence allows a licensee to use the assets within a certain territory and for a specified period of time.

eliminate competition was Tolbutamide, patented by Hoechst, and used to treat diabetes. Under the terms of the agreement, Hoechst was the dominant seller of Tolbutamide in Europe, with one other licence holder, Boehringer, able to sell on certain terms in a few countries. Upjohn was the only producer in the United States, a market which even Hoechst could not enter. In Canada, Hoechst and Upjohn formed a joint venture which held a monopoly in that market. Tolbutamide sold under different brand names in each major market: Orinase in the United States and Rastinon in Europe. It sold for twice as much in North America as in Germany, which illustrates the effectiveness of the market division between Hoechst and Upjohn and the protection given by patents and brand names, which other parties could not challenge.²²

In the mid-1950s, three United States companies, Pfizer, Lederle and Bristol, established what became a famous example of a price-fixing cartel based on licensing agreements. The agreements allowed all three to produce the broad-spectrum antibiotic known as tetracycline under the patent held by Pfizer. The same agreements, however, prohibited bulk sales of tetracycline to packagers except for sales to two bulk customers (Squibb and Upjohn) of one of the producers (Bristol). An important principle was the common effort of all three producers to prevent entry from other bulk packagers, traditionally a source of price competition. As a result of these agreements, Pfizer, Lederle and Bristol were able to fix identical prices for tetracycline in both domestic and foreign markets, and so keep prices for this drug remarkably stable for almost a decade at 10 to 20 times the manufacturing cost.²³ By 1964, the threat of real competition began to build up, mainly from tetracycline imported from Italy, which did not recognise the patent. Even though Pfizer could

²² Mirow and Maurer, *Webs of Power*, pp.122-124. Mirow and Maurer quote from the 1960-61 records of the hearings on Administered Prices, an investigation of international licensing in pharmaceuticals, conducted by the United States Congress Senate Subcommittee on Antitrust and Monopoly. As the authors point out, this material is particularly valuable, because it dates from the end of the 1940s, when pharmaceutical companies were first establishing an international licensing system.

²³ Jadow, 'Economic studies of the ethical drug industry', pp.20-21. See also Abel-Smith, *Value for Money in Health Services*, p.88, and Temin, 'Technology, regulation, and market structure', pp.429-46.

not attack the manufacturers in Italy, these rival importers were driven out of the American market by patent infringement suits. One new competitor, McKesson and Robbins, had the resources to resist, and was eventually licensed by Pfizer to sell its own brand of tetracycline. At this stage, the pattern of uniform prices for the drug began to break down.²⁴ The high prices and large profits gained by these American companies for the patented antibiotic tetracycline contrasted sharply with the rapidly falling prices and profits gained by these and other companies for the original antibiotic, penicillin, which was unpatented.

Smaller firms with little to offer by way of trade, tended to be shut out of bargaining over sales and prices. The American company Parke Davis, for example, established almost perfect control over where and how the antibiotic chloramphenicol (Chloromycetin) would be sold around the world by a network of licensing agreements. In 1949, Parke Davis had obtained a patent on chloramphenicol which remained in effect until 1966. Parke Davis licensed no other producer in the United States. However, this monopoly at home could not be guaranteed abroad, particularly in those countries which did not allow patents on drug products. Chloramphenicol, an entirely synthetic antibiotic, was duplicated by producers in several countries. In 1950, however, Parke Davis began a campaign to eliminate its overseas competition by bringing pressure to bear on countries whose firms were making chloramphenicol without licence. Parke Davis signed an agreement with its French licensee, Laboratoire Français de Chimiothérapie with a provision, characteristic of such licence agreements, that ensured the isolation of the French market from all others. The French licensee pledged not to buy or sell the product outside its assigned territory, and to ensure by every means at its disposal that none of its customers would resell it in this way. The French firm also agreed not to sell the drug in bulk but only in finished dosage form, and that if in future the Laboratoire made any

²⁴ John Braithwaite, *Corporate Crime in the Pharmaceutical Industry* (London, Routledge & Kegan Paul, 1984), pp.175-177. See further on the price-fixing conspiracy, Peter M. Costello 'The tetracycline conspiracy: structure, conduct and performance in the drug industry', *Antitrust Law & Economics Review* 1 (1968), pp.13-44.

discoveries in the field, it would share these with Parke Davis.²⁵ Both brand names and patents prevented third parties from disturbing these carefully calculated divisions of the world market between patent-holding firms. Agreements such as these set the pattern for much future collaboration in the pharmaceutical industry.²⁶

When different companies sold the same drug, they simply sold it under different brand names. For example, the mid-1950s licence agreements among Pfizer, Lederle and Bristol, which allowed all to produce tetracycline, meant that several brands of the antibiotic on the United States market vied for doctors' loyalty. In a similar way, Ampicillin, a penicillin with an unusually wide range of activity which made enormous profits for its developer, Beecham, was prescribed in different countries under the brand names Amcill, Omnipen, Penbritin, Pensyn, Polycillin and Principen.²⁷ From about the same time, various firms sold the drug thalidomide under licence from its West German developers, Chemie Grunenthal (who sold it under the name Contergan). The British firm Distillers sold the drug as Distival. The United States firm Merrell sold the drug in Canada as Kevadon.²⁸

Most drugs began to carry three names. The formal chemical name indicated molecular structure. It remained the standard of reference for the particular identity of the drug but, because of the difficulties in expressing the true chemical name in a manner recognisable by those less informed than organic chemists, the industry developed a system of 'recognised names'. The new abbreviated scientific name,

²⁵ Leigh Hancher, *Regulating for Competition: Government, Law, and the Pharmaceutical Industry in the United Kingdom and France* (Oxford, Clarendon Press, 1990), pp.324-325; Mirow and Maurer, *Webs of Power*, pp.124-126.

²⁶ See Robert Ballance, János Pogány and Helmut Forstner, *The World's Pharmaceutical Industries: An International Perspective on Innovation, Competition and Policy* (Aldershot, Edward Elgar, 1992), pp.186-189 for recent informal alliances and coalitions among pharmaceutical companies.

²⁷ Milton Silverman, Phillip R. Lee and Mia Lydecker, *Pills & the Public Purse: The Routes to National Drug Insurance* (Berkeley and London, University of California Press, 1981), p.198.

²⁸ Harris, *The Real Voice*, pp.186-187.

which indicated the active ingredient, was selected when the drug was designated in an official drug publication such as the British Pharmacopoeia. This name became the drug's approved or 'generic' name, used in the scientific literature.²⁹ Finally, the drug company assigned a reasonably simple, memorable brand name or trademark. This name was usually shorter and easier to remember than the generic name, which it was intended to displace in the mind of the prescribing doctor. Pharmaceutical companies used brand names in a rather different way than most industries; instead of using one trade or brand name for the entire line of products, a drug company usually established a brand name for each particular drug it sold.³⁰ For example, the brand name of May and Baker's chlorpromazine hydrochloride was Largactil, its phthalylsulphathiazole was Thalazole, and its iobenzamic acid was Osbil.

Each company spent increasing amounts of money on establishing and reinforcing a real or apparent distinction between each of their patented, brand-named products. In this way, they could avoid destructive price competition and compete on products. Drug companies advertised these products by a brand name which no longer referred directly either to the chemical contents or to its manufacturer, for example, CIBA's Serpasil (reserpine) or Schering's Meticorten (prednisone). A brand name enabled a company to distinguish its products from those of other companies, so that doctors could associate each product with a particular manufacturer. In this way, brand names could create a type of monopoly. Tablets could be marketed as 'X' tablets only by the owner of the 'X' name, or by persons licensed to use the name. The owner of the brand name had a monopoly over tablets bearing the name 'X', although there need not be anything novel about these. Intensive promotion

²⁹ The adjective 'generic' comes from the Latin 'genus' and suggests classification into genera. As Lang has suggested, the term as used to refer to drugs is a misnomer, because a generic name does not relate to a class or genus of drugs - it denotes a single drug. Generic is taken as opposed to specific; specific applies to the trademark or brand or proprietary name which is specific to one sole owner: Ronald W. Lang, *The Politics of Drugs: A Comparative Pressure-Group Study of the Canadian Pharmaceutical Manufacturers' Association and the Association of the British Pharmaceutical Industry, 1930-1970* (Farnborough, Saxon House, 1974), p.49.

³⁰ Lang, *Politics of Drugs*, p.31.

strengthened the monopoly against competitors who sold identical tablets under different names.³¹

Recognising the opportunities offered by further expansion in Western Europe, the United States and the countries of the Commonwealth, most major pharmaceutical firms established or extended their international networks of associate companies during the post-war years. The distinct processes of research and development, drug manufacture and marketing, encouraged them to spread manufacturing and marketing operations in many different centres. The first or primary phase of drug production was bulk manufacture of active ingredients by fermentation techniques, by the production of synthetic organic chemicals, or (less commonly) from naturally occurring animal and plant sources.³² These fine chemicals could then be combined with other chemicals, fillers, flavours and coatings, for preparation in dosage form and packaged for dispensing by the pharmacist. The main requirements for manufacture beyond the complex fine-chemical stage were cleanliness and strict quality control. Because this less demanding drug compounding stage could be separated from the fine chemical stage, drug production could be divided among several centres. Because transport costs were relatively unimportant, each major company tended to concentrate its chemical production at one or two sites, and to export active ingredients for further processing. In this way, a parent company with headquarters in Switzerland, such as Hoffman la Roche, could centralise its research and production of fine chemicals, but manufacture, promote and sell the final products in many parts of the world.

The British-owned Glaxo's post-war international development was based on antibiotics, in particular its pioneering work on penicillin and streptomycin. Following the pattern of several other major companies, Glaxo concentrated all research, development and primary production at its headquarters and among its

³¹ Committee of Enquiry into the Relationship of the Pharmaceutical Industry with the National Health Service 1965-1967 (Sainsbury Committee), *Report*, Cmnd 3410 (London, HMSO, 1967), p.46.

³² Hancher, *Regulating for Competition*, p.41.

factories in England, but established finishing and packing operations in many countries. In 1949, Glaxo's capital employed overseas represented 40 per cent of this company's total capital employed. In 1960, by which time the company had become a world-wide organisation, this ratio had risen to 46 per cent. Glaxo was represented in almost 70 countries and had nine overseas subsidiary centres. Strict licensing agreements with United States companies, in particular with Merck to control sales of antibiotics, continued to shut Glaxo out of direct marketing in the large United States market, however. In spite of this vigorous expansion, the Glaxo parent company had attempted to keep a tight reign on overseas investment during these years because of its anxiety over the levels of foreign exchange available in some countries to secure such capital, and its fear that some governments would arbitrarily restrict the payment of dividends. In some important markets, such as Argentina, government regulations controlling remittance of profits to the British parent company did indeed cause major problems. However, funds accumulating in Argentina could be spent on extensions for local production which, in other circumstances, would probably not have gone ahead. The parent company licensed or sub-licensed its foreign subsidiaries (such as its New Zealand subsidiary), which steadily returned royalty payments in sterling to Britain. These funds could, where necessary, be passed to North American licensors.³³ Glaxo was able to co-ordinate its international drug prices through a Subsidiary Companies Unit in London, thus carefully avoiding reductions in one country creating pressure for price cuts elsewhere in the world.

The top few United States pharmaceutical companies established 28 subsidiaries in Canada, Europe, Australia, New Zealand, Latin America and Africa before 1950. Most subsidiaries were located in Britain and the Commonwealth and in Mexico. The pace of this expansion quickened during the 1950s and 1960s, when these same United States companies established well over 300 subsidiaries around the world.³⁴

³³ Davenport-Hines and Slinn, *Glaxo: A History to 1962*, pp.234-236.

³⁴ Gary Gereffi, *The Pharmaceutical Industry and Dependency in the Third World* (Princeton, Princeton University Press, 1983), p.179.

The three German companies, Hoechst, Bayer and BASF, reconstituted as independent firms from I.G. Farben after the Second World War, each began aggressive overseas development programmes. Beginning in 1949 with a sales subsidiary in France, for example, Hoechst, moved progressively into western Europe, the United States, the Far East and Latin America.³⁵

Once established, local subsidiaries tended to expand, because they were encouraged by high tariffs and quotas on imports of finished pharmaceutical products imposed by governments of developed and underdeveloped countries alike during the 1950s.³⁶ Such restrictions on imports, particularly quotas (or import licensing), encouraged most leading pharmaceutical companies, including May and Baker, Merck, Squibb and Glaxo, to establish subsidiaries in New Zealand from about the same time. In some countries, local manufacture began to take over from direct importing of finished pharmaceuticals. On the whole, however, the main centres of the production of fine chemicals remained concentrated in only a few countries, especially Switzerland, West Germany, France, Britain and the United States.³⁷

By the 1960s, the international industry was dominated by a number of large firms, which were nationally owned but organised on a global scale. Each of these multinationals made many transactions, for example to buy and sell raw material and packaged or bulk finished products, or technical services and manufacturing know-how, between affiliated companies. The prices established for such international transactions within a single firm are called transfer prices. When transactions cross national frontiers - and the units of the same enterprise are subject to different custom duties, tax rates, and foreign exchange controls - transfer prices can be

³⁵ David B. Yoffie and Benjamin Gomes-Casseres, *International Trade and Competition: Cases and Notes in Strategy and Management*, Second Edition (New York, McGraw Hill, 1994), p.148.

³⁶ The intention to liberalise trade was behind the General Agreement on Tariffs and Trade, signed in 1948. During the 1940s and 1950s, however, many developing countries attempted to encourage domestic manufacturing and planned import substitution. Therefore their governments imposed relatively high quotas and tariffs.

³⁷ Gereffi, *Pharmaceutical Industry*, pp.179-188.

adjusted (or as critics allege, manipulated) to achieve a wide variety of results that will further the broad goals of the enterprise.³⁸

In this way, transfer prices for commodities were not necessarily based on manufacturing costs, but could be set at whatever level the firm wished in order to take advantage of different tax regimes and so minimise costs and maximise profits. When making such transactions, each parent company could declare profits at different points in its network, whether in Switzerland, the United States, Britain, Bermuda or Puerto Rico, in order to maximise its profits and minimise its taxes. A parent company in Switzerland, for example, could charge high prices for bulk or finished goods it sold to its overseas subsidiary companies, and thus raise local prices to the consumer (perhaps a national government), but keep most of its profits in the home country, where the tax penalties were lower. Profits recorded by the subsidiary would be greatly reduced, although in fact they were simply moving to the parent in another form. Therefore transfer pricing had two advantages: it enabled the company to avoid a large amount of taxation, and it allowed it to boost prices or achieve high mark-ups without appearing to do so. Such manipulation of costs and profits could be used to minimise the income from pharmaceuticals of New Zealand subsidiaries, for example, thus strengthening their case when seeking government approval for increased prices.

For example, the world-wide Roche organisation consisted of two groups of companies, F. Hoffmann-La Roche & Co AG, of Basle, and SAPAC Corporation Ltd, incorporated in New Brunswick, Canada, but with its principal office in Montevideo, Uruguay.³⁹ The holding company in Montevideo was called Roche International Ltd. Roche had no manufacturing facilities in Montevideo.

³⁸ Stefan H. Robock and Kenneth Simmonds, *International Business and Multinational Enterprises* (Homewood, Ill., Irwin, 1989), pp.320, 552-554. See also the clear analysis of intra-corporate transfer prices in Commission of Inquiry on the Pharmaceutical Industry (Eastman Commission), *Report* (Ottawa, Minister of Supply and Services Canada, 1985), pp.431-439.

³⁹ Monopolies Commission, *Chlordiazepoxide and Diazepam: A Report on the Supply of Chlordiazepoxide and Diazepam* (London, HMSO, 1973), p.10.

Nevertheless, customers became customers of Roche International Ltd, rather than Roche, Basle. Because Uruguay is a tax haven, any profits made there were not taxed. A product could be manufactured by Roche in Basle at a cost of, say, \$16 a kilo. Roche International Ltd, in a paper transaction, could purchase from Basle at \$17 a kilogram, a nominal profit of only \$1 a kilogram to Basle. Roche, Basle, set the world price for the product at \$40 per kilogram, with all sales for the product being made through Roche International Ltd, who would declare a tax-free profit in Uruguay of \$23 per kilogram. Profits, once declared, would not be liable for Swiss tax after transfer to the parent company.⁴⁰

A famous example of transfer pricing from this period was revealed in a British government study of the Swiss-based world-wide Roche organisation. In 1957, the company discovered the compound which was to form the basis of its two leading tranquillisers, Librium and Valium. A carefully constructed international web of patent rights allowed the Roche Group to retain control over the manufacture of the active ingredients which were supplied in bulk form to subsidiaries at inflated costs. The United Kingdom company, Roche Products, revealed to the United Kingdom Monopolies Commission that, in fixing the selling price of chlordiazepoxide and of diazepam, no consistent system (for example the aggregate of relevant costs plus a pre-determined profit in relation to selling price or capital employed) was used by the Group. Price fixing was 'largely a commercial operation in which "price" was broadly what the market would bear'. The reasonableness of the price (the transfer price) was tested by what was reasonable for taxation purposes.⁴¹

Stricter government regulation of the availability of drugs in many countries began to divide sales more sharply into two main groups - drugs that could be bought 'over

⁴⁰ This example is adapted from the discussion on transfer pricing by Roche in Stanley Adams, *Roche versus Adams* (London, Jonathan Cape, 1984), pp.29-32. For a number of years, Stanley Adams was world product manager for Roche at its headquarters in Basle.

⁴¹ Monopolies Commission, *Chlordiazepoxide and Diazepam*, p.39. When the price had been set, an allowance to cover United Kingdom operations and contributions to Roche Group research and overheads was deducted. The remainder was called the 'transfer price', that is the amount payable to the Group.

the counter', and 'ethical' or prescription medicines.⁴² Until the passing of the Food, Drug, and Cosmetic Act in 1938, non-narcotic drugs could be purchased in the United States without a prescription. The 1938 Act required new drugs to be approved by the Food and Drug Administration, and provided for registration of new drugs, proof of drug safety, and a specified minimum of information on drug labels. The regulations interpreting the Act created an important distinction between those drugs freely available for sale, and those that could be obtained only with a doctor's prescription.⁴³ In 1962, the American Congress amended the 1938 legislation to apply more stringent pre-market controls on new drugs, and to alter the criteria for marketing approval of new drugs. Under the regulations that followed, the American Food and Drug Administration could specify the testing procedure a drug manufacturer had to use in order to produce information for evaluating a New Drug Application.⁴⁴ Similar requirements, and elaborate and lengthy processes required to meet these, were also instituted in Canada and elsewhere.⁴⁵

An accident caused by drug treatment in France in 1954, meant that drug safety regulations also became more rigorous there and in Europe generally. Subsequently, the catastrophe caused by thalidomide during 1959 and 1960 led to the establishment of further new drug regulations all over Europe. Thalidomide had been sold all over the world except in France and the United States, where an elaborate bureaucracy and rigid regulation had caused administrative delays.⁴⁶ In 1968, after a detailed government enquiry into drug company profits and promotion, the British

⁴² The term 'ethical' pharmaceuticals was not new; it had been used for many years. At first it seemed simply to mean 'honest'. Later, it was generally defined as medicines not advertised to the public, in contrast to patent medicines.

⁴³ Gordon and Fowler, *Drug Industry*, p.21.

⁴⁴ Jerome E. Schnee, 'Government control of therapeutic drugs: intent, impact, and issues', in *The Pharmaceutical Industry: Economics, Performance, and Government Regulation*, ed. Lindsay M. Cotton (New York, John Wiley, 1978), pp.9-21.

⁴⁵ Eastman Commission, p.xxxiv.

⁴⁶ Richard Blum, Andrew Herxheimer, Catherine Stenzl and Jasper Woodcock (eds.), *Pharmaceuticals and Health Policy: International Perspectives on Provision and Control of Medicines* (London, Croom Helm, 1981), p.74.

government passed the Medicines Act to regulate drug licensing, labelling, advertising and sale. Until this time only vague legislation regulated pharmaceutical companies.

Strict government regulations on drug safety created a class of drugs that could not legally be sold without a prescription. The clear division now established in pharmaceutical products between those that could be bought 'over the counter' and prescription medicines confirmed the position of doctors as the industry's 'customers', and therefore the target of increasingly sophisticated advertising. Some companies continued to produce medicines based on older, established active ingredients, such as acetylsalicylic acid (from which Bayer derived Aspirin), and advertised these under brand names direct to the public. Others made efforts to distinguish their ethical or prescription medicines, namely those not advertised to the general public but to doctors only, from the remedies of proprietary or patent drug makers. Sales of a particular drug depended upon each manufacturer's success in gaining individual doctors' acceptance of their particular branded product.

In this way, advertising became the main form of non-price competition in the pharmaceutical industry. As a result of intensive promotion by drug companies, doctors quickly identified a drug with a specific brand name (and manufacturer), so that the original seller continued to maintain most of its share of a market even after its patent had expired. Hence the period of exclusive right to the drug, especially for the original seller, usually provided more than sufficient opportunity for identification of the drug with a specific brand name and the development of loyalty to that brand. The company introducing the first product of a new 'family' of drug therapies, usually established a specific preference for that product. The first drug in the oral diuretic market, for example, was Merck's Diuril, introduced in 1958. Although Merck spent far less than competitors introducing products in this market soon after, the company was able to charge significantly higher prices. Thirteen years after the original introduction, Diuril was still the market leader with a 33 per

cent share of the oral diuretic market.⁴⁷ In short, brand-name manufacturers, through their promotional and advertising methods, began to eliminate prescriptions for all but brand names.

In effect, many national governments reinforced the strength of brand names established by the manufacturing companies by forbidding pharmacists to substitute another, similar drug prescribed by the doctor, irrespective of any price difference or problems of availability. Drug companies vigorously supported this limited role for pharmacists, and often warned of the dangers of substituting cheaper, equivalent drugs.⁴⁸ They claimed that, apart from the active ingredient present in a product, many variables such as stability, disintegration time, solubility and sterility were also present. Brand names, in their view, would guarantee the source of a drug and ensure that a patient received exactly the same formulation each time the pharmacist dispensed it.⁴⁹

Each major company's success began to depend on providing one or two brands of drug for treatment of specific illnesses, such as mental illness (Roche's Valium) or heart disease (ICI's Inderal), and making these brands available in the maximum number of countries in the minimum amount of time.⁵⁰ In this way, a series of distinct therapeutic sub-markets began to form within the industry, for example, drugs to treat the central nervous system, antibiotics or antihistamines. Within each of these sub-markets, a small group of large, multinational firms competed with similar products, making claims for their product to differentiate it from competitors. The leaders of each sub-market changed frequently.

⁴⁷ Henry G. Grabowski and John M. Vernon, 'The pharmaceutical industry', in *Government and Technical Progress: A Cross-Industry Analysis*, ed. Richard R. Nelson (New York, Pergamon Press, 1982), p.295.

⁴⁸ See in general Jan R. McTavish, 'Aspirin in Germany: the pharmaceutical industry and the pharmaceutical profession', *Pharmacy in History*, 29:3 (1987), pp.103-115.

⁴⁹ Committee on Cost of Prescribing (Hinchcliffe Committee), *Final Report* (London, HMSO, 1959), p.98.

⁵⁰ Tucker, *The World Health Market*, p.31.

In countries where prescription medicines were paid for by the state, such as New Zealand under the Pharmaceutical Benefits Scheme or Britain under the National Health Service, pharmaceutical companies began a complex relationship with doctors and their patients, pharmacists, and national governments. Doctors decided which medicine, manufactured by which company, the patient would have, and the state paid the bill. Governments in most countries, including those in New Zealand, seemed to agree that the pharmaceutical industry needed to set its prices so that it could earn a satisfactory return on capital after covering the costs of research and development. The result was that each company in the industry had a fair amount of freedom to set its own prices. However, even if governments had not taken this view, the structure of the industry - that is the national firm, global network and local subsidiary all based on patented, brand-name products - would still ensure that prices could be set according to what each market would bear. Because the prices of particular drugs varied widely among national markets, as a result of different government policies affecting the industry through price controls, subsidies, patent conditions and other measures, different prices were charged by the same company for the same drug product in different countries.

Labour's introduction of pharmaceutical benefits in New Zealand in 1941 coincided with dramatic advances in organic chemistry in Europe, in particular in old, established chemical companies in Switzerland and in Germany. These companies, and wholesaling drug houses in the United States, were well placed to build on the initial discovery of the first antibacterial drug in 1935. They had the factories, the chemical knowledge and expertise and, in several cases, the cartel experience. Their commercial operations began an new era of large scale, high precision manufacturing of chemical substances which could attack specific diseases. Long-term recognition of patent rights on each new drug strengthened the monopoly of a successful brand name. Because patented drugs were available only under their manufacturers' trade names, patent holders could keep tight control on distribution and sale of their drugs. Leading firms in Europe and the United States began to use their brand names and patent rights to collaborate on price fixing and the division of world markets for specific drugs. Licensing agreements drawn up during the late 1940s and early 1950s

set the pattern for future co-operation on market division and price fixing. The nature of the separate manufacturing processes of drugs encouraged most leading companies to expand production overseas and to establish many subsidiaries.

With its introduction of pharmaceutical benefits as part of a new national health service, the New Zealand Government became, in effect, a purchaser of prescription medicines. In theory, the Government was in a strong bargaining position through its control of access to the New Zealand market. In practice, however, it was powerless to intervene directly and forcefully in the policies of individual companies. Indeed, government policy in New Zealand, as in several other countries, was crucial in promoting the success of the international pharmaceutical industry. An almost unrestricted number of drugs was eligible for reimbursement by the state. Built into the agreement reached by the Government with doctors in 1941 was their right to prescribe the drug they considered best for their patients. Pharmacists could not, moreover, substitute a cheaper product for the brand name product specified by the doctor.

4 Operating the System in 1941-1960

Crucial compromises reached between the Labour Government and doctors and pharmacists in 1941, together with almost automatic inclusion in the Drug Tariff of high cost, brand-name drugs as they became available meant that, as prescribing and dispensing increased sharply during the 1940s and 1950s, so did the cost of pharmaceutical benefits. The history of the provision of these benefits during this time is a record of the implications of the Government's initial failure to build controls into the system, and its consequent helplessness in the face of rapidly rising costs. Doctors, as the 'customers' of international drug companies and the focus of increasingly sophisticated advertising of brand-names, were free to prescribe almost as they wished from a comprehensive range of drugs on the Drug Tariff. The Department of Health could only exhort them to avoid 'wasteful' and 'extravagant' prescribing, while continuing to acknowledge their independent, professional status as the gatekeepers to all health benefits. The Department of Health was called upon to restrain, and explain, the burgeoning cost of pharmaceutical benefits. Despite an exponential growth in the volume of prescribing, the Department consistently emphasised that the Government's system of payment to pharmacists, based mainly on a percentage of wholesale costs, was the greatest cause of the rising cost of pharmaceutical benefits.

In May 1941, the Government had opened Pandora's box. Few therapeutic drugs were available at this time, but the demand for medicines by doctors and their patients was voracious. Almost immediately, each of the four District Pricing Offices began to record a startling increase in the volume of prescriptions dispensed. In May 1941, for example, the Christchurch District Office received 1,107 prescriptions, and only £146 was paid to pharmacists. The following month the number of prescriptions received had jumped to 11,543, and £1,506 was paid to pharmacists. In July, these numbers had jumped again to 21,731, and £2,893 was paid to pharmacists. In September 1941 the district office received 36,500 scripts and paid out £5,023 to pharmacists. The number of scripts received did not increase noticeably again until

December, when the District Office received 62,145 scripts, and paid £8,882 to pharmacists.¹

The original Drug Tariff issued by the Minister of Health in April 1941 specified the range of medicines that could be supplied at the cost of the Social Security Fund, and the terms and conditions of government payment to contracting pharmacists. It was based on 'official' drugs only - that is, broadly speaking, everything for medical treatment mentioned in the official publications, the British Pharmacopoeia or the British Pharmaceutical Codex, was available as a 'pharmaceutical supply'. Any preparation, apart from insulin, prescribed by reference to a trade mark or trade name was excluded. This important proviso could not last, however, in view of the fact that several important drugs were already available on the market only under a brand name, including insulin and Thyroid Tablets B.P.

In February 1942, the Minister of Health issued a revised Drug Tariff, which went ahead of official pharmaceutical publications by including various products available only under brand names, including the new sulphonamide drugs and their derivatives.² These medicines were available on the New Zealand market under several different brand names, including Sulfanilamide (Parke Davis), Sulphanilamide (May and Baker), Sulphonamide-P (British Drug Houses) and Septanilam (Glaxo Laboratories). This revision marked the beginning of a steady extension of the Drug Tariff. In November 1943, the Government made available as pharmaceutical benefits further brand name drugs not listed in official publications, such as aluminium hydroxide gel (Amphojel, Cremorin), methyl testosterone, and sodium aurothiomalate (Myocrisin).³ By 1946 it had made

¹ Medical Officer of Health, District Health Office, Christchurch to Director-General of Health, 15 May 1944. H 1 208 17977. By the year ended March 1942, the Christchurch Pricing Office had received a total of 372,082 scripts.

² Department of Health, Drug Tariff Under the Social Security (Pharmaceutical Supplies) Regulations 1941, 6 January 1942, p.1. H 1 208-25 23207.

³ Department of Health, Drug Tariff Under Social Security (Pharmaceutical Supplies) Regulations 1941, 15 November 1943, p.1. H 1 208 17120; Department of Health, Circular letter to Medical Practitioners, Proprietors of Licensed Pharmacies and other persons under

available on the Drug Tariff about 20 'unofficial', brand name drugs. Some of the new drugs were only slight variations of official preparations, or were a mixture (syrups, elixirs, suspensions) of official and unofficial branded preparations. By 1953, the Drug Tariff included about 100 brand name drugs; by 1957 about 300.⁴

The Government was aware of the implications of this trend. As the Minister of Health, Arnold Nordmeyer, pointed out in April 1942:

It would be unwise to make all proprietary brands free to patients because as you are well aware the cost of proprietary preparations is largely influenced not by their true merits, but by the amount of advertising that must be paid for.⁵

Yet, if its intention was to cover a full range of drugs, however rapidly this was increasing, the Government was compelled to provide for supply under brand names where no other form was available. Even when some brand name medicines could still be made up 'extemporaneously', that is, compounded according to a formula in the British Pharmacopoeia or the British Pharmaceutical Codex, most doctors tended to prescribe, and pharmacists preferred to dispense, the usually more 'elegant' patented brand.

When recognising each revised edition of the official pharmaceutical publications in amendments to the Drug Tariff, the Department of Health could not screen all new drugs and their related preparations (capsules, syrups, suppositories, pessaries and elixirs). In this way, many new, expensive versions of existing drugs regularly found their way on to the Drug Tariff. Parke Davis's Dilantin Suspension, for example, was a preparation of soluble phenytoin, an anticonvulsant, which cost the Social Security Fund 12s 7d for four ounces. Yet the same preparation could be compounded by a pharmacist from separate ingredients for 4s 2d in this way:

contract to supply Pharmaceutical requirements, Secretaries of all Hospital Boards, Pharmaceutical Supplies Benefits: Revised Drug Tariff, 15 November 1943, p.1.

⁴ New Zealand Report on the Market for Pharmaceuticals: Summary, 27 March 1963, unsigned (T.L Hayes?), p.14. H 1 208 33232.

⁵ Nordmeyer to Blanc, 16 April 1942, p.1. H 1 208 17977.

phenytoin soluble 10d + flavouring and suspending agents, say 6d + dispensing fee 2s 6d + container 4d = 4s 2d.⁶

Combinations of official and unofficial drugs meant that, in practice, the Drug Tariff had become a 'free for all - no holds barred', according to Myers, Director of Pharmacy, Pharmacy Plan Industrial Committee. For example, methoin, an anticonvulsant, when supplied alone cost the Fund 37s 4d for 100 tablets but, when combined in a tablet with a mere 6d worth of the sedative phenobarbitone, the 'artistry involved' raised the cost to 54s 2d for 100 tablets. This price was no doubt 'set at a point which it is hoped the Fund will continue cheerfully to pay', Myers wrote to the Director-General of Health. Would it be 'improper to call it a racket', he wondered. The time would surely come, he suggested, when the Department of Health would 'have to buy the stuff and hand it to the chemists'. Indeed, he added, a direct buyer in the Department 'could save the Fund a lot more than his salary'.⁷ Myers appeared to be the only one even contemplating such a move, however.

This widening of the scope of the Drug Tariff quickly began to increase the average price of prescriptions. The Pharmacy Plan Industrial Committee studied a group of 200 prescriptions from each of 27 pharmacies during three periods from July 1941, July 1942 and January 1943. In July 1941, the average price of a batch of 200 scripts (excluding insulin) was 2s 7d; by July 1942 it had reached 3s 5d and by January 1943 it had risen to 3s 8d. Myers found one case particularly interesting: if only one prescription from a particular pharmacist's group of 200 was omitted, his average script price went down from 4s 10d to 3s 6d. This one prescription cost the Social Security Fund £13.10, and came from the new group of drugs listed in the recently revised British Pharmaceutical Codex. There were also two other scripts of note in this batch of 200, one at 14s 11d and one at 19s 3d. Myers pointed to other

⁶ Richardson, Report on reducing the cost of Social Security (Pharmaceutical Supplies) Benefits, undated, late 1955? p.4. H 1 208 25858.

⁷ Myers to Cook, 27 July 1953, p.2. H 1 208-2 25876.

pharmacies where increases in average script prices were not dramatic, to show that 'the rising tide' had not affected all places to the same extent.⁸

The trend shown by the Pharmacy Plan Committee's analysis of average script prices is also set out in general terms in annual reports of the Departments of Social Security and Health. Pharmaceutical costs to the Government were already rising steeply. During the first 11 months of the scheme from May 1941, these benefits had cost the Social Security Fund £279,698.⁹ With the first full year of the scheme, the cost had almost doubled to £563,247.¹⁰ In the 1944 financial year the cost increased again to £762,198.¹¹

Faced with the obvious and alarming consequences of allowing doctors wide discretion to prescribe as they wished, the Department of Health tried to establish some checks. In December 1941, Nordmeyer directed that the regulations governing pharmaceutical benefits be amended so that the Director-General of Health could

require any medical practitioner to justify his action, if it appears that his prescribing has been excessive, in the matter of either quantity or cost, in respect of either individual prescriptions or individual patients, or in respect to the average number of prescriptions or average cost of prescriptions for a given number of patients as compared with the practice of other medical practitioners as a class.¹²

The only deterrent suggested was referral to an appropriate committee of medical practitioners which would advise the Minister of Health. Yet, however they prescribed, doctors could not be accused of any offence against any law. And given the earlier battles over the independence of doctors, fellow medical practitioners would be unlikely to impose penalties against their colleagues. So began a series of

⁸ E.R. Myers, 'Social security pharmaceutical benefits in New Zealand', *Australasian Journal of Pharmacy* (30 January 1945), pp.8-10.

⁹ Department of Social Security, Annual Report 1942, *AJHR* 1941-42, H.9, p.2.

¹⁰ Department of Social Security, Annual Report 1943, *AJHR* 1943, H.9, p.2.

¹¹ Department of Social Security, Annual Report 1944, *AJHR* 1944, H.9, p.2.

¹² Maclean to Compiler of Statutes, 1 December 1941, p.2. H 1 208-25 23207.

minor amendments to the Social Security (Pharmaceutical Supplies) Regulations 1941, which addressed 'undesirable practices' to do with telephoned prescriptions and the ordering of repeats. Pricing officers were to be 'on the look-out' for irregular prescriptions, for example, and medical officers of health should 'draw the attention of both practitioner and pharmacist concerned to any irregularities discovered'. The Director-General of Health warned, however, that while the power to control irregular prescribing had been shown to be necessary, it had to be used with 'very great discretion'.¹³ Such cautious amendments left the larger issues untouched, namely the freedom of doctors to prescribe in the absence of strict limits, such as a formulary of life-saving drugs, or costs per patient, or costs per annum. In view of its failure to establish any kind of contract with the doctors in 1941, however, the Government was not in a strong position to impose strict rules or to interfere with their professional and independent status.

Pharmacists, almost overwhelmed by the demands placed upon them as a result of sharply increasing dispensing under the Pharmaceutical Benefits Scheme, grappled with the problems of maintaining stocks, meeting pricing office requirements, handling repeat prescriptions, and delays in government reimbursement. A Picton pharmacist complained that he had been 'driven to desperation': he priced scripts carefully and struggled with many new rules and regulations, but 'alas', found himself quite unable to cope with incompetent clerks and Department of Health 'pinpricking' over points of interpretation and accounting methods.¹⁴

Nevertheless, there was good business in government dispensing. In general, according to Myers, pharmacists were 'shaking down well' to the new regime by the end of 1942:

There is no doubt that dispensing has greatly increased under the scheme.... Doubling of turnover since we commenced is not uncommon. There are indications also that a high proportion of dispensing gives a high rate of gross

¹³ Watt, Memorandum to All Medical Officers of Health, Social Security (Pharmaceutical Supplies) Regulations, 1941, Amendment No.2, 9 January 1942, p.1. H 1 208-25 23207.

¹⁴ Halligan to Myers, 10 June 1942, p.1. H 1 208 25472.

profit.... Quite a number of pharmacists have been overwhelmed by the work that is coming to them and believe themselves to be on the high road to prosperity but they certainly are working for it. The casual customer who was wont to spend a pleasant half-hour or so discussing his case with his chemist is now decidedly a nuisance.... When we started on our job there were far too many owners of pharmacies in business for less than a labourer's wage, but in many cases although they put in long hours they actually didn't work many. Keeping into the collar is a new experience but it is bringing a reward, and that is how it should be.¹⁵

The 'reward', in the form of government reimbursement for the wholesale cost of materials plus a generous profit margin, together with various fees, was substantial. Pricing officers in each of the four main centres calculated the price for each script by first adding together the total selling price of the ingredients as shown in the 'First Schedule' of the Prescription Pricing Official Schedules and Rules, issued by the Pharmacy Plan Industrial Committee. Next, they added a dispensing fee for each prescription as set out in the 'Second Schedule', the price of the container (which included corks and labels), and a 'breakage' fee (a further percentage, calculated on the gross price, to allow for breaking down bulk items for use in small quantities in prescriptions). Finally, they subtracted a 2.5 per cent discount, as a customary trade discount for prompt payment to pharmacists.

The profit margin paid by the Government to pharmacists was based on the prices listed in the Official Schedules and Rules, which listed a wholesale price for each product and a selling price for two or more different quantities - usually 16 ounces, 4 ounces, 1 ounce and 1 dram. For example, the wholesale price listed in the 1944 edition of the schedules for the sedative butyl chloral hydrate was 3s 8d per ounce. The selling price listed was 8s 1d for one ounce (120 per cent mark-up), and 1s 2d per dram (409 per cent mark up). Potassium bromide, used as a tranquilliser, was listed as 5s 5d per pound wholesale; selling prices were 9s 3d for 16 ounces (71 per cent mark-up), 2s 9d for 4 ounces (103 per cent mark-up), and 9d for 1 ounce (122

¹⁵ Myers to Allen, Federal Secretary, Federated Pharmaceutical Service Guild of Australia, 17 December 1942, p.3. H 1 208 25472.

percent mark-up).¹⁶ As more imported lines were 'unscheduled', that is, not listed in the First Schedule of the official schedules, no official price could be fixed for the whole of New Zealand, and wholesale prices varied in different centres depending on local sources of supply. For these items, the pharmacist was paid an 'on-cost' or margin of 50 per cent or more on the wholesale cost of the ingredients.¹⁷

The Pharmacy Plan Industrial Committee reviewed these pricing schedules regularly. Because they were based on current wholesale prices, as these rose, so did pharmacists' profits. In this way, the Government's payment system simply encouraged pharmacists to buy at the highest price and in the largest quantities in order to reap the benefit of the loading.

To the imported or 'landed' cost of the drugs was added a 20 to 25 per cent margin for the wholesaler. On this 'loaded' cost, pricing officers calculated the pharmacist's mark-up, then subtracted the Government's 2.5 per cent discount. The acting Director-General of Health, F.S. Maclean, took an extreme case as an example - a prescription for a hormone preparation which was already packed for issue to the patient and cost the Social Security Fund £14 7s 5d. Of this sum, the pharmacist's profit was £4.16.0 with no compounding required.¹⁸ A sarcastic memorandum compared the pharmacist to a building contractor who completed a job on a '10% on cost' basis and 'who found it profitable to pay his workmen high wages and equip his building with expensive hardware'.¹⁹ A further disquieting feature of the new regime was that the retail trade no longer acted as a brake on wholesale prices. Contractors had no incentive to obtain supplies on the most economical terms - in

¹⁶ Pharmacy Plan Industrial Committee, *Prescription Pricing, Official Schedules and Rules* (Wellington, Government Printer, 1944), pp.11, 29.

¹⁷ Memorandum, Pharmacy Plan Industrial Committee, *Prescription Pricing, Official Schedules and Rules, Rules governing the use of the Prescription Pricing Schedules*, June, 1948, p.1. H 1 208 3 35223, Accession W2676.

¹⁸ Maclean for Director-General of Health, Memorandum for Minister of Health, *Pharmaceutical Supplies Benefits*, 14 July 1944, pp.1-2. H 1 208 17977.

¹⁹ *Pharmaceutical Costs*, Draft memo, signed DC (Dr Duncan Cook for Director-General of Health?) undated, c1944, p.4. H1 208 17977.

fact the opposite - because their 'customer' was committed to payment and the higher the price the higher the profit to both wholesaler and retailer.

Clearly, Social Security dispensing had ensured that the objective of the Pharmacy Plan - to rehabilitate the industry - was being achieved. Indeed, there were not enough pharmacists available to keep up with the insatiable demand for dispensing under the Pharmaceutical Benefits Scheme.²⁰ At the same time, pharmacists were still doing a brisk trade in patent medicines, toilet requisites, and other merchandise. The Pharmacy Plan Committee continued to advertise the 'quality' and 'reliability' of the pharmacist who was 'pledged' to 'dispense with exactitude and to sell only products which bear the hall-mark of quality and reliability'.²¹

At the same time as their commercial prosperity improved dramatically, pharmacists' professional role began to change.²² Pharmaceutical companies distributed increasing numbers of their products almost entirely precompounded into dosage forms under a brand name. After re-labelling and re-packing where necessary in appropriate quantities, most proprietary lines were dispensed by the pharmacist in the same form as they were received. When pharmaceutical benefits were introduced in 1941, pharmacists still compounded more than half of all prescriptions from a number of basic ingredients. As they began to dispense more frequently from stocks of already manufactured medicines, in particular tablets, the old 'wet' and 'dry' drugs compounded extemporaneously began to disappear. This tendency had 'caused some thoughtful men to ask themselves and each other what is to be the future of the

²⁰ Department of Industries and Commerce, Annual Report 1946, *AJHR* 1946, H.44, p.2. In 1941, 39 and 75 pharmacies respectively were in the two lowest levels of turnover (less than £1000 and £1000-£1500). By 1947, six years after the introduction of pharmaceutical benefits, the numbers were 0 and 6 respectively. Pauline Toni Norris, 'The Negotiation and Re-negotiation of Occupational Control: A Study of Retail Pharmacy in New Zealand 1930-1990', PhD thesis (Victoria University of Wellington, 1993), p.155.

²¹ Reg. Combes, *Pharmacy in New Zealand: Aspects and Reminiscences* (Auckland, Ray Richards for the Pharmaceutical Society of New Zealand, 1981), p.161.

²² See Pauline Norris, 'The changing role of pharmacists and the distribution of pharmaceuticals in New Zealand', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992).

art of extemporaneous dispensing', Myers commented. Would the dispenser 'become a button-presser or tally-clerk', he wondered.²³

The Department of Health Annual Report of 1944 expressed concern at the continued increase in the cost of pharmaceutical benefits, which had risen to £762,199 from £563,247 the previous year. The report set out a clear summary of the main problems: part of the increased cost was due to extensions of the Drug Tariff following extensions of the British Pharmacopoeia and Pharmaceutical Codex. The increasing costs of drugs also had an important influence on the cost of the benefits. Furthermore, the number of scripts written by doctors was constantly increasing. Altogether, it was 'hard to resist the impression that many unnecessary bottles of medicine' were being prescribed.²⁴

Nordmeyer, the Minister of Health, addressed some searching questions to Maclean, acting Director-General of Health. He wished to know whether the increased expenditure on pharmaceutical benefits was a result of unnecessary prescribing, prescribing of expensive drugs 'where equally efficacious but cheaper drugs' were available, increasing cost of drugs because of the war, introduction of expensive, mainly proprietary, preparations in recent additions to the Drug Tariff, or 'overpayment to chemists, having regard to the value of the Services actually rendered'.²⁵

Maclean pointed first to 'unduly expensive prescribing'. He reported that the Department of Health sent letters to certain doctors from time to time, to show how their manner of prescribing imposed an 'undue burden on the Fund'. However, he added, it was 'extremely difficult to exert any effective influence on the manner of doctors' prescribing' because unnecessarily expensive prescribing could take a

²³ E.R. Myers, 'Social security pharmaceutical benefits in New Zealand', *Australasian Journal of Pharmacy* (30 January 1945), p.10.

²⁴ Department of Health, Annual Report 1944, *AJHR* 1944, H.31, pp.7-8.

²⁵ Nordmeyer to Maclean, 1 March 1944, p.1. H 1 208 17977.

variety of forms and its detection was not easy. A doctor could order a variety of different preparations for each patient, for example. The average cost of that doctor's prescriptions might be low, but the cost per patient of prescribing would be unduly high. Moreover, some doctors prescribed large quantities of medicine, often ordering sufficient for a month, when possibly the patient needed the medicine for only one or two weeks. The only effective alternative to laborious attempts to educate doctors, as Maclean sternly suggested, was for the Government to impose general restrictions on prescribing by the compulsory use of a particular formulary of drugs.²⁶

This radical idea was never followed up, although Department of Health officials who understood the issues at stake continued to put forward similar suggestions from time to time. In 1946, for example, the Director of the Division of Health Benefits, D. Cook, advised bluntly that there were three possible means of controlling government expenditure on costly drugs: exclusion of certain products from the Drug Tariff, a certain proportion of the cost of each prescription to be borne by the patient, and limitation of prescribing to defined practitioners, with supply through hospital boards.²⁷ Even at this stage, however, in view of the powerful interests vested in existing arrangements for the provision of medicines, such remedies would be too drastic. Each group in the distribution of medicines had a strong interest in maintaining existing arrangements. A crucial element of the Labour Government's continued popularity during the 1940s was its clear commitment to the provision of generous social security and health benefits, including a full range of free medicines. Any major restrictions in the provision of pharmaceutical benefits, such as confining the scheme to a narrow range of drugs or to a strictly limited group of patients, would be politically difficult or unacceptable. An important feature of doctors' professional status was their freedom to prescribe at the cost of the state from the

²⁶ Maclean for Director-General of Health, Memorandum for Minister of Health, Pharmaceutical Supplies Benefits, 14 July 1944, p.2. H 1 208 17977. At the same time, the number of doctors entering or re-entering practice was comparatively large. By the end of 1947, the number of doctors in practice had increased by more than 50 per cent from 1942. J.B. Lovell-Smith, *The New Zealand Doctor and the Welfare State* (Auckland, Blackwood & Janet Paul, 1966) p.183.

²⁷ Cook, Memorandum, Pharmaceutical Benefits, 10 October 1946, p.1. H 1 208 17977.

increasing range of new drugs being produced by all the major pharmaceutical companies. For different reasons, pharmacists were also a privileged group. Their commercial prosperity had been ensured by arrangements made by the Government in 1941 for reimbursement for Social Security dispensing.

Reluctant to make fundamental change, but willing to investigate the rapid escalation of costs of medical services, the Labour Government appointed the Medical Services Committee in 1947 to examine the medical benefits provided under Part III the Social Security Act and, in particular, to investigate the method of payment for general medical practice. It became known as the Cleary Committee after its chairman T.P. Cleary, a barrister and solicitor, and was composed of representatives of the Medical Association and the Department of Health. The Committee concluded that these benefits encouraged the public 'to resort to doctors for trivial complaints' and that this patient pressure could 'only too easily be satisfied by prescribing medicines, towards the cost of which neither patient nor doctor contributes'. The Committee also pointed to the more general use of new and expensive drugs, and concluded that doctors often unnecessarily selected the more expensive forms of medication. Some also prescribed excessive quantities of drugs, and repeated many prescriptions unnecessarily. Accordingly, the Committee recommended changes to Department of Health regulations to control expensive prescribing and, moreover, the levy of a standard patient charge on prescriptions, apart from certain specific cases.²⁸

In a sombre comment on the Cleary Committee's main conclusions, Duncan Cook, the Director of the Division of Clinical Services in the Department of Health, noted that unless the Government could find satisfactory remedies, the present system of social medicine in New Zealand would have to be either modified substantially or replaced by a system under which expenditure could be more readily controlled. The increases in the cost of general medical services and pharmaceutical benefits had been of such magnitude as to lead to 'serious misgivings' as to whether the best

²⁸ Report of the Medical Services Committee (Cleary Committee), 1948, *AJHR* 1948, H.31B, pp.2-12.

method of payment for services had been adopted. General medical services had accounted for an expenditure of £2,328,154 (for an average of more than three attendances per head of the population) in 1949-1950. Pharmaceutical benefits cost £2,043,843 for the dispensing of 7,240,000 scripts, amounting to approximately 21s per head of population. In the light of the Committee's findings, the Labour Government subsequently amended the Social Security Act and the Medical Practitioners Act in 1949 in an attempt lay the groundwork for better co-operation between the medical profession and the Government in the general administration of Part III of the Social Security Act. Under the Social Security Amendment Act 1949, doctors could charge their patients a sum over and above that received from the Social Security Fund, and were also entitled to sue for non-payment of fees. The amendment to the Medical Practitioners Act, introduced at the request of the local branch of the British Medical Association, provided for the establishment of a disciplinary committee whose function would be to investigate complaints either from patients or from the Department of Health in matters concerning the administration of the general medical services scheme.²⁹ In this way, instead of tightening state supervision of doctors, the Government actually confirmed their professional and economic independence, and provided for the disciplining of doctors by other members of the profession rather than some lay body.³⁰

At the same time as the Department of Health grappled with doctors' prescribing, it continued to be concerned over its lack of control over government reimbursement to pharmacists. The predicament arising from Department of Health reliance on a pricing system established within the Department of Industries and Commerce, based on an entirely separate, local industry policy, was now clear. Nordmeyer attempted

²⁹ Department of Health, Annual Report 1950, *AJHR* 1950, H.31, p.73.

³⁰ See in general Iain Hay, *The Caring Commodity: The Provision of Health Care in New Zealand* (Auckland, Oxford University Press, 1989), pp.142-144; Lovell-Smith, *New Zealand Doctor*, pp.189, 204-295. In spite of the government's liberal provisions for doctors, some may still have feared radical changes in arrangements for state medical services in the 1940s. Lovell-Smith makes the interesting comment (p.205) that some doctors felt they should 'make hay while the sun shone, in anticipation of a completely socialised medical service being foisted upon them in the not too distant future'.

unsuccessfully to wrest some financial control from the Pharmacy Plan Industrial Committee, the champion of the national network of small-business pharmacies in New Zealand. The Committee had not necessarily laid itself open to any suspicion of bias, Nordmeyer wrote to the Minister of Industries and Commerce, D. Sullivan, but, when any business transaction was conducted between two parties, 'both should have a reasonable opportunity of advancing their views as to the financial aspects of the transaction'. In short, because it was responsible for administering pharmaceutical benefits, the Department of Health deserved to have a more influential role in the financial arrangements for pharmaceutical benefits.³¹

Sullivan, however, was anxious 'not to disturb the basis of the Pharmacy Plan'. Indeed, he suggested that the removal of the duty of issuing prescription pricing schedules from the Pharmacy Plan Industrial Committee 'might be considered a substantial variation in the terms of the Plan' and, moreover, a 'breach of faith' on the part of the Government. Nevertheless, he appreciated that, instead of setting prices to the general public, the original purpose of the pricing schedules, the prices now applied to 'one main customer', the Government itself, and that customer was 'entitled to argue about it'.³² Nordmeyer reassured him that all he desired was to ensure that the department responsible for the payment of the prices set for prescriptions should have a more effective voice in their determination. He agreed, however, that the Pharmacy Plan Committee should continue to prepare and issue prescription pricing schedules, but that such schedules should be subject to revision where necessary by a new committee responsible to both the Department of Health and the pharmacists.³³

Nevertheless, pharmacists' income from dispensing continued to be governed by the Pharmacy Plan Industrial Committee's Official Schedules and Rules, which the

³¹ Nordmeyer to Sullivan, 4 September 1944, p.1. H 1 208 17977.

³² Sullivan to Nordmeyer, Memorandum, Pharmaceutical Supplies Benefits, 11 September 1944, p.1. H 1 208 17977.

³³ Nordmeyer to Sullivan, 27 September 1944, p.1. H 1 208 17977.

Department of Health could have no part in revising. The purpose behind the Pharmacy Plan had been the economic revival of pharmacy. As one of many licensed industries under the broad supervision of the Bureau of Industry, regular surveys ensured that the pricing schedules were achieving this result. Nordmeyer was concerned that the Pharmacy Plan Industrial Committee was taking too little account of the dramatically altered circumstances of pharmacists, so that they were now receiving payments from the state which were too generous in view of the services rendered.³⁴ Changing the balance of control to ensure that the Pharmacy Plan Committee and the Department of Industries and Commerce acknowledged the financial concerns of the Department of Health proved to be difficult, however. The Pharmacy Plan Committee, and in turn the Department of Industries and Commerce, were more concerned with the commercial success of pharmacists than with expenditure on pharmaceutical benefits. Against the weight of these interests, and those of the Chemists' Service Guild, the Department of Health appeared helpless.

In 1946, a Pharmaceutical Advisory Committee, made up of Department of Health representatives as well as pharmacists, including the Director of Pharmacy, began to contribute to the administration of pharmaceutical benefits. In this way, the interests of pharmacists were formally represented within the Department of Health. Nordmeyer took care to point out that he did not intend that this committee should in any way usurp the functions of the Pharmacy Plan Committee - apart from the crucial matter of the final determination of prices and fees to be paid to pharmacists, in particular the 50 per cent profit margin on the cost price of materials at present payable to pharmacists, even for imported, packaged preparations.³⁵

Labour was out of office in 1949, but the new National Government introduced no sharp changes in government policy. Indeed, its policies of free enterprise appeared to confirm what Labour had been doing to foster local industry, including pharmacy.

³⁴ Nordmeyer to Sullivan, 11 April 1945, p.1. H1 208 17977.

³⁵ Director-General of Health to Director of Pharmacy, Department of Industries and Commerce, Memorandum, S.S.(Pharm.Supplies) Benefit: Revision of Prescription Pricing System, 4 February 1946, p.1. H 1 208 17977.

National had already accepted Labour's welfare state legislation and was becoming convinced that full employment was fundamental to its success. Therefore, the Government's initial preoccupation was with fulfilling promises and adjusting the balance of beneficiaries under the system, rather than transforming the system itself.³⁶

Because medicines dispensed by pharmacists accounted for about 97 percent of total expenditure on pharmaceutical benefits, the Department of Health continued to scrutinise their reimbursement and even, from time to time, to suggest radical changes to the system for distribution, such as providing for the supply of certain costly drugs to be available only from a few 'servicing' points.³⁷ This novel idea came to nothing, however, especially in view of the National Government's policy of supporting the network of small-scale, owner-managed pharmacies, just as Labour had done before it. The Pharmacy Amendment Act 1954 replaced the detailed system of licensing pharmacies under the Industrial Efficiency Act 1936 by a more limited form of control. Under the new legislation any person, pharmacist or otherwise, could establish one pharmacy and similar freedom was given to any company, provided that 75 per cent of the capital was pharmacist-owned. Anyone wishing to establish more than one pharmacy had to gain consent from a newly created Pharmacy Authority. Companies in which less than 75 per cent of share capital was held by pharmacists had to gain consent for the establishment of even one pharmacy.³⁸ In this way, overseas firms such as Boots could still be prevented from establishing large chains of retail outlets in New Zealand.

³⁶ Robert Chapman, 'From Labour to National', in *The Oxford History of New Zealand*, ed. Geoffrey W. Rice, Second Edition (Auckland, Oxford University Press, 1992), p.373. See also, Barry Gustafson, *The First 50 Years: A History of the New Zealand National Party* (Auckland, Reed Methuen, 1986), p.65.

³⁷ Farquharson Advisory Pharmacist, Department of Health, Memo for the Director, Division of Clinical Services, Pharmaceutical Benefits: Re Suggestions Concerning Reductions in the Scope of the Drug Tariff and Absolving the Fund from Liability for Payment, 28 February, 1956, p.1. H 1 208 25858.

³⁸ Wise, Assistant Secretary, Industries and Commerce, to Minister Industries and Commerce, Memorandum, Proposed Amendment to the Pharmacy Act 1954, 20 June 1957, p.1. IC 42/1/- Vol 1.

Because the Pharmacy Amendment Act had transferred responsibility for supervising pharmacies from the Bureau of Industry to the Pharmacy Authority, it marked the final demise of the Pharmacy Plan Industrial Committee. The Committee was superseded by the Price Control Division of the Department of Industries and Commerce, so that pharmacists continued to be under the broad control of the Department of Industries and Commerce, although almost half their income was gained from dispensing under the Pharmaceutical Benefits Scheme, administered by the Department of Health. The fundamental conflict of purpose between the Department of Industries and Commerce and the Department of Health remained unresolved, indeed appeared to be confirmed by this change. Most importantly, the main elements of government payment to pharmacists for dispensing prescription medicines remained unchanged, namely a profit margin, usually 50 per cent based on the wholesale price of drugs, and various fees including a dispensing fee.

The difficulties of controlling costs in the arrangements for supply of pharmaceutical benefits in New Zealand provided a valuable warning to the new Liberal Government in Australia, elected in 1949.³⁹ The former Chifley Labor Government had already attempted to introduce a universal pharmaceutical benefit scheme in 1944, very like the New Zealand scheme. It had provided for an extensive range of free drugs to be made available to anyone resident in Australia, with no means test or other restrictions on access.⁴⁰ However, like the Labour Government in New Zealand, the Australian Labor Government had to bow to the wishes of the powerful, organised medical profession. As a result of opposition from local Australian branches of the BMA, this comprehensive scheme languished. Doctors' opposition was not directed at its main purpose - to ensure that important drugs were available to all, regardless of income. Rather, they saw the scheme as the first step in the creation of a salaried medical service. With the change of government in 1949, the idea of an all-embracing scheme was abandoned. In 1950, following agreement

³⁹ James Gillespie, *The Price of Health: Australian Governments and Medical Politics 1910-1960* (Cambridge, Cambridge University Press, 1991), pp.226-227.

⁴⁰ See Commonwealth of Australia, *Pharmaceutical Benefits, An Act to make provision for the Supply of Pharmaceutical Benefits*, 5 April 1944, pp.1-4. H 1 208 17977.

between the Government and doctors, a much more restricted scheme providing just 139 so-called life-saving and disease-preventing drugs free of charge to the whole community was introduced, including adrenaline, morphine, digitalis, the sulphonamides and penicillin. This limited scheme was also free of financial controls that had aroused the hostility of the Medical Association in the original scheme. In 1951, the scheme was broadened so that pensioners and their dependants became eligible for a more extensive range of free drugs which basically covered all drugs listed in the British Pharmacopoeia. Even this strictly limited range of drugs proved to be expensive, so that during the 1950s Australian government expenditure on pharmaceutical benefits increased rapidly.⁴¹ By the end of 1958, pharmaceutical benefits were the largest single element in the cost of the whole Australian National Health Scheme.⁴²

At about the same time, the British Government was exhorting doctors to consider carefully what and how much was justified on clinical grounds each time they prescribed. The rising national drug bill was one of the gravest and most urgent problems confronting the National Health Service, the Minister of Health, I. MacLeod, told a meeting of representatives of the BMA in June 1953. The Minister of Health 'could not afford to ask the Exchequer to go on paying an annual bill of something like £40 millions for drugs prescribed by general practitioners', unless they were all essential for the proper treatment of patients, he continued. Just as Department of Health officials had done in New Zealand, the British Minister of Health pointed to an increase in the total number of prescriptions dispensed; a rise in the average cost of prescriptions as a result of the introduction of new, useful but

⁴¹ Australian Industries Assistance Commission, *Report on Pharmaceutical Products* (Canberra, Australian Government Publishing Service, 1986), pp.23-24; Pharmaceutical Manufacturing Industry Inquiry, *Report* (Ralph Report) (Canberra, Australian Government Publishing Service, 1979), pp.88-89; in general, see Gillespie, *Price of Health*, Chapter 9.

⁴² Thelma Hunter, 'The Politics of National Health', PhD thesis (Australian National University, 1969), p.207.

expensive drugs; and the prescribing of an increased proportion of new patented drugs.⁴³

In New Zealand during the 1950s, in an effort to stem the tide of steadily rising costs, the Department of Health turned again to controls on prescribing. It discovered that there was no simple relationship between the application of controls of various kinds over prescribing, and the rate of increase of expenditure on pharmaceutical benefits. Most doctors prescribed one month's supply of medicines on each script. Based on the idea that most illnesses were short, so that a few days' supply should usually be sufficient, the Government intended doctors to prescribe treatment for a shorter maximum period. In 1952, doctors were limited to an initial 15 days' supply only for ordinary prescriptions, plus one repeat for a further 15 days if necessary. For chronic cases, doctors could specify extended supply of a medicine for up to three months. Because there was no distinct gap between the periods covered by these two types of supply, however, one type of supply merged gradually into the other, and doctors ignored the short-term restriction.

Figure 2 shows changes in government spending on pharmaceutical benefits between 1947 and 1965, together with amendments to restrictions on doctors' prescribing, such as period of supply or quantity restrictions, and the availability on the Drug Tariff of various classes of expensive new drugs.

For example, the Department of Health identified the prescribing of oral penicillin as one cause of a large increase in the average cost of prescriptions in July 1952.⁴⁴ From 1 August 1952, it set a limit for each prescription of 10 penicillin tablets of any strength. At the same time, the Department imposed a general limit of 15 days'

⁴³ Minister of Health, London, Press statement, 'The Drug Bill: Minister's Appeal to Doctors', 15 June 1953, pp.1-2. H 1 208-3-7 Box 22 35226, Accession W2676.

⁴⁴ Wise, Director Price Control Division, Department of Industries and Commerce, Memorandum to Minister of Industries and Commerce, Application to increase chemists' dispensing fees, undated, late 1952, p.1. H 1 208 3 35223, Accession W2676.

prescribing treatment on all scripts.⁴⁵ Restricting quantity or period of supply in this way, like rationing, however, appeared to increase 'consumption' so that 'maximum quantities' became 'usual quantities'. Doctors tended to prescribe more frequently for the same patient, with the result that prescription numbers increased and patients went more often to the pharmacist to obtain their medicines. While restricting supply of penicillin reduced the average cost of prescriptions, at least in the short term, the 15-day limit resulted in a sharp rise in the number of scripts dispensed for the month of August 1952, which rose to an all time record high, and was 17.5 per cent higher than for the preceding month when the limit was not operating.⁴⁶ Furthermore, pharmacists gained an increase in dispensing fees.

A sharp increase in the average cost of prescriptions from 5s 11d in 1955, to 7s 2d in 1956 provoked the Government to appoint a Special Committee on Pharmaceutical Benefits to inquire into the matter. Dr A.W.S. Thompson, the chairman of Clinical Services, represented the Department of Health. Two doctors, J.M. Twigg and J. Keeling, represented the New Zealand Branch of the BMA, and two pharmacists, D.S. Dodds and N.R.C. Wilson, represented the Pharmacy Board and the Chemists' Service Guild. Two further members, D.F. Anderson and A.K. Brown, represented the Treasury. They were to advise the Minister of Health on any possible measures which could cut the increasing cost of pharmaceutical benefits.⁴⁷

Not surprisingly, the Committee's report, issued in May 1957, attributed the increase to a rise in the number of scripts issued per head per annum, and a rise in the average cost of each script. In general, however, the Committee accepted that if the

⁴⁵ *N.Z. Gazette* No. 52, 31 July 1952, p.1296.

⁴⁶ Wise, Director Price Control Division, Department of Industries and Commerce, Memorandum to Minister of Industries and Commerce, Application to Increase Chemists' Dispensing Fees, undated, late 1952, pp.1-2. H 1 208 3 35223, Accession W2676. In July 1952 pharmacists dispensed a total of 697,588 scripts; in August 1952 they dispensed 819,985 scripts.

⁴⁷ Special Committee on Pharmaceutical Benefits, *Report* (Wellington, Government Printer, 1957), p.5.

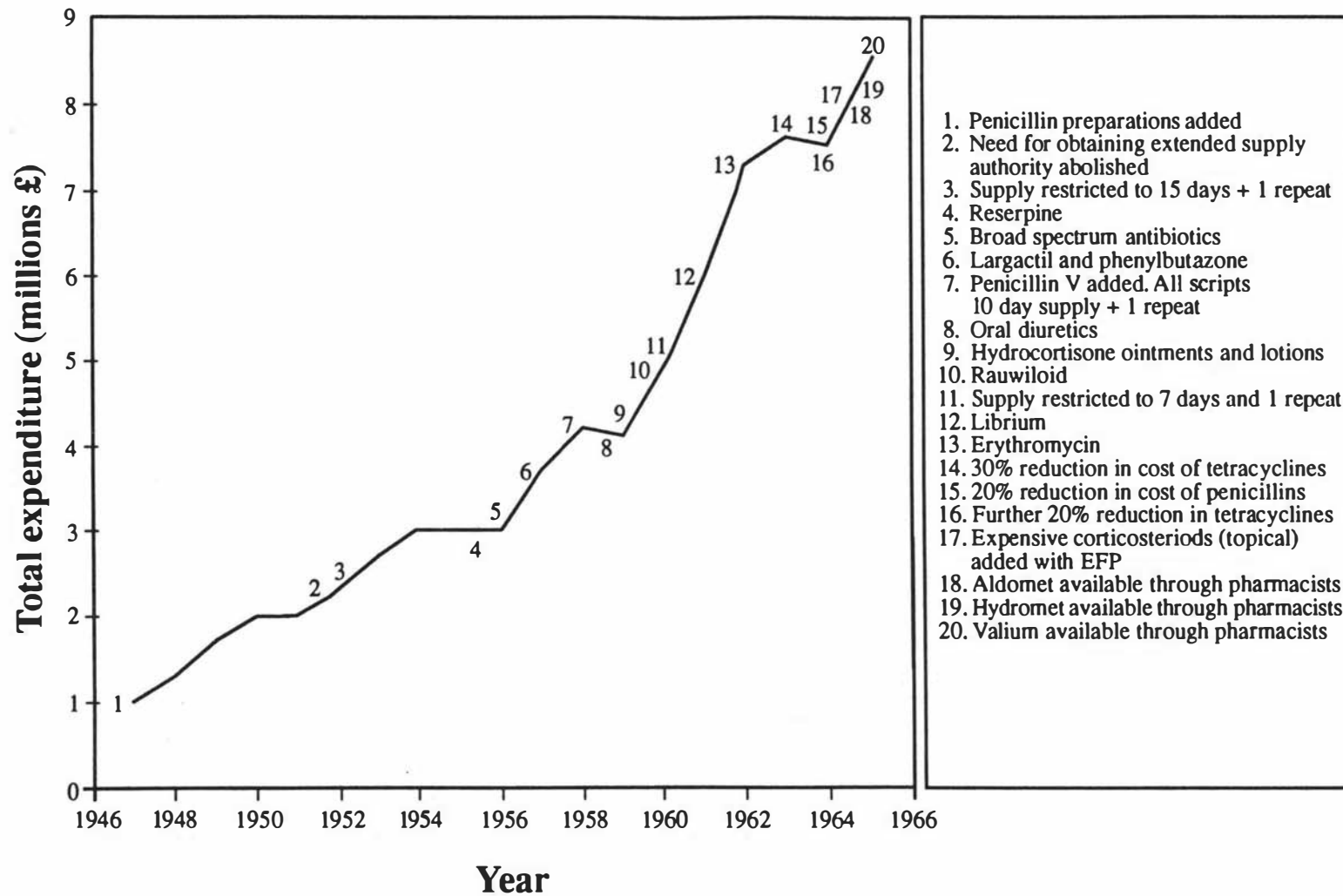


Figure 2. Changes in expenditure on pharmaceutical benefits 1947 to 1965.
 Based on original, Hayes to Kennedy, Overseas tour of duty: Dr T.L. Hayes, 11 February 1966, p.2. H1 208 33232

Pharmaceutical Benefits Scheme was to keep abreast of modern advances, the Drug Tariff must include an increasing proportion of expensive preparations. Basically, the Committee took the view that efficiency in the scheme 'must rest upon the integrity of the medical and pharmaceutical professions', which could not be improved by a 'multitude of fussy, pettifogging regulations and restrictions'. Nevertheless, it pointed to most of the central issues which together defeated all Department of Health efforts to contain costs - patient demand for new and expensive drug treatments available, pressure from pharmaceutical manufacturers, the prescribing of expensive new branded drugs, and the lack of stringent regulations to control 'extravagant' prescribing. The Committee boldly recommended that the Minister of Health scale down the pharmacists' 50 per cent on-cost profit margin, and introduce a standard charge on prescriptions. Much more cautiously, it also recommended that the Minister of Health amend the regulations on 'expensive' prescribing, so that complaints could be lodged with the doctors' Disciplinary Committee.⁴⁸

Only the recommendation to regulate prescribing was taken up by the Department of Health, but with such ambivalence that it still failed to rein in the doctors. In June 1957, the Department restricted all ordinary prescriptions to a quantity not exceeding 10 days' supply, instead of 15 as hitherto. At the same time, however, it relaxed the extended supply provisions, permitting doctors to issue specially endorsed prescriptions for any period of from one to three months.⁴⁹ This liberal provision for extended supply encouraged many doctors to ignore the 10-day limit on ordinary prescriptions, and to order extended supplies for their patients for one month's treatment or more. This prescribing was probably an important cause of the sharp increase in government spending on pharmaceutical benefits in the year ended March 1960 to close on £6 million (£5,956,302), an increase of 16.5 per cent over the previous year. The Department's annual report noted the difficulty of believing 'that every second patient in Auckland, and every third in Wellington, was suffering from

⁴⁸ Ibid. pp.8-26.

⁴⁹ Department of Health, Annual Report 1958, *AJHR* 1958, H.31, p.103.

some condition requiring at least a month's supply of drugs at a time, in view of the fact that Christchurch seemed to get along quite well with extended supplies for only one patient in five'. Accordingly, in September 1959 the Department restricted ordinary prescriptions to a maximum of seven days' supply, plus one 'repeat'. It also limited extended supplies, unless specially approved for individual patients, to certain named drugs. Doctors were unwilling to accept these new rules, however. In response to their criticism, the Department revised the extended supplies list on 1 October, and widened it further the following year.⁵⁰

The antibiotics chlortetracycline, chloramphenicol and oxytetracycline became available in New Zealand in 1953 (under the brand names Aureomycin, Chloromycetin and Terramycin respectively). Because of their cost, the Department of Health at first restricted their use to Hospital Boards. Doctors, as well as the main wholesale distributors, made repeated requests to have these brands included on the Drug Tariff in the usual way, so that they could be supplied on prescription. Such a step would mean a large increase in expenditure, however, amounting to perhaps £250,000 per annum or more, according to Department of Health calculations.⁵¹ Nevertheless, in response to this pressure, it considered availability through pharmacists in the usual way but attempted, unsuccessfully, to negotiate with the Chemists' Service Guild a lower on-cost profit margin for these drugs.⁵² The following year (1955), the Department made these antibiotics available on the Drug Tariff, which fuelled the costs of pharmaceutical benefits dramatically.⁵³

⁵⁰ Department of Health, Annual Report 1960, *AJHR* 1960, H.31, pp.65-66.

⁵¹ Cook for Director-General of Health, Memo to Minister of Health Social Security Act 1938 Part III Pharmaceutical Benefits: (1) Recognition of the revised Official Pharmaceutical Publications in the Drug Tariff and (2) Proposed amendments to the Drug Tariff, 23 April 1953, p.3. H 1 208-2 25876.

⁵² Cook for Director-General of Health to Cameron, Dominion Secretary, Chemists' Service Guild 23 November 1954. H 1 208 25858.

⁵³ See Table 1 below Health Benefit Expenditure April 1943 to April 1971; note rise from \$6,095,000 in 1955 to \$8,078,000 in 1956; see also Figure 1 Changes in expenditure on pharmaceutical benefits 1947-1965, showing time of introduction of some major drugs; note rising expenditure from '5', introduction of broad spectrum antibiotics.

Clearly, restrictions of this type had little long-term effect on prescribing. They could be used in an emergency to check sudden rises in cost, but their influence soon declined because doctors simply followed a certain pattern of prescribing, whatever restrictions existed. If ordinary supplies were too strictly controlled, doctors could make use of extended supply provisions, or put pressure on government officials to have restrictions removed to allow them to practise as freely as possible. Doctors continued to determine a large part of state expenditure on medicines without detailed knowledge of costs.

In any case, such restrictions could have no more than a temporary effect on the rising average cost of prescriptions if the cost of the drugs themselves continued to rise. This trend was confirmed in 1959, for example, when 81 new drugs were added to the Drug Tariff without special restrictions. Only 24 per cent of these 81 products cost *less* than the year's average price for all scripts.⁵⁴ Nevertheless, according to one pharmacist, the restrictions that the Government used to attempt to control prescribing were a 'most effective propaganda weapon', which had 'created an atmosphere of caution' among doctors and their patients; the Government should persevere with this policy and avoid any show of 'repentance'. He took the view that officials were 'up against a brick wall': they could economise only by being 'unfair' to the medical profession, or pharmacists, or patients.⁵⁵

This was an apt description of the Government's quandary. While Department of Health officials criticised lavish and wasteful prescribing, it continued to confirm the special, elite status of doctors, who were independent, yet at the centre of the health service. The general practitioner was not 'bound to his patient by the iron fetters of a legal contract enforceable day and night at the whim of the patient'. Instead, the bond that united them was 'the golden thread of mutual esteem and confidence, and the obligation to render service is enforceable only by the conscience of the doctor'.

⁵⁴ Department of Health, Annual Report 1959, *AJHR* 1959, H.31, p.108.

⁵⁵ Dodds to Thompson, Director of Clinical Services, 15 February 1960, p.2. H 1 208-2 28200.

The Government took the view that, from economic point of view, it could not afford waste or extravagance in prescribing, but nor could it afford, politically, a medical service that failed to provide the best in modern methods of treatment. Therefore the first essential in continuing to improve the health service was maintaining the morale of the medical profession. Doctors 'who did the real work of running the medical service' must be encouraged to 'think well of themselves and of their calling'.⁵⁶ As long as doctors felt that the administration of pharmaceutical benefits was in the hands of members of the medical profession, they might be willing to co-operate with officials.⁵⁷ In regular circulars to all medical practitioners, the Department of Health continued to emphasise its policy of making available as pharmaceutical benefits as wide a range as possible of new and valuable products.⁵⁸

There was not universal support for free medicines, however. The Dominion Conference of the National Party in August 1953, for example, supported a remit which proposed that the Government 'be requested to investigate Social Security pharmaceutical benefits with a view to instituting an initial charge thereon'. In a private memorandum to the Prime Minister in response to this remit, the Minister of Health, John Marshall, explained his dilemma: he had not pursued this matter, he explained, because he considered that the Government was still 'bound' by statements that it 'would not reduce social security'.⁵⁹

Some doctors, particularly those close to the administration of pharmaceutical benefits, did give some thought to the problem of rapidly rising costs. One Medical Officer of Health suggested propaganda to promote the idea that efficient

⁵⁶ Department of Health, Annual Report 1957, *AJHR* 1957, H.31, pp.87,89.

⁵⁷ Department of Health, Annual Report 1958, *AJHR* 1958, H.31, pp.102,105.

⁵⁸ For example, Department of Health, Circular letter to all medical practitioners, A.W.S. Thompson, Director, Division of Clinical Services, 12 July 1957, p.1. H 1 208-25-2 26230.

⁵⁹ Marshall to PM, Social Security Act 1938, Part III - Pharmaceutical Benefits, 25 November 1953. H 1 208 25858.

consultation and advice did not necessarily carry with it the need for 'a bottle to take away'. To suggest a return to full cost to the patient, he added would, of course, be heretical.⁶⁰ It would be 'rather illuminating', another doctor suggested, if all doctors had a list of the relative proportions of drug costs, for both hospital and general practice, among different drug groups such as tranquillisers, various hormones, and antibiotics. If pharmacists were to attach a label to each bottle stating 'cost to taxpayer' with the value of the prescription, both doctors and the general public might be made more aware of how 'truly expensive these prescriptions really were'.⁶¹

As well as determining which drugs the pharmacist dispensed, doctors gained formal control over the choice of items to be included in revised editions of the Drug Tariff, through their membership of the Pharmacology and Therapeutics Advisory Committee.⁶² Importers or manufacturers, wishing to have a new drug included in the Drug Tariff, addressed their applications to the Division of Clinical Services, which in turn recommended to the Minister of Health which drugs should be included in the Drug Tariff, and decided what payment would be made for drugs dispensed on Social Security prescriptions, based on advice from the Pharmacology and Therapeutics Advisory Committee.⁶³ By 1959, the Committee was considering about 180 applications for new drugs each year.⁶⁴ Members of the Committee were not bound by any particular rules, and considered each application on its merits

⁶⁰ Kennedy, Medical Officer of Health to the Director-General of Health, 27 November 1951, p.2. H 1 208 25858.

⁶¹ J.D. Baeyertz, obstetrician and gynaecologist, to T.L. Hayes, Assistant Director of Clinical Services Division, 1 November 1961. H1 208-2-3 29655.

⁶² Its members included two physicians, a surgeon, a paediatrician, a university professor representing the medical school, and a general practitioner. A representative from one of the drug companies also attended committee meetings from time to time as an observer.

⁶³ In 1961, Dr Derek North of the Auckland Hospital Board sought further information from the Assistant Director, Division of Clinical Services on this connection. A drug retailer had remarked to an Auckland doctor recently, he wrote, that when a drug was rejected by the Pharmacology and Therapeutics Advisory Committee, 'they had their ways and means of finding out what was said'. North to Hayes, 16 November 1961. H 1 208-2-3 29655.

⁶⁴ Department of Health, Annual Report 1959, *AJHR* 1959, H.31, p.108.

under the headings of efficacy, side effects and cost. If it considered a drug to be of sufficient merit, it recommended its inclusion in the Drug Tariff. At the same time, the Committee could also recommend certain restrictions on prescribing the drug as a charge on the Social Security Fund - for example the quantities which could be supplied on individual prescriptions, or a hospital board restriction, which meant that the drug could be supplied only by a hospital board to an out-patient.⁶⁵

However, even these recommendations were sometimes controversial. In 1965, for example, the Pharmacology and Therapeutics Advisory Committee established a part-charge on certain expensive diuretics. If a doctor ordered one of these expensive brands, the pharmacist would be entitled to charge the patient the extra amount above the cheapest brand. Both drug companies and doctors for different reasons opposed the levying of part-charges on certain brands. Hoechst, for example, would object to such a charge on its brand of diuretic, Lasix, in case patients insisted on a cheaper brand. Doctors interpreted such charges as restrictions on prescribing. They preferred to practise unhindered by questions of cost - to the patient or to the state. The right of all doctors to prescribe as they thought fit went back to Hippocrates, wrote one general practitioner to the Director of the Department of Health's Clinical Services Division, which administered pharmaceutical benefits. Now the Department of Health was 'dictating' to doctors how and what they should prescribe. His patients could not afford to pay the extra charge for a particular brand of diuretic, and he did not wish to change them to another type for which no part charge would be levied. Was it 'right and ethical' that an advisory committee could impose such a part charge, the doctor demanded. It could 'cause quite a stir at B.M.A. meetings and that is political dynamite these days', he warned.⁶⁶ Whether or not some doctors did prescribe cheaper brands of diuretics, and thus avoided part-charges for their patients, expenditure on pharmaceutical benefits continued to rise steeply during the mid-1960s, as Table 1 shows.

⁶⁵ NZ Ethical Pharmaceutical Association, Submission to Subcommittee of Public Expenditure Committee, Section C: Control of Prices, March 1967, pp.1-3. Le 1/1968/7/1 Box 1354.

⁶⁶ Dr A. Robert Anderson, Wanganui, to Hayes, 9 April 1965, pp.1-4. H 1 208-2-3 31351.

Table 1 Health Benefit Expenditure April 1943 to April 1971 (millions of dollars)

Year ended 31 March	Pharmaceutical benefits	Maternity benefits	Medical benefits	Hospital benefits	Total supplementary benefits	Total health benefits	Pharmaceutical benefits (% of total)	Total health benefits (% of GNP)	Mean population (million)	Average cost of pharmaceutical benefits per head (current \$)	Average cost of pharmaceutical benefits per head (1986 \$)
1943	1.13	1.01	2.03	3.08	0.20	7.45	15.1	1.11	1.64	0.68	11.39
1944	1.52	1.03	2.35	4.33	0.27	9.51	16.3	1.27	1.64	0.93	15.24
1945	1.96	1.06	2.57	4.66	0.34	10.60	18.5	1.40	1.66	1.18	18.95
1946	2.27	1.20	2.86	4.35	0.46	11.13	20.4	1.39	1.71	1.33	21.08
1947	2.88	1.35	3.52	3.97	0.70	12.42	23.2	1.46	1.77	1.63	25.72
1948	3.12	1.60	4.34	3.90	1.09	14.04	22.2	1.46	1.81	1.72	25.79
1949	3.59	1.83	4.61	4.00	1.72	15.75	22.8	1.61	1.84	1.94	27.49
1950	4.09	1.74	5.05	4.02	2.02	16.92	24.2	1.54	1.88	2.17	30.22
1951	4.19	1.77	5.32	4.04	2.12	17.45	24.0	1.25	1.92	2.19	28.25
1952	4.86	1.77	5.52	4.23	2.36	18.74	25.9	1.30	1.96	2.48	28.73
1953	6.03	1.84	6.09	4.27	2.62	20.86	28.9	1.37	2.01	3.00	32.83
1954	5.84	1.85	6.17	4.37	2.99	21.21	27.5	1.26	2.06	2.83	29.57
1955	6.10	2.30	6.70	6.82	3.27	25.18	24.2	1.35	2.11	2.89	29.04
1956	8.08	2.75	7.10	9.53	3.64	31.10	26.0	1.58	2.15	3.76	36.85
1957	9.15	2.83	7.59	9.74	4.24	33.55	27.3	1.63	2.19	4.17	39.45
1958	8.93	2.90	7.86	9.86	4.57	34.12	26.2	1.56	2.25	3.98	36.85
1959	10.23	3.09	7.94	11.55	4.51	37.31	27.4	1.64	2.30	4.45	39.09
1960	11.91	3.12	8.49	11.30	4.96	39.78	29.9	1.63	2.35	5.08	43.62
1961	13.60	3.31	8.49	11.37	5.53	42.30	32.1	1.61	2.39	5.69	48.43
1962	15.36	3.51	8.76	12.52	5.80	45.94	33.4	1.69	2.44	6.29	52.39
1963	16.12	3.72	8.61	12.68	6.40	47.52	33.9	1.63	2.50	6.45	52.47
1964	15.83	3.61	8.63	13.36	6.96	48.39	32.7	1.51	2.55	6.21	49.42
1965	17.73	1.56	8.76	3.17*	5.31	36.53	48.5	1.05	2.60	6.82	52.24
1966	19.51	1.52	8.79	3.72	6.08	39.62	49.3	1.06	2.65	7.37	54.82
1967	21.07	1.95	8.68	4.13	6.39	42.23	49.9	1.09	2.69	7.82	56.40
1968	22.27	2.05	8.85	4.44	6.86	44.46	50.1	1.10	2.74	8.14	55.28
1969	24.46	2.07	8.79	4.85	7.24	47.40	51.6	1.09	2.76	8.86	57.60
1970	26.31	2.96	9.70	5.49	7.63	53.07	51.5	1.12	2.79	9.79	60.77
1971	30.78	3.13	11.76	6.63	9.38	61.67	49.9	1.14	2.83	10.87	62.53

Sources: Royal Commission on Social Security in New Zealand, *Social Security in New Zealand*, AJHR 1972, H.53, pp.553-554; Coopers & Lybrand Associates, *Report on the Removal of Medicines from Price Control* (Wellington, Department of Health, 1986), Table 1.3.

* Health benefits made payable from Consolidated Fund; Social Security discontinued; benefits for public hospital services discontinued and included in grants to hospital boards.

Members of the Pharmacology and Therapeutics Committee were expected to provide impartial advice about which drugs should be permitted in the Drug Tariff. However, almost all the information available to them was supplied by other members of the medical profession, who had agreed to try out individual products on their patients, and by pharmaceutical companies. In this way, the Committee had close ties with a government department, the medical profession and pharmaceutical companies. This network of associations provides an interesting example of 'private government' of public money, and more particularly the kind of closed network revealed by Eckstein in his analysis of the relationship between leaders and officials of the BMA and the British Ministry of Health.⁶⁷

By 1960, the cost of pharmaceutical benefits had begun to overtake that of other health benefits provided under the Social Security Act 1938, as shown in Table 1. The Department of Health had steadily widened the scope of the Drug Tariff to include almost all drugs in daily use, and seemed to accept a certain inevitability about rising costs. The medical profession were free to prescribe from this comprehensive range. Their almost unrestricted access appeared to be part of the price the Government had committed itself to pay for doctors' co-operation as the gatekeepers to all health services. Therefore, in spite of several measures to control costs, such as restrictions on the period of supply and quantity for prescriptions, and dispensing other than through retail pharmacists, the cost of pharmaceutical benefits was still rising rapidly. The control of the influential Pharmacology and Therapeutics Advisory Committee, held by senior members of the medical profession, provided a further barrier to the introduction of radical change. Ironically, the Department of Health did have a contract with pharmacists, but it had had no part in setting the original terms of that contract, and neither was it able to make fundamental revisions to contain pharmacists' profits. The Department of Health continued to be responsible for administering these benefits yet, as things stood, it could never hope to gain financial control.

⁶⁷ H. Eckstein, *Pressure Group Politics: The Case of the British Medical Association* (London, Allen & Unwin, 1960), pp.78,91.

5 Supplying the New Zealand Market

The desire to foster local manufacturing to create employment and conserve New Zealand's foreign exchange reserves was a further aspect of government policy which affected medicines and their prices from the 1930s. The Labour Government had passed the Industrial Efficiency Act in 1936 to give it power to guide the development of industry and commerce by concentrating production or business at a limited number of licensed centres. Another major instrument of regulation was Labour's introduction of exchange controls and import licensing in response to a foreign exchange crisis in December 1938. By regulating imports, the Government sought to influence the direction of industrial expansion. In the longer term, it hoped to ensure the insulation of New Zealand producers from the vagaries of world markets and protect and promote local industry, even at a cost to consumers. When allocating import licences, therefore, the Government gave preference to plant, equipment and raw materials for local processing, rather than to finished goods for immediate consumption. In this way, overseas companies could be persuaded to complete at least some of the finishing processes of manufacture in New Zealand, or denied import licences if they did not. Government efforts to establish and promote a small core of local pharmaceutical production fitted in with this broad policy, but still left New Zealand heavily dependent on foreign companies for the supply of medicines, and with little control over prices. New Zealand could gain access to pharmaceuticals only on the terms imposed by the major patent-holding firms based in the United Kingdom, the United States, West Germany, Switzerland and France. Government efforts to tender for the purchase of medicines on a regular basis from alternative, lower-priced sources proved futile.

Since its election in 1935, Labour had made vague promises to encourage the development of local industry, but it took a sharp drain on overseas funds in 1938 to prompt a definite move in this direction in the form of strict government controls

on imports and the movement of foreign exchange.¹ To ensure that expenditure on imports was limited to available overseas exchange, and that resources were used as efficiently as possible, regulations prohibited the import of goods except where a licence had been issued or an exemption granted by the Minister of Customs.² Although the Labour Government had originally introduced these controls as a crisis measure in order to conserve foreign exchange, selection of the quantity and kinds of imports in such a way as to assist local manufacturers and expand New Zealand's industrial employment base was consistent with its long-term policy. The regulations governing imports and the movement of foreign exchange were to remain in force throughout the war and into the post-war period. Together with price controls to curb inflation, they marked the beginning of a controlled and regulated economy that was to last for the next 45 years.

The Department of Industries and Commerce was effectively the Government's manager of this broad policy. Its 1945 annual report, for example, outlined the Department's tasks of ensuring the provision of plant and raw materials to expand and develop secondary industry, and in general using the 'machinery of Industries and Commerce to devise and implement the plans best suited to the Dominion's economy'.³ While the Department soon found the rigid import selection of war time impossible to maintain, its restriction of imports to equipment, fuels and materials, rather than finished consumer goods, encouraged the growth of local industry during the post-war years. By the 1950s, New Zealand's manufacturing industries could be roughly divided into those using domestic raw materials, those importing raw materials in either a crude or simply transformed state, and those manufacturing mainly by assembling imported parts, with little local content in the final product. Examples of the first category were flour milling, which was heavily regulated to

¹ See in general 'The Exchange Crisis 1938-9', in Keith Sinclair, *Walter Nash* (Auckland, Auckland University Press/Oxford University Press, 1976), pp.170-189.

² The Labour Government soon strengthened the dubious legal basis of its December 1938 import controls by passing the Customs Act Amendment Act 1939, which gave it power to regulate imports in any way it saw fit.

³ Department of Industries and Commerce, Annual Report 1945, *AJHR* 1945, H.44, p.8.

protect New Zealand wheat production, dairy factories, breweries, pulp and paper mills based on pine plantations, woollen mills and cement manufacture. In the second category were tyre, paint and chemical fertiliser manufacture. In the third category were motor-vehicle assembly (including tractors), some electrical appliance assembly, and local pharmaceutical packaging.⁴ Successive governments fostered the high-cost, small-scale operations in the third category to conserve foreign exchange, and because these industries offered additional employment in converting imported materials or components into finished goods using imported plant and machinery.⁵

While import selection or licensing was the major protective device after 1938, governments also assisted local manufacturers and continued to raise revenue by imposing tariffs on some imported goods. The Ottawa Agreement of 1932 had established the principle of British Preference in exchange for preserving entry to the British market for unlimited quantities of primary exports from New Zealand and other imperial partners.⁶ British imports were subject to a lower tariff than imports from other sources. Similar tariff preference was also extended to all Commonwealth countries under the system known as the Commonwealth Preference System. In this way, New Zealand's protection policy was a series of layers established at different times by different governments, with different objectives. The first was a set of tariffs levied at different rates - generally low on raw materials, modest on

⁴ Department of Industries and Commerce, Annual Report 1958, *AJHR* 1958, H.44, pp.13-14.

⁵ See Alan E. Bollard, 'New Zealand: radical market-oriented reform', in *Pacific Basin Industries in Distress: Structural Adjustment and Trade Policy in the Nine Industrialized Economies*, ed. Hugh Patrick with Larry Meissner (New York, Columbia University Press, 1991), pp.129-133, 138; G.R. Hawke, *The Making of New Zealand: An Economic History* (Cambridge, Cambridge University Press, 1985), p.176-177; Paul Wooding, 'New Zealand in the international economy', in *State and Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), p.103.

⁶ Ian Duncan, Ralph Lattimore and Alan Bollard, 'Historical perspectives', in *Dismantling the Barriers: Tariff Policy in New Zealand*, Research Monograph 57 (Wellington, NZ Institute of Economic Research, 1992); Malcolm McKinnon, *Independence and Foreign Policy: New Zealand in the World Since 1935* (Auckland, Auckland University Press, 1993), p.87, n.21.

components and high on finished goods. This system was on the whole consistent with government policy on import licensing, a further layer of protection.⁷

When the new National Government took office in 1949, it made no fundamental change in Labour's long-term strategy of attempting to conserve foreign exchange and to promote the growth of local industry. It was as committed to providing full employment and to social security as Labour had been.⁸ Therefore, it aimed to raise the cost and restrict the availability of imported goods, and eke out foreign exchange, by selecting imports so as to guarantee a large share of the domestic market to local producers. The Department of Industries and Commerce distributed import licences in such a way as to serve a particular market, or foster the development of certain industries, by ensuring that available funds were allocated to the necessary materials and machinery for the clothing and textile industries, engineering, rubber tyres, sugar refining, cement, agricultural implements, electrical goods, most plastic goods, paint, cardboard and packaging.⁹ In 1955, almost half of all imports could be classified as producers' materials, and a further 18 per cent as producers' equipment. When imports of fuels and transport equipment were added, more than 80 per cent of all imports were required for secondary industry and tertiary services. In contrast, only 18 per cent of imports were goods destined

⁷ On top of this again were various export promotion or incentive schemes, introduced to diversify and expand exports in the face of a balance of payments constraint. See summary in Paul Wooding, 'Liberalising the international trade regime', in *Economic Liberalisation in New Zealand*, ed. Alan Bollard and Robert Buckle (Wellington, Allen & Unwin/Port Nicholson Press, 1987), pp.86-92.

⁸ National's initial rhetoric suggested otherwise - that is, dismantling the controlled economy. Nevertheless, by 1950 the Minister of Finance in his Budget speech, stated that 'efficient manufacturing' would continue to be protected. S.G. Holland, Minister of Finance, *Financial Statement*, 24 August, *AJHR* 1950, B.6, p.27. See, further, W.B. Sutch, *The Quest for Security in New Zealand 1840-1966* (Wellington, Oxford University Press, 1966), pp.365-366 for a useful summary of the new Government's aims and policies. Sutch points out that National's interest in the manufacturers was mainly in their role as employers.

⁹ Marshall, Secretary, Industries and Commerce, Memorandum for Minister of Industries and Commerce, *The Tariff and the Import Situation*, 14 July 1955, p.2. IC 1 2/2, Accession W1697; 'The operations of the Board of Trade', Extracts from an Address to the Wellington Branch, Economic Society of Australia and New Zealand by the Hon. Sir David Smith, 25 March 1954, pp.5-7. IC 1 2/2, Accession W1697. Department of Industries and Commerce, Annual Report 1950, *AJHR* 1950, H.44, p.12; Annual Report 1957, *AJHR* 1957, H.44, p.20.

for direct consumption. The rest were equipment, materials and fuels mainly to support secondary industry.¹⁰

In 1957, Labour regained power by a precarious margin. Its commitment to a policy of increased social security and greater protection for local industry, and a combination of heavy importing and falling prices for all major exports, especially dairy products, caused a sharp drop in overseas reserves. The new Government responded by imposing even more stringent selection controls on imports through import licensing, a policy defended in the 1958 Budget:¹¹

The new licensing schedule was designed to give priority to imports of essential foodstuffs, raw materials, machinery, and medical requirements and to allocate the balance of the available funds on the most reasonable possible basis. The Government is convinced that the licensing system involves fewer difficulties than any alternative scheme such as exchange allocation.... A paramount objective of Government policy in this field will be to maintain the supply of those imports which are essential and on which employment depends.¹²

Under the zealous leadership of W.B. Sutch, who became Secretary of Industries and Commerce in 1958, this Department became the driving force behind New Zealand's 'development in depth' at almost any cost. Departmental annual reports described how local manufacturing would provide employment opportunities for a greatly enlarged labour force in the future, and urged the need to remove any limitations on manufacturing's capacity to expand.¹³ The Department of Industries and Commerce had 'the duty of determining, in its advice to the Customs Department on import licensing', the allocation of overseas exchange to enable manufacturing to expand to maintain employment and to fill the gap created by the reduction in imports. The

¹⁰ J.B. Condliffe, *The Welfare State in New Zealand* (London, Allen & Unwin, 1959), p.128.

¹¹ Department of Industries and Commerce, Annual Report 1958, *AJHR* 1958, H.44, pp.19-20. A notice withdrawing all previous exemptions from import licensing was gazetted and came into force in January 1958.

¹² A.H. Nordmeyer, Minister of Finance, Financial Statement, 26 June 1958, *AJHR* 1958, B.6, pp.9-10.

¹³ See for example, Department of Industries and Commerce, Annual Report 1956, *AJHR* 1956, H.44, pp.11,14; Annual Report 1957, *AJHR* 1957, H.44, p.7.

Department had the responsibility for evaluating proposals for new industries, and of recommending methods to create a 'climate' in which industry could develop and operate with maximum efficiency. The initiative for development had to come from manufacturers themselves, but the Government could still 'do much to create the conditions for a healthy expansion of industry'.¹⁴ In short, New Zealand faced the alternatives of 'rapid and substantial industrial development, or slowly falling living standards'; major efforts toward one would be necessary in order to avert the other.¹⁵ In general, Sutch argued that the development of secondary industry was justified both to maintain a high demand for labour and ensure full employment, and to reduce reliance on imports.¹⁶

In 1960, Prime Minister Walter Nash explained at an Industrial Development Conference how the growth of local industry had still not been fast enough to diminish New Zealand's reliance on imports, and had done little to reduce its vulnerability and 'excessive dependence' on the fluctuating prices of a small number of farm products. It was the Labour Government's aim, he said, to encourage development of industries which could process New Zealand or imported raw materials in their crudest form through to their most finished stage. The Government would welcome the establishment of industries by former exporters to New Zealand who wished to retain their local market, provided it was satisfied that these industrialists were 'ready to go beyond mere assembly', and to 'process the products

¹⁴ Department of Industries and Commerce, Annual Report 1958, *AJHR* 1958, H.44, pp.11, 19.

¹⁵ Department of Industries and Commerce, Annual Report 1959, *AJHR* 1959, H.44, pp.5-8.

¹⁶ For a detailed discussion of the development of Sutch's thought see A.M. Endres, 'The political economy of W.B. Sutch: toward a critical appreciation', in *New Zealand Economic Papers*, 20 (1986), pp.17-39. For examples of Sutch's own writing see W.B. Sutch, 'Programme for growth', in Department of Industries and Commerce, *Industrial Development Conference: Report* (Wellington, Department of Industries and Commerce, 1960), pp.27-56. Sutch pointed to pharmaceuticals as an example of 'retarded industrial development', along with textiles, food processing and engineering. See also 'Preserving the colony', in *Quest for Security in New Zealand*, pp.407-435, and 'Towards economic maturity: criteria for development', in *Colony or Nation? Economic Crises in New Zealand from the 1860s to the 1960s*, Second Edition (Sydney, Sydney University Press, 1968), pp.91-102. See further Sinclair, *Walter Nash*, pp.342, 346, and S. Harvey Franklin, *Trade, Growth and Anxiety: New Zealand Beyond the Welfare State* (Wellington, Methuen, 1978), pp.195-196.

in depth', thereby making use of the skills of local people. As Secretary for Industries and Commerce, Sutch took up the theme of 'development in depth' of manufacturing - that is, any materials imported should be processed as much as possible in New Zealand.¹⁷

When Labour again lost power to National in 1960, the new Government continued to provide broad protection for local manufacturing industry. It was especially keen to encourage the development of industries which would process raw material, rather than those which merely assembled components imported in a finished state from overseas.¹⁸ In 1963, the Minister of Industries and Commerce, J.R. Marshall, described the National Government's broad objectives as industrial development, increased primary production and successful export promotion 'for the healthy and vigorous growth of our economy, the raising of our standards of living and the maintenance of full employment for our increasing population'. In the previous three years, Marshall reported, 300 new manufacturing projects had been given 'the green light' in the form of import licences for plant and materials. In the administration of import control, he said, the National Government had tried to ensure that manufacturers' raw materials and equipment were available to 'keep the wheels of industry turning and production rising'.¹⁹ National continued to encourage those who could export, or produce in substitution for imports.

As well as sheltering development of domestically owned factories, restrictions on imports through import licensing encouraged overseas companies to enter the New Zealand market by way of local production, based on imported raw materials and components, rather than direct export of finished goods. Some foreign investment

¹⁷ W. Nash, 'Building the future', in Department of Industries and Commerce, *Industrial Development Conference: Report* (Wellington, Department of Industries and Commerce, 1960), pp.13-26; W.B. Sutch 'Programme for growth', *Industrial Development Conference, Report*, pp.13-56.

¹⁸ H.R. Lake, Minister of Finance, Financial Statement, 20 July 1961, *AJHR* 1961, B.6. p.9; Wooding, 'Liberalising the international trade regime', pp.87-89.

¹⁹ Marshall, 'Drive to Lift Exports And Productivity', *The New Zealand Herald*, 1 November 1963, p.6.

in local manufacturing dated back to the nineteenth century, for example in meat processing, sugar refining and ammunition making. However, the number of overseas-owned enterprises established in New Zealand increased sharply after 1938 when Labour first imposed import licensing, and again after 1958 when the Second Labour Government re-imposed especially stringent controls after some relaxation under National.²⁰

Among these overseas-owned assembly industries was New Zealand's small-scale pharmaceutical production, with its wasteful use of capital, low levels of productivity, high production costs and lack of internal competition. New Zealand had established no fine chemical industry producing basic pharmaceutical materials and conducted little or no basic drug research. Legal access to most of the drugs being developed by major international pharmaceutical companies in Europe and the United States, at least before their patents expired, could be gained only by importing the product or by establishing local subsidiaries to produce these products under licence.

During the 1950s, several major pharmaceutical firms including Merck, May and Baker, and Glaxo, were already competing in the New Zealand market for prescription medicines. Each company acted through local wholesalers like Kempthorne Prosser, Salmond and Spraggon or Sharlands, or through a local subsidiary company. These local companies either packaged imported bulk materials, or imported medicines ready packed for dispensing. All the major drug companies advertised their wares to doctors and pharmacists in local journals such as the *New Zealand Hospital*, the *Pharmaceutical Journal of New Zealand*, *Australasian Journal of Pharmacy*, the *New Zealand Medical Journal*, and the *New Zealand Dental*

²⁰ See R.S. Deane, *Foreign Investment in New Zealand Manufacturing* (Wellington, Sweet & Maxwell, 1970), Table 2-1 Establishment dates of surveyed companies classified according to various activity periods, p.20. Deane defined the establishment date as that date when the overseas enterprise commenced manufacturing in New Zealand, or when a 25 per cent or more foreign interest was first purchased in an already existing New Zealand-owned manufacturing company.

Journal. Some hospital boards tendered for their drug supplies, but no government department acted as a direct importer.

Given the small size of the New Zealand market, most international firms would have preferred to continue to supply it through direct exports from their factories elsewhere. During the 1960s, however, the increasing difficulty of supplying finished goods through the import licensing system, as well as higher tariffs on finished goods, persuaded several major pharmaceutical companies to put forward proposals for investment in local production to undertake the finishing of their patented drugs under licence, in what would be a highly protected market. More than 30 subsidiaries or affiliates of international companies were eventually established in New Zealand importing finished, ready-packaged medicines or bulk materials for final stage local manufacturing. A handful of leading firms - Merck, Squibb, Glaxo, and May and Baker - retained the lion's share of the market, however.²¹

At least in theory, certain broad criteria guided government decisions on the establishment of new industry projects, and determined whether or not assistance should be given in the form of import licences for new materials or equipment or in any other way. The criteria included the extent of New Zealand content in the final product, the extent of net saving on overseas funds, both immediately and in the longer term, the extent of New Zealand participation in the ordinary share capital, and opportunities for obtaining the benefits of overseas research provided that too high a royalty was not payable.²²

On all these counts, however, the National Government was defeated in negotiations with representatives of major pharmaceutical companies concerning the establishment of local subsidiaries to manufacture prescription medicines. The insignificant size of

²¹ Five leading firms held about 30 per cent of sales; 15 firms were responsible for the leading 20 products. Michael H. Cooper, 'Prices, Profits and Government Regulation of the Pharmaceutical Industry', Bi-Annual General Meeting of the Pharmaceutical Manufacturers' Association, 24 September 1976, pp.3-4. BAJA 35/30 Part 6, Drugs & Druggists' Lines, Accession A602.

²² Department of Industries and Commerce, Annual Report 1960, *AJHR* 1960, H.44, p.12.

the local market for pharmaceuticals, combined with the monopoly power of each patent holder as supplier of individual drugs, which in turn could not, in effect, be withheld from doctors or pharmacists or the general public, meant that any New Zealand government would have very limited bargaining power. Protracted negotiations with company representatives over initial establishment of manufacture resulted in only partial fulfilment of government requirements, in particular provision for a reasonable proportion of New Zealand equity capital in the financing of each new subsidiary. Instead, each major company followed the pattern typical for pharmaceutical multinationals: local equity was kept to a minimum because dividends were taxable, whereas interest on loans was a tax deduction. This pattern of foreign ownership also allowed profits to be repatriated rather than distributed in the host country.²³

In practice, government approval for manufacturing projects was granted regardless of royalty commitments and other payments by way of dividends to parent companies, and regardless of the size of local equity holding. Both the prospect of establishing a small local pharmaceutical industry, and the threat of withdrawal of the supply of drugs to the New Zealand market, were powerful incentives. In this way, pressure on governments to maintain the goodwill of the local pharmaceutical industry combined with pressure from the medical profession, pharmacists and the general public to provide a full range of new drugs, to inhibit any possibility of radical change in arrangements for the distribution of prescription medicines.

Once established, local manufacture of pharmaceuticals entailed little more than blending and packing, in proportions predetermined in most instances by the parent company, of imported finished or bulk products which were then distributed in New Zealand.²⁴ Nevertheless, the Department of Industries and Commerce was

²³ Ned McCraine and Martin J. Murray, 'The pharmaceutical industry: a further study in corporate power', *International Journal of Health Services*, 8:4 (1978), p.581.

²⁴ McLauchlan for Secretary, Trade Practices and Prices Division, Department of Industries and Commerce, 14 January 1964, Memo, Glaxo Laboratories (N.Z.) Ltd, Palmerston North, Prices of Drugs, p.10. IC box 10 file 3/83.

concerned to ensure the prosperity of each firm in the form of adequate returns on investment. As we shall see, the poor profits recorded by local sales and manufacturing subsidiaries, and complaints about continued viability of New Zealand production, allowed them to drive a hard bargain with Industries and Commerce pricing officials when seeking approval for increased profit margins. If necessary, local subsidiaries could show low returns on investment by paying parent companies inflated prices for raw materials, royalties and other fees. Transactions of international pharmaceutical companies as sales or remittance from a parent to a subsidiary company, or subsidiary to parent, or from one subsidiary to another, made possible the manipulation of prices among sections of the same company, so that profits could be shifted from one part of the world to another, in order to avoid high taxes and lower the profits of individual companies. These transactions were largely hidden from the scrutiny of government officials, although the Reserve Bank attempted to assess royalty payments to overseas companies in an attempt to prevent transfer pricing by the location of profits in countries with lower tax rates than New Zealand.²⁵

Protracted negotiations by the Department of Industries and Commerce with representatives of international pharmaceutical companies to get at least limited New Zealand production under way, usually resulted in government approval but with a minimal local stake in ownership. In this way, the Government had little or no influence over operations or profits. Such a pattern can be traced in the establishment of several local companies during the early 1960s.

In 1961, for example, Merck Sharp and Dohme International, a division of Merck and Co, New York, applied for licences to import plant, stock and raw materials for a joint manufacturing company with its New Zealand distributors, Salmond and

²⁵ *The Economic Record* in December 1965, for example, showed that, in the private sector during the first half of the 1960s, both the increase in the value of overseas-owned investments and the private long-term capital annually transferred into New Zealand, were exceeded by the private investment income transferred overseas. P.G. Elkan, 'The New Zealand economy in 1965', *The Economic Record*, 41:96 (1965), p.485.

Spraggon.²⁶ Like other international firms applying to establish business in New Zealand, Merck promised substantial foreign exchange saving. Merck claimed that its first full year of production would result in savings of as much as £90,000, made up of local New Zealand content by way of raw materials, labour, overheads, tax and capital contribution in cash. The company made assurances of even greater saving in future years as it extended operations. The Minister of Industries and Commerce at first set a minimum of 25 per cent domestic participation in the ownership of the new venture.²⁷ Merck responded by modifying its original proposal to provide for Salmond and Spraggon to own 25 per cent of the equity in the new company. The Department of Industries and Commerce approved the establishment of a joint manufacturing company by Merck International and Salmond and Spraggon on this basis. Nevertheless, Merck continued to hold 90 per cent of the share capital of the new local subsidiary, Salmond and Spraggon holding the remaining 10 per cent.²⁸

The Department recommended to the Comptroller of Customs the issue of licences to Merck to cover the import of plant, machinery and raw materials, but declined to support Merck's request for a licence for £36,000 of finished products. Nor would the Department support the company's application to the Reserve Bank for permission to remit royalties on finished products. The following year, however, the Department of Industries and Commerce had apparently retreated from its original prohibition on payment of royalties to the parent company.²⁹ At this stage the Reserve Bank agreed with Merck that 5 per cent to 7.5 per cent on sales was a

²⁶ Barr, Burgess & Stewart, Solicitors, to Secretary, Industries and Commerce, 21 November 1961, p.1. IC 1 42/1 Vol 2, Accession W1697.

²⁷ Fairfax for Secretary Industries and Commerce, to NZ Trade Commissioner, Melbourne, 5 April 1963, p.3. IC 1 42/1 Vol 3, Accession W1697.

²⁸ Barr Burgess & Stewart, Memorandum to MD, MSD (NZ) Ltd, MSD Co-ownership, 30 June 1976, p.1. IC 1 57/9/372, Accession W2680.

²⁹ Easterbrook Smith for Secretary, Industries and Commerce, to Valentine, Barr Burgess & Stewart, 29 January 1962, p.1. IC 1 42/1 Vol 2, Accession W1697.

reasonable royalty, and also agreed to payments from the New Zealand company for 'information'.³⁰

In 1969, Merck proposed a major expansion of its New Zealand and Australian production. The company proposed to invest between \$1.5 and \$2 million in a new factory in Auckland, provided that it could secure official sanction for the basis of pricing on which it desired to operate. The company claimed that production from the new factory would include at least 45 per cent New Zealand content. The Department of Industries and Commerce saw the proposed agreement with Merck 'as one of the first practical applications' of industrial policy developed by the Manufacturing Committee of the National Development Conference, which took place in 1968 and 1969 to examine developments so far planned for public and private enterprise in New Zealand. The Manufacturing Committee had suggested that a protection policy providing for New Zealand prices 'at somewhat above import parity' would be reasonable on a number of grounds, and that protection should be sufficient to assure the manufacturing sector of steady growth and full employment. A further margin of protection could be added where 'certain national benefits', such as the growth of skills or development in depth, 'were not fully reflected' in the private profit return.³¹

In 1963, another American company, Squibb Pharmaceutical Products, proposed to establish a New Zealand subsidiary wholly owned by its parent company Olin Mathieson Chemical Corporation, New York.³² Squibb produced a range of cardiovascular drugs including diuretics, anti-hypertensives and anti-inflammatories, as well as some anti-diabetics. Sharlands had been Squibb's agent, importing British

³⁰ Graham, Industries and Commerce, to Wright, Industries and Commerce, Memo, Merck Sharp & Dohme (NZ) Ltd - Royalty, 10 April 1962, pp.1-2. IC 1 42/1 Vol 2, Accession W1697.

³¹ Datson for Secretary, Industries and Commerce, Trade Practices and Prices Division, to President, Price Tribunal, Memo, Merck Sharp & Dohme (NZ) Ltd, 23 May 1969, pp.1-5. IC box 10 file 3/87, Accession W2268.

³² Regional Vice President, Olin International to Comptroller of Customs, 10 October 1963, pp.1-8. IC 1 42/1 Vol 3, Accession W1697.

manufactured goods mainly from the Squibb division of Olin Mathieson Far East Ltd, which distributed to many countries in the Pacific from a base in Hong Kong. Squibb proposed that the New Zealand company would undertake finishing of four of its products, and take over importing and distributing other packaged products from Sharlands. In general, the proposal failed to meet the broad criteria which guided government decisions on whether or not to support new local manufacturing enterprises. Local production would be substantially more costly than current distribution arrangements for Squibb medicines currently incurred by Sharlands (in selling the same goods to wholesalers on a gross margin of 15 per cent), and would be limited mainly to repacking bulk materials supplied by the Olin Mathieson Company. The company also expected to incur higher costs for local processing than those in Squibb plants in the United Kingdom and the United States. The New Zealand content of the products to be processed would be only about 12 per cent.³³ Moreover, such tax paid profits as the company gained would all belong to overseas interests, and could readily be remitted from New Zealand. In short, the Department declined Squibb's initial proposal to establish a wholly owned subsidiary in New Zealand.³⁴

The Department estimated that Squibb's first full year of local manufacture should save about £28,000 gross in overseas exchange. A further £11,000 gross, approximately, would be derived from a special company discount on imported goods. This £11,000 would be cancelled out, however, because it counterbalanced almost exactly the foreign exchange the parent company was then introducing into New Zealand to cover detailing expenses. The remaining £28,000 would be reduced

³³ Beard, Industrial Development Division, Industries and Commerce to Assistant Secretary, Industries and Commerce, 10 December 1963, p.1. IC 1 42/1 Vol 3, Accession W1697.

³⁴ Graham (? initialled) for Secretary, Industries and Commerce to Brown, Sales Manager, Squibb Division, Olin Mathieson Far East Limited, Shell House, Hong Kong, 14 February 1964, pp.1-2. IC 1 42/1 Vol 3, Accession W1697.

further by the remittance of profits on manufacture and distribution to the parent organisation.³⁵

Nevertheless, the Government was not in a good position to drive a hard bargain with Squibb. The issue of the high cost of local operations seemed to be less important than the question of a local stake in ownership of the proposed new subsidiary. Broadly speaking, high local costs appeared to be acceptable if they resulted in local manufacture and therefore employment opportunities. The Government pressed Squibb to consider making provision for reasonable New Zealand equity participation (say £10,000) in the £25,000 capital with which the new company would be incorporated, but appeared reluctant to insist on this point. It proposed to reconsider Squibb's project, although aware that backing down on the equity condition would mean that extracting fulfilment at a later stage when the project was established would be even more difficult.³⁶ In 1964, a new company, E.R. Squibb & Sons (NZ) Ltd, was formed, based on equity capital of £30,000 to be held between Olin Mathieson Far East Ltd and Sharlands. Sharlands transferred the licences which it had used to import finished Squibb products into New Zealand to the new company, which Squibb described as 'a step toward' eventual local production of a wide range of Squibb products by Sharlands at its Auckland factory.³⁷ Squibb had already established a strong case for price increases on products produced locally. The Government had gained some satisfaction on the amount of equity holding in the new company, but would be in no position to control remittance of local profits on manufacture, as well as royalties and other payments, to the Squibb parent organisation in New York, or to Olin Mathieson Far East in Hong Kong.

³⁵ Beard to Assistant Secretary, Industries and Commerce, Memorandum, Squibb Pharmaceutical Products Olin Mathieson Far East Limited, 10 December, 1963, p.4. IC 1 42/1 Vol 3, Accession W1697.

³⁶ Beard, Industries and Commerce to Assistant Secretary, marginal note on memo, Squibb Pharmaceutical Products, Olin Mathieson Far East Limited, 10 December 1963, p.4. IC 1 42/1 Vol 3, Accession W1697.

³⁷ Graham, Industries and Commerce, to Broadbent, Industries and Commerce, 16 July 1964. IC 1 42/1 Vol 3, Accession W1697.

The National Government had similar difficulties in negotiations with Abbott Labs (NZ) Ltd, a wholly owned subsidiary of Abbott Laboratories, Chicago, which had been operating in New Zealand since 1941. In 1963, Abbott proposed a substantial expansion of local production of anaesthetics, antibiotics and antiseptics.³⁸ The Department of Industries and Commerce at first insisted on some domestic shareholding, but failed to persuade Abbott to agree. Because it wished to avoid being charged with forcing Abbott to keep equipment idle, while pursuing a prolonged argument about equity capital which probably would not be 'a deciding factor' in the case anyway, the Department eventually agreed to a contract, although regretting that New Zealand had failed to gain a stake in an 'influential and successful company'.³⁹ One of the conditions of the Government's approval of a small-scale manufacturing project was Abbotts' surrender of import licences for finished products, in exchange for raw material licences (sufficient to enable the same volume of finished goods to be manufactured).⁴⁰ The Department continued to support Abbotts' local production, mainly to encourage development of the small factory at Naenae near Wellington, and also because of the possibility that the company's prescription drugs, in particular the Compocillin range of antibiotics, would be withdrawn from the New Zealand market. Nevertheless much of Abbotts' plant was still little utilised in 1965 because of the smallness of the local market. The project continued to be based on imported bulk materials, and the New Zealand

³⁸ Graham, Industries and Commerce to Beard, Industries and Commerce, Memo, Abbott Labs (NZ) Ltd: Review of NZ Activities, 7 May 1964, pp.1-2. IC 1 42/2/3 Vol 1, Accession W1697. This 5 per cent royalty was based on sales, less the cost of Abbott's patent fees in New Zealand, and the cost of a local factory manager since 1941. Graham to Assistant Secretary, Industries and Commerce, 22 November 1963, p.1. IC 1 42/2/3 Vol 1, Accession W1697.

³⁹ Beard, Industries and Commerce, to Broadbent, Industries and Commerce, Memo, Abbott Laboratories (NZ) Ltd, 10 December 1963, p.3. IC 1 42/2/3 Vol 1, Accession W1697.

⁴⁰ Moss, Industries and Commerce, Memo, Abbott Laboratories (NZ) Ltd, 9 May 1968, pp. 1-4. IC 1 42/2/3 Vol 1, Accession W1697.

content in manufacture, as well as the saving in overseas funds, were minimal.⁴¹

The two main British companies supplying the New Zealand market for pharmaceuticals were Glaxo and May and Baker. Glaxo's origins could be traced to the New Zealand dairy distributing and exporting business of Joseph Nathan, established about the turn of the century.⁴² Nathan's dried milk infant food was sold under the brand name 'Glaxo', a trade name subsequently taken over by what became the British parent company. By the late 1940s, Glaxo's New Zealand subsidiary, with its milk powder production and new Palmerston North offices and factory, represented the best facilities the company had overseas for the preparation and packaging of foods and pharmaceuticals.⁴³ Locally made drugs, including penicillin, made up a large proportion of the company's pharmaceutical business. Like all local pharmaceutical production, the New Zealand content in Glaxo products entailed little more than mixing goods purchased from the parent company in England.⁴⁴ Glaxo's New Zealand operations, like those of May and Baker, were beset by high costs. Nearly all raw materials were imported and so carried freight charges. Almost all packing materials such as bottles, corks and tins were made with at least some imported materials. Because of the small size of the local market, manufacturing runs were short and continuous runs to produce large amounts of one product were impossible, which meant that all Glaxo plant worked at well below its full capacity. Because of this spare capacity in machine and buildings, Glaxo could hold out the attractive prospect to the National Government in the early 1960s of

⁴¹ Graham, Memorandum, Abbott Laboratories Compoicillin Manufacture, 29 July 1964 pp.1-3. IC 1 42/2/3 Vol 1, Accession W1697; Graham, Industries and Commerce, Memorandum, Manufacture of Abbott Pharmaceutical Products, 26 January 1965, pp.1-3. IC 1 42/2/3 Vol 1, Accession W1697.

⁴² Julia Millen, *Glaxo: From Bonnie Babies to Better Medicines* (Palmerston North, Glaxo New Zealand Limited, 1991), pp.20-32.

⁴³ R.P.T. Davenport-Hines and Judy Slinn, *Glaxo: A History to 1962* (Cambridge, Cambridge University Press, 1992), pp.312-313.

⁴⁴ McLauchlan for Secretary, Industries and Commerce to President, Price Tribunal, Memorandum, Glaxo Laboratories (NZ) Ltd Palmerston North, Prices of Drugs, 14 January 1964, pp.4-10. IC box 10 file 3/83, Accession W2268.

extending local production of some products currently imported.⁴⁵ It was clear, however, that such investment decisions would be closely influenced by the prices for Glaxo products paid by the Department of Health under the Pharmaceutical Benefits Scheme.

In addition to supplying its own patented products to the New Zealand market, Glaxo strengthened its position by occasionally obtaining a licence to manufacture under another company's patent. In 1963, Sandoz Pharma Pharmaceuticals, a local subsidiary of a Swiss parent company, proposed that Glaxo manufacture on its behalf under licence. Sandoz applied for, and was issued, import licences to import raw materials required mainly for the manufacture of its tranquilliser Melleril (thioridazine hydrochloride) on the understanding that the price of this drug would be reduced as a result of domestic production.⁴⁶ Glaxo duly began local production of several strengths of Melleril on behalf of Sandoz, based on materials from the Swiss parent company. The price of Melleril was only slightly lower than that of the equivalent imported product, however.⁴⁷ The domestic content in local production varied from about 63 per cent to 35 per cent for different strengths of the drug. These figures included using Glaxo's packing materials, labour and overheads, manufacturing charge and the cost of Swiss assays, and the Sandoz profit earned on the locally made products. The actual saving in overseas funds was therefore much less than the projections originally put forward by Sandoz Pharma. For example, if an import licence to the value of £19,620 was needed to make £32,399 worth of product, the New Zealand content would equal about 40 per cent of the value of the product, in this case, £12,779. Of that £32,399, however, about £9,700 was

⁴⁵ Glaxo Laboratories (NZ) Ltd, Submissions Concerning Price Control, 12 March 1963, pp.3-4. IC box 10 file 3/83, Accession W2268.

⁴⁶ Brown for Secretary, Industries and Commerce to Dobbs, New Zealand Representative Sandoz Pharma 23 September 1963, p.1. IC 1 42/1 Vol 3, Accession W1697.

⁴⁷ For a 100-tablet pack of 10 mg strength, current and proposed (locally manufactured) prices were 5s 9d and 5s 8d respectively. The same figures for the 1000-tablet pack were 52s and 51s. For the high strength (100 mg), current and proposed prices for 100-tablet packs were 32s and 31s 8d. For the 1000-tablet pack, the prices were 285s 9d and 285s exactly. Graham, Industries and Commerce, to Brown, Industries and Commerce, Memorandum, Sandoz Pharma, 10 September 1963, pp.2-3. IC 1 42/1 Vol 3, Accession W1697.

Sandoz's profit. Therefore the saving in funds could be as little as £3,000.⁴⁸ Nevertheless, by the mid-1960s, disappointing profits and poor returns on shareholders' funds being recorded by Sandoz Pharma in New Zealand enabled the company to gain agreement from the Department of Industries Commerce for steadily increasing prices and profits on its products including Melleril, the company's best selling line.⁴⁹

The other major British company supplying the market was May and Baker (NZ) Ltd, registered in New Zealand in 1943.⁵⁰ In 1962 the company proposed to begin local manufacturing. After protracted negotiations concerning import licences and rates of interest to be paid on loans obtained from the parent company, some limited local production commenced on the basis of a recommendation by the Development Division of the Department of Industries and Commerce. The Department urged May and Baker to make maximum use of domestic raw materials, and to arrange as much local processing as was economically and technically feasible, in order to conserve foreign exchange and to provide employment.⁵¹ It usually granted import licences on the understanding that selling prices for preparations to be manufactured in New Zealand would be no higher than the company's selling prices for the same imported lines when imported duty free, and preferably lower; quality was to be at least of the same standard. For its part, May and Baker made assurances that local manufacturing would result in New Zealand gaining specialist expertise, becoming part of a world-wide operation, and developing exchanges with its parent company.

⁴⁸ Graham, Industries and Commerce, to Brown, Industries and Commerce, 10 September 1963, p.3. IC 1 42/1 Vol 3, Accession W1697.

⁴⁹ See for example, Verry for District Officer, Trade Practices and Prices Division, Auckland District Office, Memorandum, Sandoz Pharma Ltd - Review of Financial Accounts, 24 April 1967, p.3. BBAJ, Box 230 Sandoz Pharma Vol 1, Accession A342. In 1964, the overseas selling price of thioridazine hydrochloride was £88 8s per kilo; the landed cost to Sandoz was £88 9s per kilo.

⁵⁰ See division of post-war world trading between these two companies in Judy Slinn, *A History of May & Baker 1834-1984* (Cambridge, Cambridge University Press, 1984) p.145, pp.169-172.

⁵¹ Fairfax for Secretary, Department of Industries and Commerce to New Zealand Trade Commissioner, Melbourne, 5 April 1963, p.3. IC 1 42/1 Vol 3, Accession W1697.

Moreover, the company promised large savings in overseas exchange amounting to £200,000 per annum.⁵² Like all international companies, May and Baker was well prepared with the rhetoric most likely to appeal to the Government, in this case large savings in foreign exchange.

Like Glaxo, May and Baker soon reported disappointing returns on local production of pharmaceuticals: its production costs were higher in New Zealand than in the United Kingdom, fixed capital costs of plant and building were greater, and salary and wage levels were higher. At the same time, the small size of the local market ruled out larger-scale production. Instead, raw materials were imported in small quantities of several different products which increased freight and insurance costs. Even many locally purchased materials, including some packaging, had an imported content and were therefore more expensive than those available in the United Kingdom. In sum, May and Baker calculated that production costs in the United Kingdom were at least 10 to 20 per cent lower than in New Zealand, thus firmly establishing a case for generous profit margins on locally produced items.⁵³ Moreover, royalties on the factory price of production, and also on plant and equipment, plus various fees including interest payments, made up regular remittance overseas. Reserve Bank approval which governed such payments did not always prove to be a stringent test. Government approval of May and Baker royalty payments had been conditional upon regular reviews to clarify the benefits received by the New Zealand subsidiary from the parent company. By April 1972, however, no review had been undertaken by the Reserve Bank.⁵⁴

Clearly, supply to the New Zealand market from a variety of sources would have encouraged competition and helped to keep down the cost to the state of

⁵² Submission to the Price Tribunal, Application for New Pricing Formula, May & Baker (NZ) Ltd, 23 February 1972, p.7. IC box 11 file 3/92, Accession W2268.

⁵³ Submission to the Price Tribunal, Application for new pricing formula, May & Baker (NZ) Ltd, 23 February 1972, pp.13-14. IC box 11 file 3/92, Accession W2268.

⁵⁴ Higgs, Industries and Commerce to Rodda, Memo, May & Baker (NZ) Ltd Royalty Agreements, 6 April 1972, p.1. IC box 11 file 3/92, Accession W2268.

pharmaceutical benefits. In practice, however, the major United States and European patent-holding companies continued to control supplies of pharmaceuticals to the New Zealand market through their local subsidiaries. Because these local firms held exclusive rights for the sale of drugs under New Zealand patents, government attempts to purchase from other, lower-priced sources proved to be difficult and controversial. In particular, such efforts raised issues relating to possible infringement of patent rights.

New Zealand's patent and trade mark regulations were framed on those of the United Kingdom. The essential feature of the New Zealand Patents Act 1953 was a bargain between the inventor and the Crown, which granted an exclusive right to exploit the invention within New Zealand for 16 years provided that licences could legally be granted.⁵⁵ In theory, two sections of the New Zealand Act strengthened the hand of the state as a purchaser of pharmaceuticals. Under Section 51, the Commissioner of Patents could award a New Zealand company a licence to import a cheaper brand of a patented drug from a country where patent laws did not apply, such as Italy, if the company could demonstrate that it was in the public interest to do so.⁵⁶ In this way, a rival local company could enter the market before a patent expired and, in effect, break the monopoly - although it would still have to overcome the strong position of the equivalent branded product established by the original producer. Under the 'Crown use' provision of the New Zealand Patents Act, Section 55, government departments could purchase pharmaceuticals from non-patented sources for use in state institutions, such as hospitals, on terms agreed between the department concerned and the patent holder.⁵⁷ These terms would include payment of royalties to the patent holder.

⁵⁵ Pacific Pharmaceuticals Ltd, Submission to the Commerce and Marketing Select Committee, Patents Amendment Bill Clause 8(3), 29 May 1992, p.3.

⁵⁶ Section 51 of the Patents Act 1953 actually stated that in 'settling the terms of licences under this section the Commissioner shall endeavour to secure that ... medicines ... shall be available to the public at the lowest prices consistent with the patentees' deriving reasonable advantage from their patent rights'. The 'reasonable advantage' could refer to the royalties which the patent holder could charge. *The Statutes of New Zealand*, 1953, Vol I, p.500.

⁵⁷ *Ibid.*, pp.502-504.

During the 1960s, the Department of Health took advantage of powers under Section 55 of the Patents Act to tender for supplies of the tranquilliser, chlorpromazine hydrochloride, used by the Mental Health Division. This drug had originally been developed in 1951 by Rhone Poulenc of Paris. For some years the Department of Health had purchased all supplies from Rhone Poulenc's associate company May and Baker (NZ) Ltd, under the brand name Largactil. On behalf of its British parent company, May and Baker held exclusive rights under New Zealand patents to all local sales of Largactil. In 1962, the Department of Health became aware of the possibility of purchasing the drug from sources other than May and Baker (NZ) Ltd at possibly lower prices. Therefore the Department invited tenders for the supply of 45,000 100 mg tablets. It received a tender of £5,568 15s from May and Baker (NZ) Ltd, a tender of £1,442 16s 3d from Bamford Brothers in Lower Hutt, and a tender of £1,084 16s 5d from Jules R. Gilbert. The Department accepted Bamford Brothers' tender for supplies of chlorpromazine hydrochloride manufactured by Paul Maney Laboratories in Canada (who in turn paid royalties on the manufacture of the drug to the original patent holder, Rhone Poulenc).⁵⁸

In spite of May and Baker's protests to the New Zealand Government that this purchase was an infringement of its patent rights, the Crown Law Office ruled that the Department of Health had acted properly under Section 55 of the Patents Act 1953.⁵⁹ Less than a year later, the Department again called for tenders when it wished to replenish stocks of chlorpromazine. Tenders for 25,000 25 mg tablets, 500,000 50 mg tablets, and 750,000 100 mg tablets were May & Baker (NZ) Ltd £13,578 3s 9d, Bamford Bros £6,890 12 9d, Jules R. Gilbert £2,630 7s 1d, plus two competitive tenders from Italian companies. The Department found it difficult to re-order, however, in the light of litigation in Canada, and the continued protests of May and Baker. In 1965, the Department proceeded as it had done in 1962 (with a

⁵⁸ Pharmaceutical Benefits Scheme, Submissions to Public Expenditure Committee, Department of Health, Review and General Proposals, Appendix F, Tenders for Drugs Supplied Under Social Security, pp.1-2, Appendix G, Patents - Government Purchase of Chlorpromazine, p.1. Le 1/1968/7/1 Box 1354.

⁵⁹ A.J. Quill, Crown Counsel, to Secretary, Government Stores Board, 28 June 1963, re: Chlorpromazine, 28 June 1963, New Zealand Crown Law Office.

saving of nearly £9,000 on the order). In November 1966, tenders for the same quantities as in 1965 resulted in another high tender from May and Baker, and much lower tenders from companies in Canada, the United States and Italy. Under Section 55 of the Patents Act, May and Baker made a claim for £5,407 in royalties in respect of lost income caused by government purchases from Bamford in 1962-63 and also from Gilbert in 1965-66.⁶⁰ In spite of May and Baker's claims, the steady drop in May and Baker's price for exactly the same quantities of Largactil, from £13,578 3s 9d to £11,068 15s to £8,306 5s, is significant.

In a covering letter to the Director-General of Health with its 1965 tender, the New Zealand general manager of May and Baker, J.A. Robertson, cited a recent British House of Lords decision, which confirmed the correctness of action by the British Minister of Health under the Crown use provision (Section 46) of the British Patents Act. Robertson feared that the House of Lords decision might lead to fresh pressures on other governments to adopt similar measures. Nevertheless, he thought that the pharmaceutical industry's 'strong feelings on this subject would have been taken into consideration', and wished to record the company's 'disquiet at the discrimination' exercised against it by the New Zealand Government. Under pressure from the Department of Health, May and Baker offered to reduce their selling prices by about 10 per cent during September/October of each of the last three years of their patent on chlorpromazine - 1965, 1966 and 1967. Such a reduction would mean a saving to the Government of about £6,700 in the first year, and £6,000 in the second year.⁶¹

May and Baker had 'no wish to dispute the right of the Department to obtain its supplies at the lowest possible price'. Indeed the firm's 'reasonable price policy' had so far enabled it to avoid disputes with government departments. However, recent expansion of its activities in New Zealand would make possible pharmaceutical

⁶⁰ Pharmaceutical Benefits Scheme, Submissions to Public Expenditure Committee, Department of Health, Review and General Proposals, Appendix G, pp.1-2. Le 1/1968/7/1 Box 1354.

⁶¹ Robertson to Director-General of Health, 16 August 1965, pp.1-3. H 1 208-2-22, 33024.

manufacture on 'a substantial scale'. This development was calculated to save annually in foreign exchange and to create additional jobs for New Zealanders. Any government action which 'substantially limited' May and Baker's earnings would threaten the future of this programme.⁶² As long as New Zealand governments continued to be sensitive to such threats of withdrawal of investment in local industry by prestigious overseas firms such as May and Baker, their hold on the market for pharmaceuticals would continue. Ensuring the continued viability of local manufacturing by subsidiaries of major international companies continued to be more important than making a determined and sustained effort to build on the possibilities of Department of Health tendering and, in general, seeking a variety of sources of supply of pharmaceuticals. This policy, moreover, was reinforced by New Zealand obligations under international conventions protecting patents.

In 1967, the Secretary to the Treasury set out succinctly and accurately the position for New Zealand governments as purchasers of pharmaceuticals: 'overseas suppliers, even without patent rights, but in a monopolistic position, or in collusion with competitors, could still charge unjustifiably high prices for drugs or raw materials exported to New Zealand'. Therefore, he argued, the Government would not be getting value for money in respect of drugs imported, and 'valuable overseas funds would be used to finance payments for such excessively priced drugs'. Furthermore, 'although the New Zealand subsidiary company may be charging very high prices for its products it would, nevertheless, be unlikely to reveal its full profits in New Zealand and could thus avoid New Zealand taxation'.⁶³

Because New Zealand had developed no significant chemical industry, the existence of its generous Pharmaceutical Benefits Scheme depended upon gaining access to the patented products of the major international suppliers either through direct importing or through the establishment of local subsidiaries, which could produce under

⁶² Memo, May & Baker's Selling Price Policy for Drugs, with Special Reference to Chlorpromazine, undated (circa 1964), p.5. H 208-2-22 33024.

⁶³ Durbin to Muldoon, Chairman Public Expenditure Committee, 20 January 1967, p.2. Le 1/1968/7/1.

licence. As part of a broad policy to encourage development of local industry, New Zealand governments encouraged the development of a fledgling pharmaceutical industry through restrictions on the import of finished goods. This policy was pursued with particular zeal during the late 1950s and early 1960s by the Department of Industries and Commerce, under Sutch's leadership. In this way, major United States and European companies were persuaded to undertake at least the final stages of the production process in New Zealand, in addition to sales of finished imports, but largely on their own terms. Although there were good general reasons why such a policy should be supported, government encouragement of high-cost local production of pharmaceuticals by overseas-owned subsidiaries meant a lack of competition in what was a totally protected, guaranteed market. More specifically, Department of Health bargaining over drug prices was to be constrained by a new need to make this local industry viable. Each subsidiary operated under licences and under patents from major firms based in the United States and Europe. As patent holders on behalf of their parent companies, these firms gained exclusive rights to sell their products on the New Zealand market. Therefore they were in a position to drive a hard bargain, both on the terms of agreement for initial local production, and on prices for finished products once established as agents in the local economy. Although New Zealand governments aimed for a local stake in the equity capital of each new venture, in the expectation that this holding would somehow act as a control - indeed, that the holders of such equity would somehow act in the 'national interest' - local equity was kept to a minimum in each new subsidiary. Whether or not it gained any such local holding, however, the Government was still far from gaining control over the activities of local subsidiaries, which formed part of an international network. Production costs were high, even if confined to final processing and packaging. Yet the Department of Industries and Commerce was concerned to ensure adequate returns on investment in what it saw as an important asset to the economy. Adequate returns on investment and the continued viability of the local industry depended largely, however, on prices paid for pharmaceuticals by the Department of Health. In practice, therefore, government policy of sponsoring a local pharmaceutical industry was in direct conflict with its policy of attempting to acquire prescription medicines at least cost.

6 Paying the Price

An essential feature of New Zealand government efforts to sustain the welfare state throughout the 1950s and 1960s was managed 'stabilisation' of the economy through price control. The broad intention of this policy was to ensure that prices were fixed on the basis of producers' costs, together with a given margin of profit sanctioned by the Price Tribunal, rather than on the basis of what the market would bear. The structures designed to implement government price control proved totally inappropriate to influence the pricing policies of local pharmaceutical companies. The Pharmaceutical Benefits Scheme was compromised by dual government price administration systems operating almost independently of each other - in the Department of Health under the Social Security act 1938, and in the Department of Industries and Commerce under powers delegated to the Price Tribunal by the Control of Prices Act 1947. Under this latter legislation, the Department of Industries and Commerce Price Control Division approved maximum profit margins and maximum prices for local pharmaceutical suppliers, based largely on the manufacturers' own estimates of costs. Departmental officials were ill-equipped to investigate or contest these costs, yet were committed by government policy to a cost-plus basis of setting maximum prices and profit margins, in which only the 'plus' could be monitored. Within the limits set by Industries and Commerce, the Clinical Services Division of the Department of Health negotiated the price of individual medicines on the Drug Tariff which, in turn, largely determined government payments to pharmacists. If the Department considered the price of a particular product to be too high, it could refuse to list that product on the Drug Tariff, thus denying entry to the local market, or it could impose a part-charge - unpopular to doctors, patients and drug manufacturers. The Department could also set a maximum price for drugs within each therapeutic group based on the lowest-priced product within the group, but could bargain in this way only if close substitutes were available. In general, local pharmaceutical companies managed to escape government price controls by transfer pricing among affiliates, by using their powerful position as local manufacturing (and investing) subsidiaries of major

overseas companies to lobby government departments, and because they sold products which could not easily be withheld from doctors, pharmacists or the general public.

The use of price control to suppress inflation had its origin in policies introduced by the first Labour Government. Labour's protection and promotion of local industry and full employment had caused an increasing demand for imported goods. At the same time, strict government controls on imports led, in turn, to a scarcity of imported commodities on the domestic market. In the absence of price control, such scarce goods could be sold at inflated prices by monopoly New Zealand suppliers. Wartime economic problems, including the sharply increasing cost of imports, strengthened Labour's resolve to manage the economy closely. Its comprehensive Economic Stabilisation Emergency Regulations 1942 set out a plan for a co-ordinated attempt to stabilise costs, wages and the prices of a wide range of commodities. In this way, price control and stabilisation were much more than a means of protecting purchasing power. They were to become the 'cogs' in a broad financial policy aimed at promoting maximum production.¹ During the post-war years of full employment, when the demand for labour exceeded its supply, the Government continued to elaborate and redefine its arrangements for price control to stabilise prices and hold down inflation. The effect was to foster the expansion of local industry by ensuring generous returns on investment.²

The Control of Prices Act 1947 consolidated powers and functions formerly exercised mainly under the Emergency Regulations, and confirmed the Government's power to fix prices on any goods or services indefinitely.³ The Act reconstituted the

¹ J.V.T. Baker, *The New Zealand People at War: War Economy* (Wellington, Historical Publications Branch, Department of Internal Affairs, 1965), pp.67, 289-299.

² See J.B. Condliffe, *The Welfare State in New Zealand* (London, Allen & Unwin, 1959), pp.103-104, for an interesting discussion of the meaning of the 'blessed' word stabilisation. See also H.G. Lang, Treasury, Report on Price Control, 3 March 1953, pp.1-3. IC 51 file 1/10, Accession W2618.

³ Department of Industries and Commerce, Annual Report 1948, *AJHR* 1948, H.44, p.28.

1939 Price Tribunal, and extended its powers and functions. The Tribunal now had the power to fix prices for goods and services, investigate complaints and establish proceedings to deal with offenders.⁴ To achieve this, the Tribunal could make and publish Price Orders fixing the actual, maximum or minimum price for goods sold in a specified market under specified conditions.⁵ More broadly, it could fix 'formulae' for price 'ceilings' for all industries as well as wholesale and retail margins.⁶ When assessing a 'fair' return to applicants, the Tribunal attempted to establish what the business would yield to its proprietors if competing under 'normal' conditions, which were generally defined as the 'long run average costs of production of well managed establishments'. In practice, this 'price' was the cost of producing the commodity including the return to the enterprise for its investment and management. Because products varied, or because firms starting up in manufacturing should 'be given the opportunity to become efficient', or because production was essential for the local market even if firms were operated at a loss, the Tribunal was often obliged to fix individual prices for specific manufacturers.⁷ Under these arrangements for managing the economy, the efficiency or otherwise of all individual producers was secondary to ensuring returns on investment.

The Price Tribunal itself did not investigate prices. Under the Control of Prices Act, this function was delegated to a separate Division of the Department of Industries

⁴ Department of Industries and Commerce, Annual Report 1948, *AJHR* 1948, H.44, p.28; Annual Report 1949, *AJHR* 1949, H.44, pp.28-29; Nordmeyer, Minister of Industries and Commerce, to Wilson, President Auckland Chamber of Commerce, 21 April 1949, p.1. IC 51 file 1/10, Accession W2618. See further on government price stabilisation Baker, *New Zealand People at War*, Chapters 11, 12.

⁵ *NZOYB*, 1956, Section 36 Prices, pp.946-947.

⁶ Nordmeyer, Minister of Industries and Commerce, Memorandum to President, Price Tribunal, 28 November 1947, p.1. IC 1 301/1/10, Accession W1534.

⁷ Notes of Points for Attention on appointment of Mr I.D. Reid to the Tribunal, March 1951, p.1. IC Box 1 file 1/10, Accession W2268.

and Commerce, known as the Price Control Division, to which was delegated the administration and 'enforcement' of price control.⁸

In general, therefore, the Tribunal was concerned not so much with consumers, but rather with the financial progress of industries and traders, and hence with employment. Rates of mark-up, whether established by conventional practice, by competitive trading or administrative edict, differed widely among industries. The rate of mark-up was

not an end in itself, but the means whereby a proprietor obtains a reward on his investment. According to the scale of the reward in relation to the investment available from respective industries or trades so is the election made by the investor of the placing of his capital.⁹

This general principle, that substantial rewards for investment in a particular industry would encourage the growth of new enterprises, was the basis of Price Tribunal policy throughout the 1950s and 1960s. Accordingly, the role of price control was to ensure that, on the whole, prices and profit margins continued to be fixed so as to allow sellers to recover their costs. Because 'costs' included rewards for management and capital investors, when the Tribunal fixed prices for separate lines made by individual firms it allowed the cost of materials, labour and overheads, with a margin for profit equivalent to the average return for that particular industry to be included.¹⁰

As we have seen, the new National Government which took office in 1949 made no fundamental changes to Labour's long-term policy of promoting the expansion of

⁸ Department of Industries and Commerce, Annual Report 1948, *AJHR* 1948, H.44, p.28; Control of Prices Act, 1947, Instrument of Delegation to the Director of Price Control, 17 December 1947, pp.1-2. IC box 1 file 1/10, Accession W2268. When dealing with industry applications for increases in maximum prices and profit margins on particular commodities or groups of commodities, the Division conducted initial discussions with the governing body of the industry concerned, through its four local branch offices.

⁹ Notes on policy of Price Tribunal, 12 October 1951, p.4. IC 51 file 1/10, Accession W2618.

¹⁰ Notes on Policy of Price Tribunal, 14 February 1952, pp.1-3. IC 51 file 1/10, Accession W2618.

local manufacturing in order to maintain full employment. According to J.T. Watts, National's Minister of Industries and Commerce, price control as an 'arm of Economic Policy' was necessary because of inflationary pressures, shortages, import restrictions and other impediments to competition. The 'keynote' of the Government's attitude towards price control was to co-operate with those affected 'with a view to obtaining the utmost assistance from business and commercial interests'.¹¹ The pursuit of full employment, supported by comprehensive social welfare, had fostered demand to the point where a general 'hyper-demand' had appeared - which in turn had led to apparent labour and material shortages and to pressure on the prices of goods and services. Once committed to economic welfare by way of 'fostered demand', rather than by unimpeded competition, the Government had to continue to regulate the market where necessary. Whether unrestricted competition would 'do the job' or not, in practice so many 'biases' had been superimposed on the competitive system that state intervention in the market was to a large extent inevitable.¹² In this way, price control and stabilisation had become much more than a means of protecting purchasing power. They were a central feature of broad government policies which underpinned the full-employment welfare state.

To streamline the procedure of applying the Control of Prices Act to industries and trades, the Price Control Division of Industries and Commerce devised a system whereby industry representatives or individual applicants negotiated a standard 'automatic', 'cost-plus' percentage rate of mark-up or profit. In effect, each trader or group of traders was free to set individual prices according to an agreed 'formula'. As the Director of Price Control warned in 1951, there were certain serious drawbacks to the scheme: its success would depend on a 'completely ethical attitude among traders' and some sound method of proving claimed additional costs.

¹¹ Watts, Minister of Industries and Commerce, Price Control Policy, November 1951, p.2. IC 51 file 1/10 Part 1 1949-54, Accession W2618.

¹² Public Inquiry by Price Tribunal, 29 March 1954, Control of Prices Act 1947, Submissions Regarding the Establishment of Criteria to Guide in Determination of Goods and Services to be Subject to Price Control, Price Control Division, pp.1-6. AATJ T & I 3/1/42, Accession W3566.

If these were absent, traders could 'unashamedly' inflate their costs and depreciate their budgeted revenue when applying for price increases. Yet no other 'rule-of-thumb formula stopping short of complete freedom to the manufacturer to price as he will' appeared feasible.¹³ In spite of its lack of safeguards against the claiming of inflated costs, and the difficulty of regularly scrutinising detailed financial accounts, the Price Control Division continued to streamline price control procedure in this way.¹⁴ In practice, most producers simply fixed prices on the basis of their own estimate of costs plus a given margin of profit sanctioned by the Price Tribunal.¹⁵ As the Director of Price Control himself pointed out in 1952, reviews at a much later date could never effectively cancel unauthorised costs already recovered.¹⁶

As international tension eased after the Korean War, and supplies of imported goods again started to improve, the National Government began to exempt an increasing range of items from price control. In the mid-1950s, however, about 50 per cent of goods and services still remained subject to price control.¹⁷ In 1955 the Government, through the Price Tribunal, changed its broad policy of blanket price control apart from those items specifically exempted and, instead, began to issue a 'positive list' of items still subject to price control. Goods on this positive list were those subject to shortage, those affected by a monopoly or by restrictive trade

¹³ Wise, Director of Price Control, Industries and Commerce, Memorandum to President Price Tribunal, Proposal to Streamline Price Control Practice, 22 March 1951, pp.1-5. IC box 10, 22/3/51; Notes on Policy of Price Tribunal, 14 February 1952, pp.5-6. IC 51 file 1/10, Accession W2618.

¹⁴ Notes on Policy of Price Tribunal, 12 October 1951, pp.9-12. IC 51 file 1/10, Accession W2618.

¹⁵ Lang, Treasury, to President, Price Tribunal, Memorandum, Price Control, 3 March 1953, pp.1-9. IC 51 file 1/10, Accession W2618.

¹⁶ Wise, Memorandum for President, Price Tribunal, Operation of Price Control, 30 September 1952, p.2. IC 51 file 1/10, Accession W2618.

¹⁷ Public Inquiry by Price Tribunal, 29 March 1954, Control of Prices Act 1947, Price Control Division, p.5. T & I 3/1/42 AATJ, Accession W3566.

practices, or those provided with the support of a government subsidy to reduce costs to the consumer.¹⁸

Prescription medicines provided under the Pharmaceutical Benefits Scheme fell into this last category because they were subsidised from public funds. These medicines were administered as part of a broader group, namely drugs and bulk chemical substances, covered by a system of 'automatic' wholesale and retail price control by way of profit margins expressed as a percentage 'on cost'.¹⁹ Because the Minister of Health was responsible for the medicines provided under the Pharmaceutical Benefits Scheme, the 'basic wholesale selling price' of individual items on the Drug Tariff was negotiated by this Department - but within the broad maximum profit margins approved for each firm by the Department of Industries and Commerce.²⁰ This cumbersome dual administration of medicine prices, by the Department of Industries and Commerce and by the Department of Health, continued for about the next 30 years.

During the 1950s, as each major pharmaceutical firm introduced new drugs to the New Zealand market it simply sent printed price lists to the Price Control Division of the Department of Industries and Commerce. Revised price lists followed the same route. The Department treated these price lists as applications, which it formally approved without checking the prices.²¹ This procedure - rather a system

¹⁸ Department of Industries and Commerce, Annual Report 1955, *AJHR* 1955, H.44, p.49; Annual Report 1956, *AJHR* 1956, H.44, p.50.

¹⁹ This group comprised almost 2,000 different varieties and qualities of drugs and chemicals. Isbister, Price Control Division to Director of Price Control, Memo, Drugs, etc. Automatic Scheme, 14 October 1949, pp.1-3. IC 1 box 20 file 4/29, Accession W2268.

²⁰ See, for example, J.W. Ruth for Secretary, Industries and Commerce, Trade Practices and Prices Division, to Director General of Health, 10 April 1962, pp.1-2. H 1 208 33232. The wholesale prices of drugs determined by the Department of Health did not necessarily indicate actual wholesale selling prices to chemists, but were the 'stabilised Drug Tariff' prices from which the prescription cost was calculated.

²¹ See, for example Wise, Director of Price Control to the Manager, Glaxo Laboratories, 17 May 1951, p.1. Wise acknowledged receipt of Glaxo's application (a medical and veterinary products price list) of 11 May 1951 and copies of the company's printed price lists. Wise advised that the Price Tribunal provisionally approved these selling prices. H 1 208-4-5

of registering rather than of restraining price increases - made a mockery of price control. Each firm varied its wholesale prices according to variations in overseas costs as incurred by different importing wholesalers. Up to 1955, for example, Glaxo Laboratories (NZ) Ltd simply sent copies of trade circulars and printed price lists to the Department of Industries and Commerce, setting out prices of each product as it was introduced to the market.²²

During the 1960s, officials of the Price Control Division of the Department of Industries and Commerce began to negotiate a 'formula' with each local importing and manufacturing firm, in order to calculate what was called a 'controlled' maximum selling price to drug wholesalers. This formula, expressed as a percentage on cost, set a gross maximum annual profit margin for each firm so as allow its recovery of production costs (as declared), together with a stated return on shareholders' funds or assets. Each firm was required to calculate prices for individual products according to this overall limit. As its operating costs increased, including labour and raw materials or fluctuations in exchange rates, each firm regularly sought to revise its approved formula. Most agreements were conditional on the disclosure of financial records to the Department of Industries and Commerce to ensure that selling prices approved had not yielded the firm more than a 'fair and reasonable' profit.²³

Just what constituted a 'fair and reasonable' return on local production costs proved difficult to determine. Regular departmental scrutiny of financial accounts was impossible in the face of determined refusals by local firms to allow access to records, in spite of regular requests to do so. In practice, the price control system allowed manufacturers the freedom to cost in materials as they saw fit, thus giving

35238 box 32.

²² McLauchlan for Secretary, Trade Practices and Prices Division, Industries and Commerce, to President Price Tribunal, Glaxo Laboratories (NZ) Ltd, Prices of Drugs, 14 January 1964, p.2. IC box 10, file 3/83, Accession W2268.

²³ Beard to President, Price Tribunal, Memo, Pricing - Pharmaceutical Drug Industry, 27 March 1969, p.4. IC 1 box 20 file 4/29 (Drugs 1949-72), Accession W2268.

them wide discretion in reaching a total cost of production, to which percentage profit margins were then added. Costs of production by local subsidiaries could be made to appear high, and profits therefore appear depressed, because of the scope for parent companies to manipulate costs and returns through transfer pricing. In this way, inflated raw material costs could become part of the 'proven cost' of manufacture, which provided for recovery of selling, administration and distribution costs as well as profit. Each local manufacturer justified its proposed selling prices for groups of drugs on the basis of past costs and return on shareholders' investments. Each firm then deducted a discount of 15 to 20 per cent to reach its selling price to drug wholesalers such as Kempthorne Prosser or Sharlands. This figure represented the wholesalers' profit margin.

The British firms of Glaxo and May and Baker were the most important suppliers of pharmaceuticals to the small New Zealand market until the beginning of the 1970s. The results of negotiations with these and other European and United States firms during the 1960s show how the Department of Industries and Commerce was hamstrung by its lack of any reliable guide to the true costs of local pharmaceutical production and, more generally, by the bureaucratic inertia of departmental officials and their lack of awareness of the international marketing structure of the pharmaceutical industry.

In 1960, Glaxo (NZ) Ltd was the major local drug manufacturer, particularly for packaged forms of penicillin, streptomycin, cyanocobalamin (vitamin B₁₂), hydrocortisone and prednisolone. The company drew its supplies of bulk materials and finished goods from Glaxo associates in the United Kingdom.²⁴ The Price Control Division of the Department of Industries and Commerce began to take an interest in the company's profits during the later 1950s. When analysing accounts received for the year ended 30 June 1955, the Division became aware for the first time of Glaxo's impressive profit-earning capacity. (The ratio of net tax-paid return

²⁴ Farquharson, Report on various chemical products specified in the memorandum of the New Zealand Government Trade Commissioner dated 17 December 1959, 4 February 1960, p.1. IC 1 42/1 Vol 2, Accession W1697.

on shareholders' funds invested in the Pharmaceutical Division was 9.8 per cent, and the ratio of gross profit to cost of goods sold was 32.5 per cent.)²⁵ Glaxo's status in the local industry meant that any reduction of its prices could set the pace for other firms. On the basis of financial accounts for 1956 and 1957 showing similar earnings, the Price Control Division in 1958 instructed the firm to restrict the gross profits of its Pharmaceutical Division to a maximum of 38 per cent on cost per annum. 'Cost' in this case related to cost in the Production Department. Subsequent warehousing, delivery and advertising costs could be charged against this profit. Furthermore, the Price Control Division stipulated a yearly government review of the company's accounts, in order to monitor its operating costs and prices.²⁶

Glaxo objected to this attempt to restrict its profits, claiming that it 'stifled enterprise' and would discourage further investment in New Zealand manufacture. If the company's ambitions were 'stultified' in this way, morale would suffer, and it would become increasingly difficult to maintain pride in products and services, which could deteriorate as a result.²⁷ In response, the Department of Industries and Commerce retracted to a less stringent requirement that Glaxo simply give an assurance 'that opportunity would not be taken to increase prices if approval were given' - that is, increased profits on existing lines would accrue not from increasing *prices* but from reducing *costs*.²⁸

In 1963, Glaxo's managing director, R. Stagg, proposed a substantial review of the firm's approved pricing formula. He pointed out that, under the current formula, a

²⁵ The net return on capital in Glaxo's pharmaceutical division was 9.8 per cent, and gross profit was 32.5 per cent.

²⁶ These figures were inclusive of a wholesale mark-up of 17.5 per cent. McLauchlan for Secretary, Trade Practices and Prices Division, Industries and Commerce, to President, Price Tribunal, 14 January 1964, pp.1-4. IC Box 10 file 3/83, Accession W2268.

²⁷ Glaxo Laboratories (NZ) Ltd, Submissions Concerning Price Control, 12 March 1963, p.1. IC 1 Box 10 file 3/83, Accession W2268.

²⁸ McLauchlan for Secretary, Trade Practices and Prices Division, Industries and Commerce, to President Price Tribunal, Glaxo Laboratories (NZ) Ltd, Prices of Drugs, 14 January 1964, pp.2-3. IC 1 Box 10 file 3/83, Accession W2268. My italics.

reduction in the manufacturing cost of locally made goods or in the landed cost of imported goods would produce a higher average annual gross margin than 38 per cent on cost, which would lead the Department of Industries and Commerce to seek price reductions. The company wished, Stagg explained, to increase local manufacture and to establish a formula that would enable it to gain the benefit of reductions in all costs. Therefore he requested that, in future, the wholesale selling prices for Glaxo's imported and locally made drugs would be 'fixed' according to current United Kingdom prices, plus 25 per cent. Glaxo would not increase the wholesale price of any price-controlled drug unless the United Kingdom wholesale price increased.²⁹

Like the prices of drugs supplied under the Pharmaceutical Benefits Scheme in New Zealand, those charged to the British National Health Service also bore little relationship to manufacture costs, but were decided by what each firm believed the market would stand. Drug prices were governed by a Voluntary Price Regulation Scheme, negotiated by the British Ministry of Health and the Association of the British Pharmaceutical Industry, the third version of which began operating in 1964. The Ministry of Health had negotiated the original scheme in 1957, in an attempt to tackle the regulation of prices for prescription medicines. However, each successive version was weakened by an absence of government powers and resources. The pharmaceutical industry's negotiating committee included representatives of the leading British companies, ICI, May and Baker and Glaxo Laboratories, which were subsequently strengthened by local representatives of Swiss and United States companies (Ciba and Pfizer). Like the earlier price regulation schemes, the 1964 version established several formulae for establishing drug prices. Because the Voluntary Price Regulation Scheme was informal, and could not legally be enforced either by the Minister of Health against the Association of the British Pharmaceutical

²⁹ McLauchlan for Secretary, Trade Practices and Prices Division, Industries and Commerce, to President Price Tribunal, Memorandum, Glaxo Laboratories (NZ) Ltd - Palmerston North, Prices of Drugs, 14 January 1964, pp.1-2. IC 1 box 10 file 3/83, Accession W2268. Stagg became particularly well informed about government policy making on pharmaceuticals because he was the Pharmaceutical Manufacturers' Association representative on the Department of Health Pharmaceutical Advisory Committee from 1968-1970.

Industry, or by the latter against its member firms, it failed to ensure that the Minister of Health could gain concrete information on local production costs, including expenditure on advertising and promotion. Furthermore, the price regulation scheme ignored the fundamental problem of transfer pricing. Although the scheme did provide for firms to submit annual financial returns, there were certain important exemptions depending upon the circumstances of an individual company, its contribution to the economy, including its foreign earnings, investment, employment or research.³⁰

Not surprisingly, the management of Glaxo (NZ) Ltd took the view that the British Voluntary Price Regulation Scheme would guarantee that prices established by companies such as its parent company would be 'fair and reasonable' and would constitute a 'sound basis' for New Zealand prices. In support of its proposal for local prices to be based on United Kingdom prices plus 25 per cent, Glaxo pointed out that the price of many of its drugs would be reduced immediately, and that the company would 'embark with vigour' on local production of some products which were currently imported. At the same time, a margin of 25 per cent on United Kingdom prices would still set a stringent, 'difficult' standard for Glaxo because of the high cost of production in New Zealand based on small manufacturing runs, high freight charges and high local wage, building and plant costs. Indeed, the proposed margin would not actually cover the cost of production in New Zealand.³¹

³⁰ For a lively account of the negotiation of the first Voluntary Price Regulation Scheme see Ronald W. Lang, *The Politics of Drugs: A Comparative Pressure-Group Study of the Canadian Pharmaceutical Manufacturers Association and the Association of the British Pharmaceutical Industry, 1930-1970* (Farnborough, Saxon House, 1974), Chapter 7. See also Jane A. Sargent, 'The politics of the pharmaceutical price regulation scheme' in *Private Interest Government: Beyond Market and State*, ed. Wolfgang Streeck and Philippe C. Schmitter (London, Sage Publications, 1985), pp.105-127, and Joe Collier, 'The Pharmaceutical Price Regulation Scheme: a time for change', *The Lancet* (13 April 1985, pp.862-863. Leigh Hancher, *Regulating for Competition: Government, Law, and the Pharmaceutical Industry in the United Kingdom and France* (Oxford, Clarendon Press, 1990), pp.82-83, goes further than Sargent to describe the scheme as 'little more than a loosely worded declaration of intent'.

³¹ McLauchlan For Secretary, Trade Practices and Prices Division, Industries and Commerce, to President Price Tribunal, Glaxo Laboratories (NZ) Ltd, Prices of Drugs, 14 January 1964, pp.5-6. IC box 10 file 3/83, Accession W2268.

Because the immediate effect of the proposed formula would be to simplify price control procedures, reduce the prices of Glaxo's drugs, and increase local manufacture, the Department of Industries and Commerce approved Glaxo's proposal of a formula of 25 per cent on the United Kingdom wholesale price plus 25 per cent on an 'experimental basis', subject to the firm's annual submission of financial accounts to show the trading results of each division.³² The Department took the official view that safeguarding its right to monitor the results of a pricing formula was 'inherent in price control'. Yet its agreement to an 'automatic' mark up or profit margin based on United Kingdom prices meant that the Department had relinquished any possibility of rigorous control of prices. There was no guarantee of the ability of the British Ministry of Health to police drug prices, so that although products would still formally be under price control in New Zealand, to all intents and purposes they would be free of control.³³ In spite of Industries and Commerce insistence on some kind of surveillance of local production costs, Glaxo continued to resist attempts to scrutinise its financial records.³⁴ In practice, its parent company remained free to manipulate the prices of raw materials or finished products to take profits in the United Kingdom or in New Zealand.

Other companies, including May and Baker and Merck, Sharp and Dohme (NZ) Ltd also each negotiated a pricing formula with the Department of Industries and Commerce during the 1960s based on the price of their products to wholesalers in the United Kingdom, plus a percentage ranging from 25 per cent to 60 per cent

³² McLaughlan to President, Price Tribunal, 14 January 1964, pp.12-14. IC box 10 file 3/83, Accession W2268.

³³ When consulted on Glaxo's proposal to base prices of imported and locally manufactured drugs on United Kingdom wholesale prices, the Department of Health agreed that the scheme had merit and raised no objection, provided that the Price Tribunal was able to retain general surveillance and price control over the company's operations in New Zealand. McLaughlan for Secretary Trade Practices and Prices Division, Industries and Commerce, to President Price Tribunal, Memorandum, Glaxo (NZ) Ltd, Prices of Drugs, 14 January 1964, pp.5-8. IC box 10 file 3/83, Accession W2268.

³⁴ See for example Beard for Secretary, Industries and Commerce, Trade Practices and Prices Division, to President Price Tribunal 15 July 1969, pp.1-4. IC box 10 file 3/83, Accession W2268.

depending on the negotiating strength and acumen of each one. Merck, like Glaxo, was not prepared to supply detailed information on the costs and profits of its local operations while negotiating a pricing formula with members of the Department of Industries and Commerce, including two ministers, between 1968 and 1972. The United States and Swiss companies such as Pfizer and Sandoz Pharma continued to propose prices calculated on the basis of the landed cost of drugs in New Zealand. Whether companies calculated their prices on United Kingdom price to wholesalers, or on landed cost in New Zealand, the true cost of raw materials remained hidden. Clearly, companies sought to secure their prices and profits on whichever basis of calculation best suited their purposes. Parent companies could buy bulk materials at low rates and sell at high rates when dealing with their overseas subsidiaries. The higher the prices paid by a subsidiary to its parent, the higher its production costs, which were in turn the basis of its percentage approved maximum profit margin under Industries and Commerce cost-plus price control.

Merck Sharp and Dohme (NZ) Ltd produced the drug Aldomet, for example, used to treat high blood pressure, at its factory at Wiri in Auckland under licence from its United States parent. Merck imported drums of methyldopa, the basic active ingredient of Aldomet, from its associate, Merck Sharp & Dohme Quimica de P.R. in Barceloneta, Puerto Rico, which was exempt from United States and Puerto Rican income taxes. The CIF (cost, insurance, freight) charge was \$NZ109 per kilogram. Merck's current approved pricing formula was factory cost plus 60 per cent. Its cost of raw material in a 125 milligram strength, 100-tablet pack was \$1.37; the factory cost for each pack was \$2.20. According to its formula, Merck proposed a price to drug wholesalers of \$3.52 (that is $\$2.20 \times 1.6$), and a price to pharmacists of \$4.22 per pack.³⁵ In the same way, Merck imported bulk supplies of Tryptanol tablets, and Alphacillin capsules by way of Bermuda to be packed at Wiri. Each time local

³⁵ Invoice, Barceloneta, Puerto Rico, August 2 1979, Pharmaceutical purchased by Merck Sharp & Dohme (NZ) Ltd of Papatoetoe from Merck Sharp & Dohme Quimica de P.R. Inc of Barceloneta, Puerto Rico, to be shipped per Merck Sharp & Dohme (NZ) Ltd Wiri. BBAJ Box 191 MSD, Accession A342; Baker, Manager accounting to Trade and Industry Department, Memo Pharmaceutical Price Increases, 21 June 1978, p.2. BBAJ Box 191 MSD, Accession A342. Thus the pharmacist received 70 cents profit on this pack of tablets, about half the declared material cost of the pack, in addition to other fees.

production costs increased, including the cost of raw materials imported from the parent company by way of tax havens in Puerto Rico or Bermuda, Merck in New Zealand applied to the Department of Industries and Commerce for an adjustment to its percentage pricing formula to take into account these increasing costs.

Officers of the Department of Industries and Commerce were clearly aware, by at least the 1960s, of the extraordinary difficulties of attempting to hold down the prices of products purchased from a powerful, multinational industry, but seemed prepared to be pragmatic, recognising the weakness of the Government's bargaining position. For example, W. Rigby of Trade Practices and Prices Division Auckland District Office had undertaken a regular review of the accounts submitted by Pfizer (NZ) Ltd in 1966. This company was a subsidiary of an Australian company and was controlled by Pfizer USA. It imported all products ready packaged from overseas and did not undertake production in New Zealand. Rigby reported that the results of the review should be accepted, but suggested that Pfizer's results, which were 'so reasonable', might perhaps mean that its profit was being taken overseas by the parent company. However, he added helplessly, 'there appears nothing we can do to follow this up at this stage'.³⁶

Within the broad administration of price control by the Department of Industries and Commerce, the Clinical Services Division of the Department of Health negotiated with pharmaceutical suppliers to determine the prices it would pay for medicines provided under the Pharmaceutical Benefits Scheme. Within the limits of maximum wholesale prices already calculated according to maximum profit margins set by the Department of Industries and Commerce, the Department of Health determined what was confusingly termed a 'basic wholesale price' for each individual product on the Drug Tariff. During the 1950s, this notional price was calculated from a 'floating average' of prices of locally manufactured and imported pharmaceuticals, notified

³⁶ Rigby to Executive Officer, General Products, Trade Practices and Prices Division, Pfizer (NZ) Ltd, Review of Accounts - 1966, undated, p.1. BBAJ Box 223 Pfiz, Accession A352.

by the Price Control Division.³⁷ The Department of Health published these basic wholesale prices in Prescription Pricing Schedules which were revised quarterly but, in general, simply recorded market changes notified by wholesalers or importers to the Department of Industries and Commerce.³⁸

As we have seen, importers or manufacturers aiming to get a new product included in the Drug Tariff initially applied to the Pharmacology and Therapeutics Advisory Committee to market a new medicine. This Committee advised the Minister of Health on price, terms and conditions for the inclusion of each individual preparation on the Drug Tariff.³⁹ If the Minister accepted the Advisory Committee's recommendation that a particular medicine would be clinically useful and that its supply should be paid for under the Pharmaceutical Benefits Scheme, the Clinical Services Division negotiated prices for each individual strength of the preparation with the supplier. If the supplier's stated price for a medicine was perceived as being too high, the Clinical Services Division could seek to have the price reduced, or threaten to exclude the product from the Drug Tariff and, in turn, from the local market.

The Department also had the alternative of imposing a part-charge on a drug, if it could reach no satisfactory agreement on price, in which case the patient had to meet any cost over and above the price that the Department was prepared to pay. Even if patients complained, the Department recognised its 'duty to the taxpayer' not to continue to pay what appeared to be 'an excessive price'.⁴⁰ Part-charges were unattractive to drug companies as well as to patients, because doctors were reluctant

³⁷ Comments of the Department of Health On the Unsigned Draft Report of the Joint Reviewing Committee on Prescription Pricing, 15 May 1951, p.1. H 1 208-2-2 25408.

³⁸ Hayes to Minister of Health, Memo, Customs Duty on Pharmaceuticals, 9 April 1962, p.1. H 1 208 33232.

³⁹ A representative of one of the local pharmaceutical subsidiaries sometimes attended as an observer. For example, the managing director of May & Baker (NZ) Ltd, J.A. Robertson, attended meetings during the mid 1960s.

⁴⁰ Department of Health, Annual Report 1964, *AJHR* 1964, H.31, p.49.

to prescribe drugs which were not a full charge on the Social Security Fund. Thus the proposal of a direct charge to the patient sometimes forced a firm to reduce its price.⁴¹ When it imposed a part-charge, the Department concluded that it had failed to persuade the firm to meet what it believed was 'a reasonable price'.⁴²

The Department of Health's Annual Report for 1964 emphasised the 'gratifying' efforts of the Division of Clinical Services as major influence on cost control. Negotiations with drug manufacturers were expected to result in 'large savings' on broad-spectrum antibiotics of about £400,000 per annum, and on Penicillin V oral tablets of more than £100,000. Drug prices were 'under constant scrutiny', it was claimed, in particular the price of the same drug on the English market, and the cost of other drugs in the same therapeutic class.⁴³

In spite of all the problems, the Department of Health could make some savings when favourable conditions applied, especially if several competing brands of one drug existed. The Department could then use the price of one version of a drug to negotiate the price of another. When more than one brand of a drug was available in a particular therapeutic group, such as preparations acting on the central nervous system, or topical preparations acting on the skin, the Clinical Services Division devised a system whereby it based initial payments to pharmacists on the lowest price brand of the drug in the group, which became the 'bench-mark' or maximum acceptable price.

In October 1964, for example, Dr T.L. Hayes of the Division of Clinical Services, wrote to the Managing Director of N.M. Peryer in Christchurch (agents for a United Kingdom Searle subsidiary): 'Having advised you that there would be a very good chance that Netrulen M, Metrulen and Ovulen would be approved by the

⁴¹ Ruth for Secretary, Department of Industries and Commerce, Trade Practices and Prices Division, 10 April 1962, p.2. H1 208 33232.

⁴² Clinical Services Letter No 73, 21 September 1967, The Cost of Drugs, p.2. AAFB box 5, 208-3-1 34762, Accession W3563.

⁴³ Department of Health, Annual Report 1964, *AJHR* 1964, H.31, p.49.

Pharmacology and Therapeutics Committee, I thought it would be only fair to warn you that the prices of all these types of products would be reviewed at this meeting', he said. One comparison that would be used, Hayes said, would be prices in the United Kingdom. He suggested that Peryer's products seemed 'a little high', which might prejudice its chances of getting these on the Drug Tariff without some form of restriction. Hayes suggested a price for each drug which Peryer's prices should not exceed (namely Metrulen M, cost to chemist 18s 3s for 50, Metrulen, cost to chemist 34s 3d for 50, and Ovulen, cost to chemist 7s 9d for 50).⁴⁴ The Department was in a good position to bargain over prices in this particular group of drugs, all oral contraceptives, because several companies were manufacturing these by the mid-1960s, and therefore had an incentive not to delay agreement on terms and prices.

In the same way, the sale by several different companies, including Smith Kline French, Pfizer, Parke Davis, Squibb and Upjohn, of tetracycline antibiotics under many different brand names offered another opportunity for setting one minimum price. In 1961, tetracyclines were shown to be the highest priced drugs in all therapeutic groups, costing more than £909,900 per annum.⁴⁵ In 1965, the Pharmacology and Therapeutics Advisory Committee recommended that the amount paid by the Department of Health for all preparations in the tetracycline group should be based on the lowest price charged in the United Kingdom for any one of that group. A part-charge would apply to those preparations not reduced in price in this way.⁴⁶ The Department advised the firms concerned that payment for all 250 milligram capsules and tablets of tetracyclines would be based on a cost to chemists of 54s 2d per 100. The President of the drug companies' lobby group, the Ethical Pharmaceuticals Association, protested that there was 'little chance' of their being able to market their products at this 'competitive price', and approached the Minister

⁴⁴ Hayes to Peryer, 29 October 1964, p.1. H 1 208-2-30 30204.

⁴⁵ Department of Health, Annual Report 1964, *AJHR* 1964, H.31, p.50.

⁴⁶ Hayes for Director, Division of Clinical Services to the Managing Director, E.R. Squibb & Sons (NZ) Ltd, 29 April 1965, p.1. H1 208-2-39 32046 .

of Health on this matter.⁴⁷ The Minister saw no reason to alter the action recommended by the Pharmacology and Therapeutics Advisory Committee. Nevertheless, after complaints to the Committee from the United States-based Upjohn and Squibb, it agreed to a 10 per cent *increase* on the cheaper brand.⁴⁸ The following year, however, the Department of Health managed to set a lower price for tetracyclines (by adopting the new low price for oxytetracycline and lymecycline as the maximum it would pay for any member of the tetracycline group). In this way, the maximum price for tetracyclines in April 1968 was less than half that paid by the Department of Health a year earlier.⁴⁹

Some such reduction in price would have occurred, however, with or without the efforts of the Department of Health. As Chapter 3 showed, world prices for tetracyclines had begun to fall sharply by the mid-1960s anyway, after almost a decade of being held at 10 to 20 times the manufacturing cost by a price-fixing cartel of United States companies, using licensing agreements. Once the patent on oxytetracycline expired in 1966, however, many new market entrants managed to gain a small market share in this large market. Nevertheless, according to a report on the costs of pharmaceutical manufacture, submitted to a British official inquiry in 1966, even the new, much lower 1968 price negotiated by the New Zealand Department of Health for tetracyclines, was still very high. The report, prepared by a chemist, Dr M.A. Phillips, calculated the cost of raw material, including estimates of research and advertising costs, to be about £12 per kilogram, and the cost of 1000 tablets (250 milligram) to be about 72s. On this basis, the cost of 100 tablets would

⁴⁷ Robertson was kept well reasonably up to date with Department of Health Drug Tariff decisions through his attendance at meetings of the Pharmacology and Therapeutics Advisory Committee.

⁴⁸ Minutes of the Pharmacology and Therapeutics Advisory Committee, 17 April 1967, pp.5-6. H1 208-2-3 33197.

⁴⁹ Department of Health, Annual Report 1968, *AJHR* 1968, H.31, p.60.

be a little over 7 shillings - rather than 27s per 100 which the Department was currently paying.⁵⁰

When negotiating prices for new preparations, the Department of Health could establish a maximum price within a particular therapeutic group only if a close substitute for the product in question was available. This kind of opportunity was limited, as long as the major patent-holding firms in Europe and the United States avoided competing within therapeutic groups. Strong patent protection on new products encouraged research and development as the main form of competition, so that the success of each company continued to depend on providing one or two brands of prescription medicine to treat specific conditions, such as mental illness or asthma, and marketing these products in the maximum number of countries in the minimum amount of time. Only the local representative of each patent holder in Europe or the United States could legally supply the New Zealand market. This sole supplier could vary the price and level of sales in order to maximise profits.⁵¹ Until the end of 1973, few of the patents on products holding dominant market positions had expired. Furthermore, many products were covered by multiple patents and multiple patent expiry dates.⁵² Therefore, as long as the Pharmaceutical Benefits Scheme continued to be based largely on patent-protected medicines, the Department of Health was heavily constrained by the prices established under the broad system of price control administered by the Department of Industries and Commerce.

Expenditure on the major products provided under the Pharmaceutical Benefits Scheme climbed rapidly through the 1960s, largely unaffected by either government price control regimes in the Department of Health or the Department of Industries and Commerce. (See Figure 1, Chapter 1, and Table 1, Chapter 4.) The

⁵⁰ Report to the Committee of Inquiry into the relationship of the pharmaceutical industry with the Ministry of Health, M.A. Phillips, February 1966, pp.6-7. Le 1/1968/7/1 Box 1354.

⁵¹ As we have seen, a patent holder sometimes allowed other firms to produce its drug under licence. Detailed agreements guarded against undercutting.

⁵² Stuart St. P. Slatter, *Competition and Marketing Strategies in the Pharmaceutical Industry* (London, Croom Helm, 1977), p.72.

benzodiazepine tranquillisers, Librium and Valium, supplied by Roche were examples of such a group.⁵³ Librium first became available on the Drug Tariff in 1961. Between 1963 and 1967, the Department of Health recorded the following expenditure (£ x 1000) on this one drug :

1963	1964	1965	1966	1967
278.5	297.0	n/a	522.0	464.0

Valium became available on the Drug Tariff in 1965. During the 12 months ending 31 July 1967, the cost to the Drug Tariff of all tranquillisers was £1.267 million, or 12.1 per cent of total expenditure on pharmaceutical benefits during that period. Librium and Valium accounted for £0.92 million or 71.8 per cent of the total cost of tranquillisers. As the volume of sales increased, the price of all strengths of Librium and Valium actually decreased by 19 per cent and 15 per cent respectively during these years.⁵⁴ Nevertheless, as the Director of the Clinical Services Division, A. Thompson, said helplessly, the cost of prescribing these drugs under the Pharmaceutical Benefits Scheme was 'absurd and unjustifiable'.⁵⁵ All he could suggest by way of 'forcing' a further reduction in the price of Librium was a part-charge to the patient which would, he said, have 'advantages of its own'. The Department of Health was rightly convinced that in some cases drug prices in New Zealand were 'unrealistic and that the average cost to the Government could be reduced substantially by negotiations with overseas manufacturers'.⁵⁶

Unrealistic or not, the Department was powerless in the face of a web of patent rights which allowed the Roche Group to retain control over the manufacture of the

⁵³ These drugs had similar tranquillising effects; Valium was far more effective as a muscle relaxant and anti-convulsant and was the more widely used of the two drugs. Roche held the patents on both.

⁵⁴ Thompson, Memorandum, The Cost of Librium and Valium, 6 December 1967, pp.1-3. H1 208-2-3 33197.

⁵⁵ Minutes of the Meeting of the Pharmacology and Therapeutics Advisory Committee, 17 April 1967, p.3. H 1 208-2-3 33197.

⁵⁶ 'NZ Checking on Rising Drug Costs', *Auckland Star*, 21 December 1966, p.22.

active ingredients of Librium (chlordiazepoxide) and Valium (diazepam) which it supplied in bulk form to subsidiaries at inflated prices throughout the 1960s. In 1967, the Department of Health agreed price for 500 5-milligram strength (that is, weight of active ingredient in each tablet) Valium tablets was 100s 8d.⁵⁷ Yet, at about this time, the active ingredient diazepam could be purchased from producers in Italy, where there was no patent protection for drugs (and so no means of keeping prices high) for about £20 per kilogram. The Department of Health's agreed price, however, meant paying about £2,000 per kilogram of active ingredient diazepam in its 5- milligram tablet form.⁵⁸

In the face of its difficulties in confronting the drug companies, the Department of Health fell back on persuading doctors to prescribe economically. Doctors were kept informed of changes in policy and the availability and cost of particular medicines in regular issues of the Clinical Services Letter. The issue for 21 September 1967 discussed the problems of controlling the cost of pharmaceutical benefits in this 'era of drug treatment':

To ask most doctors to keep a curb on their prescribing is like asking a boxer not to use his fists. A doctor who got a reputation for being a niggardly prescriber would soon find his practice dwindling away. All new drugs are relatively expensive, and there is a certain prestige about using them: 'We must keep up to date'. If the more highly responsible doctors are average prescribers (or a shade above average) it is little wonder that the average keeps rising year by year - for new drugs are being introduced all the time.⁵⁹

In the last resort, the statement continued, the Department of Health had only two effective weapons: setting a price which, if not accepted, involved a part-charge, or

⁵⁷ Thompson, Director Division of Clinical Services, Memorandum, The Cost of Librium and Valium, 6 December 1967, p.2. H 1 208-2-3 33197.

⁵⁸ Monopolies Commission, *Chlordiazepoxide and Diazepam: A Report on the Supply of Chlordiazepoxide and Diazepam* (London, HMSO, 1973), pp.38-39. When the price was set, an allowance to cover UK operations and contributions to Roche Group research and overheads was deducted. The remainder was called the 'transfer price', that is the amount payable to the Group. In the early 1970s, Roche in the United Kingdom reduced the price of Valium by 36 per cent in response to the marketing of diazepam by a competitor.

⁵⁹ Clinical Services Letter No 73, 21 September 1967, The Cost of Drugs, p.1. AAFB box 5 file 208-3-1 34762 , Accession W3563.

removing the drug from the Drug Tariff. The customer usually decided whether or not a price was reasonable and, if not, declined to buy. In the same way, the Department of Health had 'a duty to the taxpayer' not to pay more than it believed the drug was worth. However, the pharmaceutical industry was 'justly proud of its achievements, understandably sensitive to criticism, and touchy about prices'. It was so 'rich and powerful', that only 'a fool' would tangle with it without being sure of his ground, because he would be 'liable to get hurt'.⁶⁰

At a subsequent meeting of the Pharmaceutical Advisory Committee, the President of the Ethical Pharmaceutical Association, J. Robertson of May and Baker, claimed that these comments 'gave little credit to the effort being made by drug firms to cooperate with the Department'. He did not have any criticism of the subject matter of the letter, he said, but 'took exception to its general tone in its references to the drug industry'.⁶¹

As the Department's annual report for 1968 explained in a revealing statement, the truth was that nobody was in a position to establish 'a fair price' for a new drug, not even the manufacturer. There were 'too many uncertainties and too many unknowns in this field to permit precise calculations to be applied with absolute justice'. Big risks had to be taken at every stage in drug development, from the first decision to pursue a particular line of research, to the point of embarking on large scale production. Many promising research leads petered out; once launched, the most successful drug might be superseded overnight, or even be condemned altogether by unexpected reactions. On the other hand, a drug could earn money far beyond expectations. When Librium was added to the Drug Tariff, for example, nobody anticipated that within five years it would be costing the taxpayer more than a million dollars a year. Therefore 'a fair price' for any particular new drug was 'hardly a realistic concept'. Instead, the question for the manufacturer was, 'what

⁶⁰ Ibid., pp.1-2.

⁶¹ Minutes of the Meeting of the Pharmaceutical Advisory Committee, 10 October 1967, p.5. H 1 208-62 34695 Box 9, Accession W2676.

price will the market stand'. The questions for the Department of Health were 'how much is being paid elsewhere' and 'what do other drugs comparable to this one cost'.⁶²

Both government systems of drug price administration, in the Department of Industries and Commerce and in the Department of Health, continued to operate almost independently of each other. Both price 'setting' or price 'taking' regimes were totally inadequate as a basis of price negotiation with local representatives of the international pharmaceutical industry. The New Zealand 'industry' policy of the Department of Industries and Commerce meant careful accommodation of the interests of local importers and manufacturers whose profit margins were designed to recover costs and ensure adequate returns on investment in view of their local investment and employment commitments. The Department could impose drug prices or maximum margins by Price Order under the Control of Prices Act 1947, but had allowed prescription medicines to be exempted from the Price Order intended to govern drug prices. Instead, the Department negotiated a separate price fixing formula with each major firm, based either on the landed cost of materials in New Zealand or on the current United Kingdom price, plus a specified percentage. This cost-plus system, according to which a fixed margin of profit based on costs was guaranteed, provided an incentive to suppliers to *increase* rather than minimise other costs, so that maximum authorised prices tended to become minimum prices.

Whether companies based their profit margins on United Kingdom prices or on declared landed costs of materials in New Zealand, made little difference to government price control. The Department of Industries and Commerce could have no influence over United Kingdom prices. The crucial cost of raw materials or bulk finished goods to local subsidiaries remained hidden because of the problem of regular scrutiny of each firm's financial accounts and therefore of contesting each firm's calculation of its costs and profits. Each firm could state a profit to suit its price control 'formula'. If a firm appeared to be making only a small profit, it had

⁶² Department of Health, Annual Report 1968, *AJHR* 1968, H.31, pp.60-61.

a good case for demanding a revision in the formula to allow price increases. In effect, the maximum profit margins and prices already set by the Department of Industries and Commerce provided a 'cost justified' price for the Department of Health when negotiating prices for individual preparations to be included on the Drug Tariff. This curious division of jurisdiction continued to undermine Department of Health efforts to acquire, at the lowest possible cost, medicines for the Pharmaceutical Benefits Scheme.

7 Scrutiny and Compromise 1960-1970

By the end of the 1960s, pharmaceutical benefits had already been the subject of four official inquiries beginning as early as 1947 with the first Labour Government's Medical Services Committee. The same intractable issues reappeared in further government inquiries in 1957, 1961 and 1967 - namely, the levy of a standard patient charge on prescriptions, lack of government control over prescribing, the so-called 'limited list' or Drug Tariff, the high cost of imported drugs, the generous profit margins approved to wholesalers and importers, the patent monopoly on drugs, and appropriate payments for pharmacists. Each committee of inquiry generally agreed on the need to hold down drug costs while emphasising the social and medical benefits of the state's provision of free medicines. Mainly because of the power of vested professional and commercial interests on one side, and a firm political commitment to the broad provisions of the welfare state on the other, successive governments declined to follow any of the major suggestions for change and continued to restate their intention of paying for almost the entire cost of the medicines prescribed by doctors for everyone who qualified for the service. This commitment extended far beyond providing medicines to treat life-threatening illness, to a full range of modern products as and when they became available. All groups in the distribution chain strongly supported this policy. Local subsidiaries of international companies negotiated guaranteed margins of profit for imported and locally produced drugs. Doctors, who generated public demand, were determined to preserve their independence from government control. Pharmacists continued to make substantial financial (if not professional) gains from dispensing. Against these forces, the Department of Health had little chance of curtailing costs, especially when politicians were so obviously unwilling to engage in the battle to make fundamental change.

Free medicines were only one aspect of generous state spending on health services and social security under the National Government during the 1960s. During a period of political stability, economic prosperity, rapid industrial growth and full

employment, shored up by a regulated and protected economy, National made no major policy innovations to extend the benefits provided by the Second Labour Government during the late 1950s.¹ Nevertheless, National introduced substantial increases in pensions and other classes of benefit and, in general, remained firmly committed to the full employment welfare state, which meant continuing to provide health and medical services, including free medicines, as essentials like education and justice.

Pharmaceutical benefits had long since become a danger zone for politicians. Any hint of reduced spending met with criticism in Parliament, especially in view of the steadily declining value of the Medical Services Benefit which subsidised part of the cost of general practitioner visits.² Politicians repeated at length the old argument of the value of medical and health benefits in reducing hours of work lost, and the incalculable value of good health in general.³ The Labour Member for Riccarton, M.A. Connelly, feared that 'in future the Minister of Health and not the doctors would determine what medicine people would get', so that people needing medical care 'would have a political prescriber, or maybe a political proscriber'.⁴ Such a radical idea was unacceptable to politicians, who preferred the Government's open-ended guarantee to doctors and their patients to continue.

¹ Royal Commission on Social Security in New Zealand, *Social Security in New Zealand*, AJHR 1972, H.53, 1972), p.49. Labour had arranged for the payment of family benefit in advance (1958), capitalisation of family benefit for housing (1959), and made superannuation available for everyone aged 65 without means test (1960). See in general John Gould, *The Rake's Progress: The New Zealand Economy Since 1945* (Auckland, Hodder and Stoughton, 1982), pp.89-9; Elizabeth Hanson, *The Politics of Social Security: The 1938 Act and Some Later Developments* (Auckland, Auckland University Press/Oxford University Press, 1980), p.117-118; Chris Rudd, 'The New Zealand welfare state: origins, development, and crisis', in *State and Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), pp.228-229.

² This benefit remained at the level set in the 1940s, namely 7s 6d; by the 1960s, doctors were charging substantial amounts over and above the social security payment.

³ See, for example, *NZPD*, 327 (1961), p.1454.

⁴ *NZPD*, 326 (1961), p.259.

A very sharp increase in the average cost of prescriptions had, as we have seen, provoked the 1957 inquiry on pharmaceutical benefits. In the Clinical Services Division of the Department of Health high hopes for amendments to the regulations governing prescribing, made in response to this Committee's recommendations, came to nothing. The lack of effective methods of assessing the cost of each doctor's prescribing was one difficulty.⁵ Even if accurate calculation had been possible, the Department still found great difficulty acting against individual doctors, and could impose only small fines as a deterrent. At the same time, the cost of individual products, for example antibiotics, continued to increase sharply.⁶

By 1960 when the drug bill was close to £6 million, this cost had begun to overtake that of all other health benefits provided under the Social Security Act.⁷ The Department's annual report for that year recorded a particularly sharp increase in the cost of pharmaceutical benefits during the first quarter of the financial year of 26 per cent over the same period the year before. The number of prescriptions issued had increased, as well as their average cost. Moreover, doctors were more often ordering extended supplies for one month's treatment or more on one prescription, instead of the normal 10 days' supply. The situation seemed to call for 'drastic' action and a reappraisal of the entire scheme: after 18 years it was 'Time to Think Again'.⁸ The initiative for such a wide ranging review came from a combined meeting of the two

⁵ In Britain, the capitation system allowed the cost per patient on the doctor's list to be calculated. In New Zealand, the size of doctors' practices, and how many patients seen in a given period, were largely unknown.

⁶ In 1959, a single prescription (16 capsules) for one of the commonly used antibiotics cost £3 5s 8d; this was sufficient for about three days' treatment.

⁷ Between 1958 and 1960, this expenditure increased by 33.3 per cent, from £4,466,541 to £5,956,302, when inflation was about 3 per cent per annum. Department of Health Annual Report 1961, *AJHR* 1961, H.31, p.92.

⁸ Department of Health, Annual Report, *AJHR* 1960, H.31, pp.65-66. The number of prescriptions passed for payment was 13,684,657, compared with 12,847,773 the year before. The average cost per prescription was 8s 3d.

medical and pharmaceutical advisory committees within the Department of Health, representing doctors and pharmacists respectively.⁹

Clearly National, like Labour, was not yet sufficiently concerned about drug costs to appoint a committee that would be likely to take a radical view on the provision of medicines. Just as they had dominated the 1957 inquiry, doctors and pharmacists were to dominate the subsequent inquiry by the Special Committee on Pharmaceutical Benefits established by Cabinet under Section 83 of the Social Security Act in January 1961 and, as in 1957, chaired by Dr A.W.S. Thompson, director of the Clinical Services Division of the Department of Health. The eight other members included representatives of the Medical Association, Dr D.E. Orchard and Dr J.M. Twigg, another co-opted doctor member, paediatrician Dr J.M. Watt, and pharmacist representatives of the Chemists' Service Guild, as well as nominees of the Chambers of Commerce, Cabinet and Treasury. Dr Twigg had already served on the 1957 inquiry. Both he and Watt were members of the influential Pharmacology and Therapeutics Advisory Committee of the Department of Health which decided on the range of medicines available on the Drug Tariff. Cabinet appointed Professor Alan Danks, Professor of Economics at the University of Canterbury; the Treasury appointed its Assistant Secretary, Mr A. McGregor.

The Committee's terms of reference were wider than that of the 1957 Special Committee. That inquiry had been concerned principally with the immediate problem of rising costs, and the measures that might be taken to control these. Under its terms of reference, the 1961-62 Committee was to review the Pharmaceutical Benefits Scheme since 1941 with particular reference to possible measures to control government spending. It was also to consider policies applied in other countries to control the cost of drugs, and to make recommendations for the scheme's future.¹⁰

⁹ Minutes of Combined Meeting of Pharmacology and Therapeutics Advisory Committee and Pharmaceutical Advisory Committee 8 February 1960, p.1. H 1 208 29655.

¹⁰ Special Committee on Pharmaceutical Benefits 1961-62, *Report* (Wellington, Government Printer, 1963), pp.8-9.

After a clear analysis of the problems and some reasonably clear ideas on how to deal with these, the 1961-62 Committee approved the existing structure of the Pharmaceutical Benefits Scheme and the policy underlying its administration - that is, free medicines on a doctor's prescription available to all. This clear endorsement of the status quo was not surprising, given the strong presence of doctors and pharmacists on the investigating Committee. Neither group was anxious to see any changes in current arrangements for the provision of medicines. While acknowledging the high cost of new drugs, the Committee smoothed over this central issue by presenting it in terms of national income and returns in the form of public health and social well-being. The Committee showed that between 1947 and 1962, the cost of medicines had increased from 0.34 per cent to only 0.57 per cent of the gross national product - so that spending on medicines was not such a burden as at first appeared. As the Committee's report observed, many more patients could be treated at home instead of in hospital, acute illnesses were shorter and less often fatal, and many patients who would have become chronic invalids a generation before were now kept in reasonable health and often at work.¹¹ Other official analysis appeared to support this conclusion, showing that hospital stays had decreased on average from 20 days in 1953 to just over 17 in 1959.¹²

According to this 'public good' or 'better health' argument for generous state spending on medicines, along with health care in general, New Zealanders were getting value for money through the Pharmaceutical Benefits Scheme. Consistent with this argument, that the whole range of medical care should be readily available to all citizens, was the Committee's view of the function of the scheme - 'to supply the doctor with the drugs he needs in order to treat his patients'. This liberal view coincided with expectations of both doctors and their patients of generous provision of health care fostered by successive governments since the 1930s. Instead of recommending stringent criteria for the Drug Tariff, the Committee stressed the

¹¹ Special Committee 1961-62, pp.5, 19-29.

¹² Pharmaceutical Benefits Scheme, Submissions to Public Expenditure Committee by Department of Health, Appendix J, p.1. H 1 208-53-1 32177.

dangers of 'bureaucratic interference with medical practice', of 'therapeutic dictatorship' and of 'lagging behind' medical progress through 'inertia, conservatism or a parsimonious attitude'. While urging the Department of Health to adopt a rigorous attitude, the Committee, at the same time, firmly commended current policy of ensuring that the Tariff keep abreast of medical progress. Because it acknowledged that the original intention behind the scheme had never been that every version of every drug, regardless of price, could be available at the cost of the Social Security Fund, the Committee supported the occasional levy of part-charges to win price concessions from manufacturers on more expensive drugs where equivalent products existed. Recommending part-charges on a few specific products was clearly easier than attempting to set broad limits on the range of medicines available as pharmaceutical benefits.¹³

At the same time, focusing on the Drug Tariff, and on inclusion and exclusion of particular products and their price distracted attention from the pressing need to monitor closely individual prescribers. Total cost was made up of kinds of drugs and their price *and* volume. Until official committees tackled the issue of prescribing, the total volume of scripts, and the cost of pharmaceutical benefits would continue to rise. To make doctors more aware of drug costs, the 1961-62 Committee mildly recommended efforts to 'awaken' in them 'a due sense of social responsibility' toward health benefits during medical training. Doctors should be 'encouraged' to prescribe by official or generic titles, rather than by brand names, and manufacturers and agents should include official names, as well as brand names, in all advertising.¹⁴ These vague recommendations did not go nearly far enough to stem the tide. Prescribing by more than 1,800 general practitioners largely determined the

¹³ In 1961, out of more than 3,500 items available as a full or part-charge as pharmaceutical benefits, only about 150 drugs carried a part-charge. Special Committee 1961-62, pp.6, 28, 33, 52, 53, 54, 59.

¹⁴ Special Committee 1961-62, pp.6, 44, 52-53. If a doctor prescribed a more expensive brand, the pharmacist could charge the patient the difference in cost. For example, the Health Department imposed a part-charge on the Chloromycetin brand of chloramphenicol because the Chloramex brand, manufactured in Denmark, was marketed in NZ at a lower price. Patients were charged 97 cents per 100 250 mg capsules of Chloromycetin, and 49 cents per 60 ml suspension. Most scripts called for 60 ml of the suspension, or for 16 capsules.

volume and brands of medicines dispensed by pharmacists.¹⁵ Doctors resented, and could easily resist, official attempts to influence their choices between higher-priced and lower-priced equivalent medicines, whether patented or non-patented. Moreover, pharmacists were compelled to dispense the brand prescribed by the doctor, unless there was prior consultation or an emergency (specified by the Code of Ethics of the Pharmaceutical Society), and could not substitute another (cheaper) drug for that prescribed. In spite of their freedom from restrictions, doctors criticised the Department's 'excessive' interest in costs. Some complained to the Committee of being 'the meat in the sandwich' between the Department and their patients who believed they had the 'right to demand anything' on prescription.¹⁶

In general, the 1961-62 Committee's findings concurred with those of the Hinchliffe Committee on the cost of prescribing in United Kingdom. This inquiry was eventually established by the Ministry of Health when it first became alarmed at the growing bill for prescription medicines in the mid-1950s.¹⁷ The Hinchliffe Committee had found that the main influences on this cost were the 'coincidental introduction of a free and comprehensive Health Service for all and the discovery and large-scale production of valuable but expensive drugs'. The Committee simply accepted that 'wherever medicines and drugs are supplied to the public in conditions analogous if not identical with those of the National Health Service, the absolute cost will be heavy'. On doctors' right to prescribe, the Hinchliffe Committee (composed almost entirely of doctors) concluded that there were

overwhelming objections of principle and of practice against limitation and no restriction should be imposed on the doctor's right to prescribe whatever drugs he considers to be proper and necessary for his patients.¹⁸

¹⁵ By 1962, 1,851 doctors were claiming for general medical services. Department of Health, Annual Report 1962, *AJHR* 1962, H.31, p.51.

¹⁶ Special Committee 1961-62, p.29.

¹⁷ Ronald W. Lang, *The Politics of Drugs: A Comparative Pressure-Group Study of the Canadian Pharmaceutical Manufacturers' Association and the Association of the British Pharmaceutical Industry, 1930-1970* (Farnborough, Saxon House, 1974), pp.65, 69, 150.

¹⁸ Committee on Cost of Prescribing (Hinchliffe Committee), *Final Report* (London, HMSO, 1959), pp.5-7.

Pharmacists' remuneration was another thorny issue studied by the 1961-62 Committee. Unlike the 1957 inquiry, which had suggested that the rapid growth in the use of expensive drugs might call for scaling down the profit margin and establishing a fixed service fee, this Committee drew back from proposing any radical revision of payments. It simply recommended further analysis so that income from ordinary retailing could clearly be separated from dispensing income. Because of the 50 per cent margin on wholesale costs, pharmacists' profit on ingredients per script had increased from 1s 2.94d in 1954 to 1s 10.37d in 1960 (an increase of 49.7 per cent). Although pharmacists argued that this profit was more than offset by operating costs, especially wages and overheads, the annual rate of inflation and average wage increases during this period suggest otherwise.¹⁹

Nevertheless the Dominion Secretary of the Chemists' Service Guild, L.J. Mauger, argued that social security dispensing was actually uneconomic.²⁰ During the 10 years from 1959 to 1969, however, when doctors began prescribing expensive non-steroidal anti-inflammatories, benzodiazepines, tricyclic antidepressants, beta blockers and aerosols for asthma and hay-fever, pharmacists' gross income from dispensing had increased by 45 per cent. In 1988 dollars, the average pharmacy received more than \$100,000 in payments from dispensing in 1955. This figure increased to well over \$200,000 in 1973 (and over \$300,000 in 1984).²¹ At the same time, the proportion of pharmacists' income derived from dispensing steadily increased from 34 per cent in 1955, to 42 per cent in 1960, to 44 per cent in 1966, to 46 per cent in 1976 (to 49 per cent in 1981, to 56 per cent in 1986).²² Its fear of disturbing its close relationship with the Chemists' Guild, and the problems of

¹⁹ Special Committee 1961-62, pp.54-56. The annual rate of inflation during the second half of the 1950s was about 3 per cent, and average wages increased by about 14 per cent. *NZOYB* 1960, p.987, 1057.

²⁰ Mauger to McKay, Minister of Health, 7 December 1965, p.1. Le 1/1968/7/1 Box 1354.

²¹ Pauline Toni Norris, 'The Negotiation and Re-negotiation of Occupational Control: A Study of Retail Pharmacy in New Zealand 1930-1990', (PhD thesis, Victoria University of Wellington, 1993), pp.160-161.

²² New Zealand Report on the market for pharmaceuticals, Hayes, 27 March 1963, H 1 208 33232; Norris, *Retail Pharmacy in New Zealand*, p.162.

accurately apportioning costs between pharmacists' retail and dispensing activities, meant that the Department of Industries and Commerce continued to recommend that current arrangements remain unchanged.²³

Only in its conclusion did the Committee's report have some real force. The Chamber of Commerce nominee, H.E. Smith, an accountant, had criticised the tentative tone of an earlier draft.²⁴ On his insistence, the final draft set out the central dilemma: 'the plain fact is that when the State assumed responsibility for the payment of drugs and medical services in private practice, cost, which up to then had regulated consumption, was rendered impotent as a constraint'. To control pharmaceutical costs the Government would have to correct the effects of state intervention, namely that:

The doctor, in prescribing, need have no concern for his patient's pocket. The chemists (or their representatives) need not trouble themselves about the price of prescriptions; a reduction in cost will not increase the volume of business; the higher the cost of ingredients, the greater the gross profit. The drug manufacturer has little to fear from buyer resistance to higher prices.²⁵

To balance these pressures, the state would have to impose fair 'but firm' use of its monopoly position when negotiating wholesale prices for drugs, take a rigorous attitude on the Drug Tariff, gain 'really effective control over extravagant prescribing', and establish a 'realistic negotiated price' for chemists' services. These problems could not be tackled unless the powers and resources of the Department of Health were greatly strengthened.²⁶

²³ See, for example, Marshall, Minister of Industries and Commerce, to McKay, Minister of Health, 25 May 1965, pp.1-2. H 1 208 33232.

²⁴ Minutes of the 20th Meeting of the Special Committee on Pharmaceutical Benefits, 6 February 1963, p.2. H 1 208-53-1 32177.

²⁵ Smith to Thompson, 3 February 1963, pp.1-2 and 17 February 1963, pp.1-2. H 1 208-53-1, 32177; Special Committee 1961-62, p.57.

²⁶ Special Committee 1961-62, pp.57-58.

This clear statement of the issues was no more than a shot in the dark. The Department of Health did manage to gain a little control over prescribing, in particular cost per patient per month, by establishing a pharmaceutical statistics section. Most importantly, it continued to encourage doctors to prescribe by official title rather than by brand name, in regular issues of the 'Clinical Services Letter'. But only a compulsory, legal requirement could shift doctors' prescribing away from brand names.²⁷

Not surprisingly, given the lack of any radical recommendations for change, the National Government made no major amendments to the arrangements for providing medicines. Like Labour, it was still not greatly concerned about pharmaceutical benefits and was reluctant anyway to lose votes by tampering with an important provision of the Welfare State.²⁸ The Social Security Act 1964 reaffirmed the provisions on pharmaceutical benefits from the original Act. Section 99 set out the conditions, including the issue of the Drug Tariff, and the basis of payment to pharmacists from Section 89 of the original Act.²⁹ Questions in Parliament regularly reminded the Government of the political costs of any attempt to withdraw from this guarantee by limiting the range of medicines on the 'free list' and imposing more part-charges, or even introducing a standard patient charge on all prescriptions. By encouraging part-charges, National was accused of threatening to 'destroy the whole concept of the pharmaceutical benefits scheme as introduced by the Labour Government'.³⁰ When asked in Parliament whether he had changed his view that a standard charge on medicines 'would be a breach of the basic principle on which social security was founded', the Minister of Health, D.N. McKay, replied that he

²⁷ Brief Summary of Action Taken on the Recommendations of the Special Committee on Pharmaceutical Benefits, 1961-62, in Memorandum on the Report of the Special Committee, Sally Porter, Advisory Pharmacist, April 1967. H 1 208-53-1 33858, Accession W2406.

²⁸ Personal communication, T.L. Hayes, 22 July 1995.

²⁹ *Statutes of New Zealand*, 1964, Vol 2, pp.1217-1221, 1229.

³⁰ *NZPD*, 346 (1966), p.811.

knew of 'no conditions' that would cause the National Government to reconsider its previous decision against such a levy.³¹

The increasing expense of visits to the doctor was a less obvious but important reason for the Government to continue to refuse even to establish a standard patient charge on prescriptions, or to allow part-charges on expensive medicines to be much more widely levied. In the 10 years to 1966, the cost of pharmaceutical benefits increased from £4.04 million in 1956 to £9.76 million in 1966 - a period when inflation was about 2.5 per cent per annum.³² When adjusted for inflation and population increase, this represents an increase per head of population of 48.8 per cent over this 10-year period.³³ In contrast, the cost of the general medical services benefit (for doctor visits) increased less than 17 per cent during these years. The cost of medicines was more conspicuous than this other, lower cost to the state. Because doctors still worked under the original, subsidised fee-for-service system, however, and remained free to charge their patients a fee over and above that received from the Social Security Fund, the true cost of doctor visits was much higher. The gap between the government subsidy and the total fee charged continued to widen, so that by the end of the 1960s the subsidy amounted to only about a third of the cost of consultations.³⁴

Despite the sanguine findings of the Committee, the assistant director of the Clinical Services Division of the Department of Health, Dr T.L. Hayes, remained much more concerned with the difficulties than his Minister. Early in 1966, he summed up the Government's position in a hard-hitting memorandum to the Director-General of Health, Dr D.P. Kennedy. He pointed out that Pharmaceutical Benefits now cost the

³¹ *NZPD*, 347 (1966), p.2038.

³² Department of Health, Annual Report 1966, *AJHR* 1966, H.31, p.84. The Consumer Price Index rose from a base figure of 1000 in 1955 to 1273 in 1964; therefore what cost \$100 in 1955 cost \$127.30 in 1964. *NZOYB*, 1965, p.711.

³³ See above Figure 1, Chapter 1 and Table 1, Chapter 4: in 1986 dollars the average cost per capita of pharmaceutical benefits increased from \$36.9 in 1956 to \$54.8 in 1966.

³⁴ Royal Commission 1972, p.408; Hanson, *Politics of Social Security*, p.126.

country more than £9,800,000 a year and, moreover, this cost was now rising at the rate of almost £1 million per annum. 'All known methods of control' had been used during recent years to curb this rising cost, he said, 'but with little success'. There was no doubt that the main reason for the increase in spending was due to the high cost of *new* drugs. Two important questions remained unanswered: was New Zealand paying too much for newly discovered drugs? Was New Zealand buying drugs on the best market, and by the best methods?³⁵

This conviction that the prices of many drugs on the New Zealand market were unrealistic was greeted with interest in the Treasury. The Minister of Finance gained Cabinet approval for Dr Hayes to make a world tour to investigate the provision of medicines in other countries, to visit manufacturers supplying drugs to New Zealand agents, and to inspect the quality of similar drugs produced by other firms with a view to obtaining large contracts at reduced prices. In spite of the enormity of this task, Treasury hoped that large savings in overseas funds would result.³⁶ For the first time, a New Zealand government official was to gain some first-hand knowledge of the size of overseas drug manufacturing centres and of possible cheaper alternative sources of supply.

Identifying such sources proved to be a great deal easier than establishing regular supplies, however. Dr Hayes visited or made contact with representatives of nearly 40 drug companies around the world, and with government officials in Australia and the United Kingdom. He visited many large manufacturing centres, for example at Hoechst in Frankfurt with the most modern antibiotic filling machine in Europe, producing one-third of a million antibiotic injections per day. Dr Hayes discovered that New Zealand could learn little from either the Australian or United Kingdom governments on the general administration of pharmaceutical benefits. They seemed to have similar problems, in particular controlling prescribing and remuneration for

³⁵ Hayes to Kennedy, Memo, Overseas tour of duty, 11 February 1966, p.1. H 1 208 33232.

³⁶ Muldoon, Minister of Finance, Greenberg, Secretary to the Treasury, Overseas Travel, Dr T.L. Hayes, Health Department, 15 July 1966. H 1 208-53-1 33858, Accession W2406.

pharmacists. Various agencies operated in Europe and the United States for the distribution of cheaper drugs than equivalent brand name products. However, quality and guarantee of regular supplies would always be a problem.³⁷

Meanwhile, plans for a new official inquiry on drug costs went slowly ahead. Department of Health concern that drug prices were being 'loaded against New Zealand', prompted the Director-General, Dr D.P. Kennedy, to propose to Treasury an investigation of this matter. In view of the cost to the Health vote, the Minister of Finance, H.R. Lake, suggested the Public Expenditure Committee of the House of Representatives as the appropriate body for such an inquiry.³⁸ In October 1966, prompted by this suggestion, and by further embarrassing questions in Parliament about pharmaceutical benefits, this committee formally resolved to investigate the matter of drug costs.³⁹ A sub-committee of the Public Expenditure Committee began meeting in January 1967, initially under the chairmanship of R.D. Muldoon.⁴⁰ It hoped to uncover the causes of the apparently uncontrollable rise in spending on medicines and, most importantly, would examine the possibility of alternative drugs and sources of supply.⁴¹ In general it was to investigate similar problems to those already studied in earlier official inquiries. Treasury concern over

³⁷ Report of Overseas Tour of Duty, Dr T.L. Hayes, 8 August-10 October 1966 (undated), pp.1-89. H 1 208 33232.

³⁸ Lake, Minister of Finance to Chairman Public Expenditure Committee 27 May 1966, Pharmaceutical Benefits, p.1. Le 1/1968/7/1 Box 1354.

³⁹ Public Expenditure Committee Minutes, 12 October 1966, p.1. Le 1/1967/6 Box 1333. The Labour member for Waitemata, N.J. King, pointed out the recent heavy increase in the cost of drugs from wholesalers, and accused the Minister of Health of side-stepping this issue by passing it to the Minister of Customs. King attacked the Minister for failing to keep drug prices 'under continuous critical review'. Pharmaceutical costs were increasing all the time but the Government did nothing, he said, urging the Minister to authorise a departmental investigation to ensure that the best quality drugs were being obtained at the cheapest possible cost. *NZPD*, 349 (1966), pp.3272-3273.

⁴⁰ The Committee's membership changed several times during the next two years. Initially, members were D. Carter, A. Walker and M. Connelly. When Muldoon became Minister of Finance in March 1967, the chairmanship passed to G.A. Walsh.

⁴¹ Muldoon, Chairman Public Expenditure Committee to Cherrington, NZ Ethical Pharmaceutical Association, 16 December 1966, p.1. Le 1/1968/7/1 Box 1354.

early signs of a serious balance of payments crisis by late 1966 meant, for the first time, however, that the political heat on drug costs had begun to rise.⁴² Indeed the Department of Health was now under pressure to trim about £2 million from the cost of pharmaceutical benefits in 1967.⁴³

Newspapers picked up this new government concern about drug costs, which was part of a wider anxiety about New Zealand's heavy borrowing, and 'living beyond its means'. Rising expenditure on pharmaceutical benefits had led to a 'probe' to find out if New Zealand was 'buying drugs on the best markets at the best prices', announced the *Auckland Star*.⁴⁴ Substantial savings should be 'well within the compass of Government economies', reported the *Dominion* in March 1967 in one of a series of articles on the economy entitled 'New Zealand at the Cross Roads'. If the Holyoake Administration seized its opportunity it could 'save a good deal more', the article continued. National had displayed some courage in 'assaulting the sacred cows of state house rents and of subsidies as they affect butter and flour'. A levy should now be imposed on prescriptions to recover at least some of the outlay on pharmaceutical benefits, 'expected to top £10 million in 1967'. A 'nominal charge might stop many of those near-hypochondriacs from lodging in doctors' waiting rooms, and for others, might teach them something of the real cost of prescriptions'. How many 'pills and potions' were 'poured uselessly down drains now?', the article asked. Doctors, too, had a 'responsibility not to over-prescribe'.⁴⁵

⁴² Durbin, Secretary to Treasury to Chairman, Public Expenditure Committee, Cost of Drugs - Pharmaceutical Benefits, 20 January 1967, pp.1-2. H 1 208-53-1 32177.

⁴³ Perry, Secretary of the Cabinet to Minister of Health, Memo, Pharmaceutical Benefits, 25 January 1967, p.1. H 1 208-53-1 33858, Accession W2406.

⁴⁴ 'NZ Checking on Rising Drug Costs', *Auckland Star*, 21 December 1966, p.1. See also 'Outlook for N.Z. - Austere: Appraisal By Economist', *New Zealand Herald*, December 1, 1966, p.16.

⁴⁵ *Dominion*, 14 March 1967, p.1. In February 1967, the government increased state housing rentals, along with post office, electricity and rail charges, as well as indirect taxes on such items as motor vehicles, tobacco and spirits. These tough fiscal measures were designed to 'mop up' purchasing power which might create a demand for imports. See John Gould, *The Rake's Progress? The New Zealand Economy Since 1945*, Chapter 5, 'The end of the golden weather: 1967-1975' (Auckland, Hodder and Stoughton, 1982).

Since its establishment in 1962, the Public Expenditure Committee had gained a reputation for rigorous scrutiny of departmental spending and had attracted able and ambitious members.⁴⁶ It acted as a watchdog to confirm that all public expenditure was actually sanctioned by Parliament. At the time of its inquiry on drug costs, however, the Committee seemed to have lost some of its early vigour. One possible reason was that Muldoon, along with J.B. Gordon and D. MacIntyre, had gained a reputation as critical government backbenchers and had formed a 'ginger group' within the Committee, the spirit of which was absent after the three moved on to ministerial portfolios early in 1967. Moreover, between 1968 and 1972, Public Expenditure Committee reports were not even debated in Parliament because they were presented too late in the session.⁴⁷

The Committee's initial informal survey of major 'points for consideration' raised once again most of the main problems of the state provision of medicines, namely keeping doctors clearly informed about drug prices, payments to chemists, the high landed cost of drugs in New Zealand, the cost of sales promotion by drug companies, and the period of patent protection for drugs.⁴⁸ Unlike earlier inquiries, however, this one was conducted by a group quite independent of the main professional and commercial groups involved in the provision of medicines. Neither doctors nor pharmacists were represented.

In 1968, after hearing substantial submissions from all the major groups involved, the Public Expenditure Committee tabled its report in Parliament. Pharmacists, in particular, were stung into criticism by no less than six recommendations which addressed their payments for dispensing. The Committee had at last given birth to

⁴⁶ Geoff Skene, *New Zealand Parliamentary Committees: An Analysis* (Wellington, Victoria University for Institute of Policy Studies, 1990), p.5.

⁴⁷ Stephen Levine (ed.), *Politics in New Zealand: A Reader* (Sydney, Allen & Unwin, 1978), p.117; Alan D. McRobie, 'The New Zealand Public Expenditure Committee', *Political Science*, 26:1 (1974), pp.28-46.

⁴⁸ Public Expenditure Committee, *Points for Consideration*, undated (1967), pp.1-5. Le 1/1968/7/1.

'its duckling' and what 'a quaint bird' it was, one pharmacist commented sarcastically. Some ideas had merit but others were 'surprisingly naive'. The writer did not believe that the 'astonishing' turnover of personnel was the main reason why the report 'regrettably' left the impression of being a 'superficial document' based on a 'singularly immature' study.⁴⁹ The Chemists' Guild submission had stressed that, although the 50 per cent mark-up on wholesale costs was higher in New Zealand than in Australia or the United Kingdom, the New Zealand dispensing fee was by far the lowest.⁵⁰ Accordingly, the Committee had recommended immediate action to reapportion official payments so that pharmacists would receive a much *lower* margin on ingredients, but a *higher* dispensing fee to reward work actually performed. The Committee also sensibly recommended that pharmacists must advise the Health Department if they purchased drugs at discount. The number of new pharmacies being opened was more than was justified by population increase, the Committee concluded, so that fewer dispensing-only centres might provide a more efficient distribution system.⁵¹

Committee members seemed to imply that dispensing could be handled more economically through hospital pharmacies or through public health centres; they accepted, however, that the public wanted many pharmacies conveniently placed throughout the country. The Government was committed to continue to under-write this system, so that no less than 1120 pharmacies (one to each 2,400 people) provided dispensing centres for the Pharmaceutical Benefits Scheme.⁵² The

⁴⁹ 'The duckling has hatched', Special Report by a Senior Guild Administrator, *Pharmaceutical Journal of New Zealand* (January 1969), pp.11-12.

⁵⁰ Public Expenditure Committee, Sub-Committee investigating the cost of drugs and pharmaceutical benefits in New Zealand. Submissions of the Chemists' Guild of New Zealand, pp.8-9. Le 1/1968/7/1 Box 1354. In 1967, the dispensing fee was 1s for pre-compounded drugs and 2s 6d for those which had to be compounded, e.g. ointments and mixtures. The average container fee was 5d. The Department of Health deducted a discount from its total payment to pharmacists of 2.5 per cent.

⁵¹ Public Expenditure Committee 1968, *AJHR* 1968, I.12, pp.19, 22, 23.

⁵² Jackman, Registrar, Pharmacy Board of NZ, to McKay, undated. Le 1/1968/7/1 Box 1354.

guaranteed, generous margin paid on the rising wholesale cost of drugs enabled pharmacists to maintain their protected and privileged position.

The Public Expenditure Committee found it easier to propose changes in official payments to pharmacists as a way of cutting expenditure on medicines than to address the privileged position of doctors. A forceful submission from the New Zealand Medical Association had argued that drugs were 'the greatest bargain' New Zealand was buying, and warned the Government to exercise 'great caution before interfering with this very advantageous arrangement'. According to the Medical Association, the 'guiding principle' of commercial dealings with drug firms should be

that patients are entitled to get without undue financial barriers what the doctor has ordered for them. There is a thin line between the State acting as an agent for the people to obtain drugs at a reasonable price and the State acting as a dictator determining what drugs people may have. The first is legitimate and the second is not.⁵³

As long as this view remained unchallenged - that doctors rather than any government body should determine the mix and range of medicines available as pharmaceutical benefits - no government department could hope to gain a measure of control. Like pharmacists, doctors were crucial providers of health services on behalf of the state. Their control over prescribing was only one aspect of their dominance of the provision of health care and the making of health policy.

In spite of its inquiries, and the availability of findings from much more extensive official inquiries on drug costs in the United Kingdom and the United States, the Public Expenditure Committee addressed the critical issue of drug prices only in very general terms. While it claimed to be 'concerned at the possibility of New Zealand being charged excessively for drugs', the Committee concluded that 'little evidence' had been produced to show that prices charged by manufacturers, whether the drugs were manufactured in New Zealand or overseas, were exorbitant, particularly when

⁵³ N.Z. Medical Association, Submissions on the cost of drugs, Batt, Geiringer, Ridley-Smith, Roydhouse, Taylor, Virtue, April 1967, pp.2, 6. Le 1/1968/7/1 Box 1354.

compared with prices ruling in other countries. Accordingly, it simply recommended that 'continuing surveillance should be maintained in respect of prices charged'. A subsequent recommendation, however, urged the Department of Industries and Commerce to take 'early action' to review the profit margins allowed to importers and wholesalers on Drug Tariff items, because these might now be 'out of line'.⁵⁴

Such a proposal struck at the heart of cost-plus price control, which guaranteed generous margins to local producers and importers, based on their own, unverifiable, calculations of production costs. A senior Industries and Commerce official, J.P. Lewin, summed up his Department's policy on this matter to the Public Expenditure Committee. While the Control of Prices Act had provided adequate powers to tackle the disparity between export prices from the country of origin, and the prices for supplies sold on the New Zealand market, for 'some years' it had not been policy 'to apply these powers rigorously'. Instead, the Department had simply tended to exercise 'price monitorship rather than stringent control'.⁵⁵ Defending this policy, Lewin claimed that domestic manufacture of drugs was proving to be an increasingly useful means of saving overseas exchange, so that the Department preferred to encourage local producers to incorporate a greater proportion of New Zealand content in their goods, and also to support initiatives to set up new manufacturing plants, where these were economically viable.⁵⁶ In view of this attitude, a determined stand by the Department to reduce the profit margins of local firms was unlikely.

In spite of Industries and Commerce warnings, and with certain stipulations on quality standards, the Public Expenditure Committee took the view that the Government should encourage the purchase of drugs 'at the best possible market price'. It firmly recommended the passing of legislation to enable patented drugs to

⁵⁴ Public Expenditure Committee 1968, *AJHR* 1968, 1.12, pp.20, 21, 26, 29.

⁵⁵ Lewin for Secretary, Industries and Commerce, to Chairman, Public Expenditure Committee, 19 April 1967, p.5. Le 1/1968/7/1 Box 1354.

⁵⁶ Lewin for Secretary, Industries and Commerce to Chairnman, Public Expenditure Committee, 6 March 1967, pp.1-2. Le 1/1968/7/1 Box 1354.

be purchased and dispensed by hospital boards from non-patented sources. The Committee went further to recommend that where drugs were available from more than one source, world-wide tenders should be called for the supply of a particular drug for six months to one year for distribution through normal trade channels. This tendering would be an extension of existing procedures available for hospital boards.⁵⁷

As long as patent rights lasted, legal access to the drugs could be gained only by importing or through local manufacture under licence. Two important provisions in the New Zealand Patents Act weakened this monopoly: Section 51, the compulsory licence provision, and Section 55, the Crown use provision. Under Section 55, the Department of Health had made two successful tenders in 1962 and 1965 for the purchase of the tranquilliser chloramphenicol hydrochloride for the Mental Health Division. May and Baker's claim that its patent rights on this drug under the brand name Largactil had been infringed, and its claim for royalties in respect of government purchases made from Bamford and Gilbert, were still being considered at the time of the Public Expenditure Committee inquiry. In view of its limited success with Largactil, the Department of Health had proposed further such tenders to the Committee. It proposed that antibiotics (tetracyclines, chloramphenicol, erythromycin, penicillins) and tranquillisers, which accounted for between one-third and one-half of the drug bill, could be purchased in this way. The Department warned that such government purchases could be extremely controversial and would require a decision 'at a high level after full consideration of all aspects'.⁵⁸

Not surprisingly, in view of its commitment to the continued prosperity of the fledgling local drug industry, Industries and Commerce nervously argued against such tenders - on the grounds that overseas companies might refuse to supply the

⁵⁷ Public Expenditure Committee 1968, *AJHR* 1968, 1.12, pp.20, 27.

⁵⁸ Pharmaceutical Benefits Scheme, Submissions to Public Expenditure Committee by Department of Health: Review and General Proposals, p.6, Appendix F, Tenders for drugs supplied under Social Security, pp.1-2, Appendix G, Patents, pp.1-2. Le 1/1968/7/1 Box 1354.

market if their local firms were threatened by such competitive measures. The Department argued, furthermore, that any overseas government tenders calling for products manufactured or likely to be manufactured locally would harm the local industry and prejudice New Zealand's balance of payments. In any case, the results obtained would not provide a 'sound substitute for firm price control in New Zealand'.⁵⁹ As long as the Department of Industries and Commerce maintained its policy of encouraging local pharmaceutical manufacturers and importers to meet all government requirements, these firms would continue to be in a strong position to extract concessions. If the Department of Health had insisted on buying some supplies of major drugs from cheaper sources, whether locally or imported, the same may not have applied.

This important recommendation on tendering was to languish, in spite of strong support from Treasury.⁶⁰ No government purchases of drugs supplied under the Pharmaceutical Benefits Scheme were ever made. In the 1980s, the Department of Health was to attempt to purchase patented medicines on its own behalf, but was forced to abandon the scheme and, moreover, to repeal the compulsory licensing provisions of the Patents Act because infringement of patents was held to be a violation of intellectual property rights.

On the question of the term of patents, the Public Expenditure Committee boldly recommended that 16 years was longer than necessary to enable manufacturers to recoup expenses on research and promotion. It proposed a 10-year term as a more realistic period of protection, which would allow two years for a drug to become established and a further eight for recovery of expenses.⁶¹ As we shall see,

⁵⁹ Lewin for Secretary, Industries and Commerce, to Chairman, Public Expenditure, 6 March 1967, p.5. Le 1/1968/7/1 Box 1354.

⁶⁰ The Treasury strongly supported further government efforts to tender for commonly used drugs, as well as the reduction of the period of patent protection for drugs. Durbin, Secretary to the Treasury, to Chairman, Public Expenditure Committee, 20 January 1967, pp.1-2. H 1 208-53-1 32177.

⁶¹ Public Expenditure Committee 1968, *AJHR* 1968, I.12, pp.20, 26-27. See also *Statutes of New Zealand*, 1953, Vol I, No.64, pp.495, 502.

however, far from reducing the term of patents on medicines, the National Government was to strengthen this protection by providing for *extensions* of the term of each patent, in effect confirming the monopoly on the local market held by the major patent-holding firms. In short, in spite of this extensive inquiry, the original arrangements for providing pharmaceutical benefits remained intact.

The problems of powerful vested interests in the public provision of medicines were by no means unique to New Zealand. By the 1960s, under national health care programmes of various kinds, governments in the United States, Canada, the United Kingdom and Australia subsidised either wholly, or in part, the purchase of a similar range of drugs from the same major international companies as governments in New Zealand. Those schemes extensively supported by public funds appeared to have the strongest built-in political pressures to limit expenditure. This equation was not so simple in practice, however. Where a substantially state-supported medicines scheme was linked to a strong, well-represented, local pharmaceutical industry, as in the United Kingdom for example, governments sought both to hold down drug prices but, at the same time, to ensure the profits and prosperity of local manufacturers. Indeed, the latter objective was sometimes more important than the former. In this way, governments sometimes had conflicting interests as both sponsor and main customer of local industries. Price competition could be encouraged, and the monopoly of supply of the major multinational firms undermined, by the state grant of compulsory licences to enable local production or import of drugs still under patent. A brief look at the contests over compulsory licensing in the United States, Canada and the United Kingdom during the 1960s provides an interesting prelude to the story of a similar contest in New Zealand during the 1980s. The economic and political strength of the local industry and its lobby group in each country, along with the will and philosophy of the government, determined the outcome in each case.

Extensive official inquiries during the 1960s on drug costs and prices in the United States, Canada and the United Kingdom all examined the crucial issues of patents and compulsory licensing. For more than a decade, from 1957 to 1967, the United

States Senate Subcommittee on Antitrust and Monopoly, chaired by Senator E. Kefauver, examined the pricing and marketing policies of the drug industry.⁶² The Subcommittee examined several individual products showing a profit margin based on selling prices of more than 90 per cent over factory costs.⁶³ By cross-examining the medical directors of a number of health co-operatives, the Committee uncovered wide discrepancies between the prices of drugs sold under their generic names, and those sold under brand name. One co-operative regularly purchased 0.25 milligram tablets of the anti-hypertensive reserpine for \$1.70 per 1,000, for example. Yet the price to pharmacists of Ciba's 0.25 milligram reserpine tablets, sold under the brand name Serpasil, was \$39.50 per 1000.⁶⁴

During 1967, the Subcommittee investigated competition in the pharmaceutical industry, including restraint of trade, drug pricing, and the relative effectiveness of generic and brand-name drugs. It recommended the grant of compulsory licences at an 8 per cent royalty rate after only a short period of exclusive use by the patent holder. The Subcommittee never succeeded in altering the legislation applying to patents and compulsory licences, however. The United States Pharmaceutical Manufacturers Association marshalled all its resources to fight the passage of Senator Kefauver's bill to implement this recommendation; during its passage through Congress, the bill was shorn of both these provisions.⁶⁵ The lengthy hearings, however, provided voluminous material on the elaborate structure of the international pharmaceutical industry, based on patents, compulsory licensing, trademarks, brand names and generic compounds. All these issues were faced by parliamentary

⁶² Lang, *Politics of Drugs*, p.13; for a detailed and lively account of the earlier part of the Kefauver battle see Richard Harris, *The Real Voice* (New York, Macmillan, 1964).

⁶³ W. Duncan Reekie and Michael H. Weber, *Profits, Politics and Drugs* (London, Macmillan, 1979), p.66.

⁶⁴ U.S. Senate, Monopoly Subcommittee of the Select Committee on Small Business, *Competitive Problems in the Drug Industry*, 17 May 1967, pp.219-224. Le 1/1968/7/1.

⁶⁵ Myron J. Gordon and David J. Fowler, *The Drug Industry: A Case Study in Foreign Control* (Toronto, James Lorimer, 1981), p.39.

inquiries in Canada and the United Kingdom during the same period, and were later to be confronted by New Zealand governments.

In Canada, just as in New Zealand, the state played a major role in providing and paying for health care. By the 1960s, most Canadians had their hospital and medical costs covered by national and provincial insurance plans, based on a mixture of taxes and levies or taxes and local body rates. Some costs were covered by Federal and provincial schemes, some by private or group insurance plans.⁶⁶ When an official investigation in Canada made public its findings in 1963 that drug costs in Canada were among the highest in the world, the Liberal Government appointed a Select Committee of Parliament, the House of Commons Special Committee on Drug Costs and Prices. The Committee came to be known as the Harley Committee, after its longest-serving chairman, Dr Harry Harley.⁶⁷ The most far-reaching recommendation of its 1965-1967 inquiry concerned drug patents and brand names. Most significantly, the Committee concluded that the Canadian Patent Act should be amended to include applications for compulsory licences to import drug products in all forms.⁶⁸

The Canadian Liberal Government responded promptly by passing legislation in 1969 to amend the Patent Act, the Trade Marks Act and the Food and Drugs Act, which went somewhat further than the Harley Committee seems to have intended. Under the new legislation, a manufacturer of a patented drug was compelled to grant a licence to any firm that requested it, subject to a royalty payment. The licensed firm could import either the product or the fine chemicals, as long as the final product

⁶⁶ Commission of Inquiry on the Pharmaceutical Industry (Eastman Commission), *Report* (Ottawa, Minister of Supply and Services Canada, 1985), pp.5-7; Claudia Scott, Geoff Fougere and John Marwick, *Choices for Health Care: Report of the Health Benefits Review* (Wellington, Department of Health, 1986), pp.86-88.

⁶⁷ Lang, *Politics of Drugs*, p.189.

⁶⁸ House of Commons Special Committee on Drug Costs and Prices (Harley Committee), *Proceedings* (Ottawa, Queen's Printer and Controller of Stationery, 1967), p.54; see, too, pp.38-44.

was made in Canada.⁶⁹ Moreover, the Government gradually introduced a system of generic substitution so that pharmacists could supply generic drugs unless specifically ordered by the doctor to supply a branded drug. In order to maintain their profits, pharmacists shopped around for cut price deals. The result was a downward spiral on the costs of some drugs - and the discouragement of further investment by the drug industry.⁷⁰ The prices of the few products for which compulsory licensing had provided generic substitutes by 1976 fell from 93 per cent of their United States prices in 1968 to 74 per cent in 1976. There were many qualifying factors to this success, however. For example, generic producers found it profitable to compete on only a few high-volume products.⁷¹ Furthermore, by 1986, intense pressure from the United States Government and multinational pharmaceutical companies was to force the Canadian Government to strengthen its patent law, making it almost impossible to market generic drugs for the first 10 years after the introduction of a new drug.⁷²

⁶⁹ Lang, *Politics of Drugs*, p.248; Gordon and Fowler, *Drug Industry*, p.63. The first compulsory licence was issued by Hoffmann La Roche to Frank W. Horner, and covered the right to market diazepam (trade name Valium). The royalty rate was set at 4 per cent, which became the norm for future licence holders. Gaining the licence in this way was only the first step in gaining entry to the market, however, although a crucial one. The licence holder had still to overcome the strong brand-name identification of the original producer. Because doctors still used brand names when writing prescriptions, the licensed firm had to establish its own brand name if it was to gain a position in the market.

⁷⁰ Tony Smith, 'Limited lists of drugs: lessons from abroad', *British Medical Journal*, 290 (1985), pp.532-534. For example, Smith Kline and French Canada Ltd closed its research and development institutions in Quebec, Ayerst Laboratories moved to the United States, and Abbott severely curtailed its research and development efforts. By the 1980s, the industry had simply moved over the border into the United States.

⁷¹ Gordon and Fowler, *Drug Industry*, p.86. The modest performance of the overall price index was in part the result of the small number of drugs (only 27) for which compulsory licensing created generic substitutes by 1976.

⁷² Joel Lexchin and Pauline Norris, 'Patents and generics: a campaign diary', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), p.236; Notes for Remarks by the Honourable Michel Cote, Minister of Consumer and Corporate Affairs, Canada for a Press Statement, June 27, 1986, in Coopers & Lybrand Associates, *Report on the Removal of Medicines from Price Control* (Wellington, Department of Health, 1986), Appendix 6.1., pp.1-9; Michael M. Atkinson and William D. Coleman, *The State, Business, and Industrial Change in Canada* (Toronto, University of Toronto Press, 1989), Chapter 6, 'The political economy of domestic expansion: pharmaceuticals'.

The local British pharmaceutical industry included several domestically owned, internationally successful firms such as ICI, May and Baker, and Glaxo Laboratories. From 1938 to 1963, the British drug industry had consistently gained between 12 and 16 per cent of the world export trade in drugs. (In comparison, Canada had earned 1 per cent during this same period.) Clearly, the British industry was likely to receive a sympathetic hearing from both Labour and Conservative governments.⁷³ It made an important contribution to the economy through rapidly increasing exports and investments in research and manufacturing. Just as in New Zealand on a much smaller scale, the British Government was at the same time attempting to regulate, control and negotiate with the pharmaceutical industry over the price of drugs for the national health service, and to pursue an industrial policy aimed to maintain Britain's leading role in the global market for pharmaceuticals.⁷⁴

In 1965, publicity over the Kefauver Committee's investigations and continuing official unease concerning drug industry profits and prices, prompted the British Labour Government in 1965 to appoint a further committee of inquiry to examine the industry's relationship with the National Health Service. This committee became known as the Sainsbury Committee, after its chairman, Lord Sainsbury. Two major questions concerned the inquiry: were medicines too expensive? Did the drug companies make excessive profits? The Committee's report clearly set out the tangle of state and commercial interests in the provision of medicines and, in particular, the ambivalent policies of the Ministry of Health both as regulator and as sponsor of the local pharmaceutical industry:

The National Health Service, which pays almost the entire bill for prescription medicines, is not any ordinary buyer. The medicines are developed, manufactured and supplied by the pharmaceutical industry; they are prescribed by doctors; they are consumed by patients; and, through the National Health Service, the taxpayer eventually pays for them. But neither the doctor who

⁷³ Lang, *Politics of Drugs*, pp.26-27; Committee of Enquiry into the Relationship of the Pharmaceutical Industry with the National Health Service 1965-1967 (Sainsbury Committee), *Report*, Cmd 3410 (London, HMSO, 1967), p.13.

⁷⁴ See in general Justin Greenwood, 'Producer interests in medicines policy: the role of the pharmaceutical industry', in *Social Pharmacy: Innovation and Development*, ed. G. Harding, S. Nettleton and K. Taylor (London, The Pharmaceutical Press, 1994).

prescribes nor the patient who consumes is immediately concerned with prices. It is the indirectness of their relationship with the industry which imposes on the Health Departments both a difficulty in controlling costs and a special duty to exercise a surveillance over prices in order to ensure, as far as possible, that they are fair both to the industry and to the taxpayer.⁷⁵

The Sainsbury Committee confirmed earlier findings of the Hinchliffe Committee that branded medicines were taking an ever-larger share of National Health Service spending on medicines. It attacked the local industry for making excessive profits and boldly recommended the introduction of standard cost returns to enable closer scrutiny of companies' costs, prices, profits and capital employed. The Sainsbury Committee also made two important recommendations concerning brand names and patents: it proposed that Section 46 of the United Kingdom Patents Act 1949 (the Crown use provision) should be widened to apply to the General Medical and Pharmaceutical services of the National Health Service, rather than just to the Hospital Services (which represented only about 20 per cent of the total consumption of medicines). The British Minister of Health, Enoch Powell, had already successfully tendered for the supply of five different medicines under Section 46 in 1961; these products had been supplied at prices very much lower than the prices of the patent holders.⁷⁶ Thus the Committee was not establishing any new principle, but simply extending an existing one. Under this procedure, government departments could import low-priced, unpatented supplies of medicines from sources such as Italy to supply the National Health Service. The Association of the British Pharmaceutical Industry fought hard against this recommendation and, initially, the Labour Government ignored the idea. However, in a somewhat diluted form, it eventually pushed through an extension of Section 46 as part of the Health and Social Services Act 1968. Due warning was to be given should it ever be necessary to invoke these powers, so that Parliament would have an opportunity of discussing and approving

⁷⁵ Sainsbury Committee, p.5.

⁷⁶ Sainsbury Committee, pp.33-34. For example, the original patentee price of medicine 'A' in 1961 was 153s 4d; in 1965 93s 2d. The Section 46 supplier price for medicine A in 1961 was 33s 10d; in 1965 8s 6d. The original patentee price of medicine 'E' in 1961 was 170s; in 1965, 155s. The Section 46 supplier price for medicine E in 1961 was 20s 2d; in 1965, 19s.

their exercise.⁷⁷ The British Government subsequently incorporated Section 46 in the British Patents Act 1977, which laid down special procedures by which rights under patents could be appropriated by the government for Crown use, on payment of compensation as deemed appropriate by the Comptroller of Patents. Third parties could then be authorised to exploit the patent.⁷⁸ At the same time, as we shall see, the United Kingdom Banks Committee in 1970 came down firmly on the side of even stronger patent protection for pharmaceuticals.

The Sainsbury Committee recommended that Section 41 of the Patents Act 1949, the compulsory licence provision, while only an indirect means of influencing drug prices, should nevertheless be retained.⁷⁹ A subsequent committee of inquiry on the reform of patent law, the Banks Committee, recommended that, in the light of the Government's extension of Section 46 powers, Section 41 licences should be abolished. In due course, in return for the pharmaceutical industry's co-operation on the introduction of advertising regulations, the British Labour Government dropped compulsory licences from the 1977 Patents Act.⁸⁰

More drastically, the Sainsbury Committee recommended that brand names be abolished in favour of one approved name for each prescription medicine; a proposed Medicines Commission would design product names, although patents would still be available. The Committee claimed, correctly, that brand names prolonged the seller's monopoly even after the patent expired. Furthermore, brand names could cause confusion when identical products had different names.⁸¹ The Labour Government took no specific action, however, no doubt influenced by warnings from the Association of the British Pharmaceutical Industry, especially after the 1967

⁷⁷ Lang, *Politics of Drugs*, pp.265-271.

⁷⁸ Leigh Hancher, *Regulating for Competition: Government, Law, and the Pharmaceutical Industry in the United Kingdom and France* (Oxford, Clarendon Press, 1990), p.321.

⁷⁹ Sainsbury Committee, pp.35-36.

⁸⁰ Hancher, *Regulating for Competition*, p.323.

⁸¹ Sainsbury Committee, pp.78-80.

devaluation of sterling, about the effects such a measure would have on the industry's exports and international competitiveness.

An editorial in the *British Medical Journal* came down firmly against such a move, claiming that any reduction in costs to the Health Service envisaged by the Sainsbury Committee would be more than offset by the economic consequences that would follow. Indeed, the Committee could not have realised how 'devastating' a prohibition on brand-names would be to the pharmaceutical industry; such a move 'could inhibit the major innovating companies in Britain from competing adequately in overseas markets'. The editorial explained how no other sector of the chemical industry showed such a favourable balance of exports to imports as did the pharmaceutical industry, on which the 'well-being' of doctors so greatly depended. From this point of view alone

the Government should be very chary of interfering adversely with the reproductive processes of a goose which has laid so many golden therapeutic eggs.⁸²

In short, the Wilson Labour Government rejected much of the action proposed by the Sainsbury Committee. Commenting on the recommendations, the future Minister of State for Health and Social Security, Sir Keith Joseph, said that he believed they carried a real risk of 'strangling' the 'modern, scientific and enterprising industry in a cocoon of controls' - thus clearly illustrating the ambivalent attitude of both Labour and Conservative governments.⁸³ This lack of resolve to reduce costs was not surprising, given the continued vigour of the local pharmaceutical industry.

Even though Australia did not have to cope with the pressures of a major domestic, manufacturing industry, it faced similar issues over the supply of pharmaceuticals. The Australian Pharmaceutical Benefits Scheme had originally applied only to a strictly limited range of expensive, life-saving medicines, which were free to everyone; pensioners were eligible to receive a wider array of drugs. Pharmacists

⁸² Anon, 'Brand names', *British Medical Journal* (30 March 1968), pp.781-782.

⁸³ Quoted by Lang, *Politics of Drugs*, p.223, from the *Chemical Age* (7 October 1967).

were allowed a mark-up of 25 per cent on the 'price to pharmacist', based on the price negotiated with the manufacturer, including a notional wholesaler's mark-up, plus a dispensing fee. As in New Zealand, doctors successfully opposed any form of direct government control on prescribing, such as the compulsory use of official prescribing forms, or the limitation of the more expensive drugs to specific conditions. While only a restricted range of drugs was available, doctors were free to specify any brand name they wished. The indiscriminate use of costly imported drugs, including cortisone and streptomycin, meant that the worst predictions of an explosion in the costs of pharmaceutical benefits were soon exceeded. The Federal Treasury condemned doctors' handling of pharmaceutical benefits, their reluctance to assist the Department of Health in administration, and their lip-service to the idea of disciplinary committees while, at the same time, objecting to all specific proposals for regulation of abuses. National economic problems added pressure for the control of costs. Nevertheless, by 1960 the Commonwealth (Menzies) Government bowed to pressure from both patients and doctors and expanded its original, restricted list of drugs to provide a full range under the Pharmaceutical Benefits Scheme. Significantly, however, unlike New Zealand governments, the Commonwealth Government also introduced a patient co-payment of 5s per prescription in an attempt to keep down costs to the state.⁸⁴ These patient contributions for all persons except pensioners (who continued to receive prescription medicines free of charge) were increased by 50 cent increments in subsequent years.⁸⁵

Because the Commonwealth Government continued to be concerned about the cost of pharmaceuticals, it was determined to exploit its negotiating position as a monopoly buyer from overseas drug companies operating in Australia, to force a

⁸⁴ James A. Gillespie, *The Price of Health: Australian Governments and Medical Politics 1910-1960*, Chapter 9 'A war of attrition: the fate of the Pharmaceutical Benefits Scheme', (Cambridge, Cambridge University Press, 1991), pp.257-259, 260, 263, 264; Coopers & Lybrand, *Removal of Medicines*, Section 5.16.

⁸⁵ *Pharmaceutical Manufacturing Industry Inquiry, Report (Ralph Report)*, (Canberra, Australian Government Publishing Service, 1979), p.89.

reduction in the price of a wide range of drugs.⁸⁶ Just as in New Zealand, listing under the Pharmaceutical Benefits Scheme was essential for market success. As in New Zealand, the Australian Department of Health had some bargaining power with manufacturers where alternative drug treatments competed for the treatment of specific illnesses. Apart from a few drugs which represented major therapeutic advances, the Department could remove products from the schedule of those medicines available as pharmaceutical benefits, or refuse to list a product if a close substitute was available at a lower price.

The Australian Department of Health had some limited success during the 1960s and 1970s.⁸⁷ At the same time, the cost of the Australian Pharmaceutical Benefits Scheme (including patient contributions) rose from \$59.3 million in 1960-61 to \$361.2 million in 1977-78, almost doubling in constant dollar terms.⁸⁸ Local drug manufacturers complained about the damaging effects on their profits of Department of Health pricing practices and policies, and successfully sought across-the-board price increases through the agency of the Australian Department of Industry, Technology and Commerce, whose concern was more for industry profitability than for the delivery of health care.⁸⁹ In response to pressure from the Australian Pharmaceutical Manufacturers' Association, the Commonwealth Government agreed to modify its pricing guidelines in order to support the local industry. In effect, this meant that when the local manufacturing component of a product was large, the negotiated price could be higher than it would otherwise have been. Moreover, to reinforce the position of local firms, the Government extended the duration of drug

⁸⁶ 'Cabinet to act: Government ready for showdown on drugs', Appendix, Extract from *Australian Financial Review*, 716 (September 1963), pp.1-2. H 1 208-53-1 2117 32177.

⁸⁷ W. Duncan Reekie, 'Drug Prices in the UK, USA, Europe and Australia', *Australian Economic Papers*, 23:42 (1984), pp.71-78.

⁸⁸ Ralph Report, p.88.

⁸⁹ Coopers & Lybrand, *Removal of Medicines*, Sections 5.44 to 5.50. Submissions to this Department were to result in five separate general price increases from 1978.

patent protection from 16 to 20 years.⁹⁰ In this way it joined a number of other national governments, including New Zealand governments, in maintaining a privileged, protected, regime for local branches of international, patent-holding firms. Just as in New Zealand, acquiring medicines at least cost conflicted with constant efforts to appease local drug manufacturers.

The Australian Director General of Health, Sir William Refshauge, set out the problems of cost control in pharmaceutical benefits, which were especially intractable because so many conflicting interests are involved. In his view the principal attribute of a control measure was that it should be effective. At the same time however, the control measure should

- (a) not interfere unduly with the rights, privileges and obligations of patients, nor impose undue hardship on them, particularly where the burden is heaviest;
- (b) not interfere unduly with the rights, privileges and obligations of the professions concerned in the Scheme;
- (c) maintain harmonious relations with the pharmaceutical industry notwithstanding the objective of the Government to obtain the most economical scheme possible;
- (d) be politically acceptable.

No doubt you have shared our experience from time to time of having a suggestion put forward which shows promise of being effective but which falls down on one or more of the other criteria.⁹¹

Clearly, the same provider groups dominated the provision of medicines in Australia as in New Zealand. Doctors' prescribing dictated the volume and mix of drugs, yet they remained free of strict official controls. Disputes between the Government and pharmacists, and between the Government and manufacturers, in particular about price setting policies and the delays before drugs could be listed as pharmaceutical

⁹⁰ George R. Palmer and Stephanie D. Short, *Health Care & Public Policy: An Australian Analysis*, Second Edition (Melbourne, Macmillan, 1994), pp.130-131,

⁹¹ Director-General of Health in Australia to the Director-General of Health, New Zealand, unsigned, 21 February 1967, p.1. Le 1/1968/7/1 Box 1354. Through his earlier position as D-G of Army Medical Services, Refshauge was very closely linked with the Australian Medical Association. This association with the doctors helps to explain his cautious, deferential attitude on pharmaceutical benefits.

benefits, were to prompt two extensive official inquiries in Australia during the 1970s and 1980s.

Patents, brand names and compulsory licensing were also to haunt government departments in New Zealand during the 1970s and 1980s. Just as in the United Kingdom, governments in New Zealand, irrespective of party, continued to take a deferential attitude toward local pharmaceutical producers. Like other governments around the world, they were concerned with costs, safety and efficacy, but were just as keen to try to maintain a strong local industry - not least because by the beginning of the 1970s it represented one of the world's most successful and profitable types of economic activity.

Official inquiries on drug costs and the arrangements of the Pharmaceutical Benefits Scheme, whether dominated by vested interests or not, had resulted in some important recommendations for change. However, politicians avoided taking tough decisions which would threaten doctors' professional independence, or pharmacists' incomes, or the monopoly on the New Zealand drugs market held by major international companies, or continued electoral support.

8 Holding the Status Quo 1970-1984

Although the problems of high inflation and growing unemployment were addressed by both National and Labour throughout the 1970s, the long-standing policy of ensuring economic and social security by fostering local industry and providing the benefits of the welfare state remained in place. In line with this policy, and in spite of extensive investigation of the costs, neither National nor Labour made any important changes to the Pharmaceutical Benefits Scheme in this period. Because the Government's aim was still to make all new drugs available as quickly as was consistent with safety, controlling costs was less important than meeting demand. By 1973-74, the annual cost of pharmaceutical benefits had increased to \$45 million from \$1.1 million in 1942-43, a ten-fold increase after allowing for inflation. During the same period, the number of prescriptions increased seven-fold while the population increased from 1.6 million to almost 3 million.¹ Under the pricing provisions of the Commerce Act 1975, the Department of Trade and Industry guaranteed fixed profit margins, which it reviewed regularly, to local drug importers, manufacturers and wholesalers as it had done under the Price Control Act 1947. By whatever method these margins were calculated, the crucial cost of raw materials remained hidden. Transfer pricing enabled parent companies to buy bulk materials at low rates and sell at high rates when dealing with overseas subsidiaries. In response to drug company threats to withdraw from the New Zealand market, the National Government sought to provide incentives, including stronger patent protection, to ensure continued local investment.

The National Development Conference of 1968-1969 reaffirmed the need to develop New Zealand's productive industries on a large scale.² The Conference's Social and

¹ State Services Efficiency Review Committee, Report on an efficiency and economy review of the Pharmaceutical Services in the Department of Health, December 1974, p.19. Ministry of Health New Archives 381.4561.

² National Development Conference, Recommendations Approved, Second Plenary Session 5-9 May 1969, pp. 6, 9, 77, 135. See also Department of Industries and Commerce, Annual Report 1969, *AJHR* 1969, H.44, p.5, which noted that the recommendations of the National

Cultural Committee emphasised that the aim of this economic growth was to raise living standards, and recommended an independent examination of social security to ensure that benefits were still adequate.³

With its long-term economic strategy of joining in international trade in manufactured goods confirmed, the National Government turned its attention to such an appraisal. In 1969, it appointed a Royal Commission on Social Security to make the first comprehensive study of social welfare provision since the passing of the 1938 Act. As with most Royal Commissions, its chairman was a judge, the Right Honourable Sir Thaddeus McCarthy, a Judge of the Court of Appeal. Other members were Professor Alan Danks, Chairman of the University Grants Committee, Dr J.O. Mercer, medical practitioner, Mrs M.A. Tiller, President of the National Council of Women, and Mr J. Turnbull, company secretary.⁴ McCarthy had already chaired an inquiry on the states services and was to lead another on the Maori Land Court. Danks, an economist, had been a member of the 1961-62 Special Committee on Pharmaceutical Benefits which had made no radical recommendations for change. Mercer, as a doctor, was unlikely to want to overturn current social welfare provisions.

Confirming current arrangements for providing social security and health care seemed appropriate at the end of the 1960s, still a time of economic prosperity and full employment in New Zealand. The Commission's report, published in March 1972, provided a resounding endorsement of the principles of the welfare state. Its central argument was that, in general and irrespective of employment, everyone should have a standard of living much like that of everyone else - in other words an

Development Conference required 'from the whole economy a determined commitment to growth from which there can be no withdrawal'. See further John Gould, *The Rake's Progress: The New Zealand Economy Since 1945* (Auckland, Hodder and Stoughton, 1982), pp.134-135 and Bernard Galvin, *Policy Co-ordination, Public Sector and Government* (Wellington, Victoria University Press for the Institute of Policy Studies, 1991), p.15.

³ Recommendations of the National Development Conference, Action Completed as at 31 October 1969, Social and Cultural Committee Recommendations, p.22.

⁴ Department of Social Security, Annual Report 1970, *AJHR* 1970, H.9, p.23.

average standard of living, rather than a bottom line, which was a step forward from the principles of the 1938 Social Security Act. Although the Commission believed such an approach to be sustainable under existing economic conditions, what was proposed proved to be unsustainable in the longer term. The present social security and health benefit system had worked, the Commission's report concluded, 'to the advantage of the nation since 1938' and had become part of the economic and social fabric of the nation. This system was 'not something apart from the main stream of economic life', which could 'be put on or off as the weather or the mood' changed.⁵ As the chairman told Commission members, social welfare had its critics, but it was now 'the marrow' of national life.⁶

The Commission proposed no major reform of health benefits. Far from criticising the mounting cost of pharmaceutical benefits, it recommended firmly that 'substantially free' medicines be retained, with no general standard charge on prescriptions. In short, it confirmed the now long-standing principle of state provision of medicines:

Undoubtedly, the existence of the pharmaceutical benefit scheme has enabled the advantages of modern methods of drug treatment to be readily available to all members of the community irrespective of ability to pay. The high cost of some drugs may otherwise have influenced prescribing. Patients may have been reluctant to call in a doctor, or to collect prescribed medicines if a large cash payment was involved. Efficient treatment with modern remedies often keeps patients out of hospital, and even at work, saving public funds and increasing productivity. A greater lifespan has raised the number of aged people who frequently need long-term drug therapy, possibly with newer, more expensive preparations.⁷

The Commission accepted that the cost of medicines was increasing world-wide but that, unless the public was to be denied new, more costly drugs, expenditure on pharmaceutical benefits would continue to grow. It simply acknowledged that many

⁵ Royal Commission on Social Security in New Zealand, *Social Security in New Zealand*, *AJHR* 1972, H.53, pp.6-8, 29, 32, 61.

⁶ Royal Commission on Social Security, 'Proceedings', *New Zealand Medical Journal*, 71:452 (1970), p.36.

⁷ Royal Commission 1972, *Social Security in New Zealand*, p.441.

different sections of the community had a stake in providing medicines, 'not only citizens as patients and taxpayers, but doctors, pharmacists, wholesalers, and manufacturers'.⁸ This staunch defence of the status quo was based on a reasoned argument that the high price of medicines was offset by other advantages, such as better health and economic gain (less work lost). At the same time, it blandly accepted the stalemate between efforts to gain control of the Pharmaceutical Benefits Scheme, and resistance from a web of vested interests.

Almost all of the Royal Commission's recommendations were adopted in National's 1972 Budget and in subsequent legislation.⁹ An important innovation to follow from the report was the domestic purposes benefit for solo mothers, introduced in 1973. Others were generous accident compensation to cover those only partially covered by social security, and provision for retirement under the New Zealand Superannuation Scheme (1975), subsequently replaced by the National Superannuation Scheme in 1977. These provisions signalled the start of greater social welfare spending in New Zealand, so that the 1970s represented a striking period of innovation in social security and income maintenance.¹⁰

The third Labour Government came to office in 1972 promising many reforms while, like National, supporting a welfare safety net for all. The domestic purposes benefit and the earnings-related, comprehensive accident compensation scheme were introduced by this Government, although both were bi-partisan measures. Labour also introduced a compulsory contributory superannuation scheme. This expansionary programme helped to fuel inflation, which was compounded by the first of a series

⁸ Ibid., p.443.

⁹ These benefits could be called 'generous' in a New Zealand context, but not in the wider context of the OECD. See Francis G. Castles, *The Working Class and Welfare: Reflections on the Political Development of the Welfare State in Australia and New Zealand, 1890-1980* (Wellington, Allen & Unwin/Port Nicholson Press, 1985), pp.29-30, for New Zealand's shift from welfare 'leader' to welfare 'laggard' in the post-war years.

¹⁰ Brian Easton, *Pragmatism and Progress: Social Security in the Seventies* (Christchurch, University of Canterbury, 1981), p.7; Chris Rudd, 'The New Zealand welfare state: origins, development, and crisis', in *State and Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), p.229.

of increases in world oil prices. Unemployment and inflation increased sharply in New Zealand where prosperity declined and the deficit in the public accounts increased.¹¹

National was again in power in 1975, pledged to restore New Zealand's 'shattered economy' and, under the leadership of R.D. Muldoon, was the dominant political force for the most of the next decade.¹² The crucial importance of National Superannuation in National's election seemed to indicate a firm public preference for increased state spending on welfare. The Government's dilemma remained unchanged: how to reconcile its limited capacity to pay with the public expectation of a continuing commitment to growing economic and social security. Extra demands for superannuation, accident compensation, unemployment and welfare benefits, as well as subsidies for ailing industries, put pressure on the Muldoon Government to stabilise the economy. Another economic pressure was the need to subsidise exporters in order to generate foreign exchange to cover the rapidly increasing overseas debt. Instead of broad policy changes, the Government repeatedly resorted to detailed interventions to hold down inflation and unemployment, to provide stability and help to ensure the prosperity of manufacturers and exporters of agricultural commodities.¹³

This state-managed 'local industry' policy was still centred in the large and powerful Department of Industries and Commerce, renamed Trade and Industry in 1972.¹⁴

¹¹ John Roberts, *Politicians, Public Servants and Public Enterprise: Restructuring the New Zealand Government Executive* (Wellington, Victoria University Press for Institute of Policy Studies, 1987), pp.145-146; Easton, *Pragmatism and Progress*, pp.7, 15-16; Gould, *Rake's Progress*, pp.141-142.

¹² Barry Gustafson, *The First 50 Years: A History of the New Zealand National Party* (Auckland, Reed Methuen, 1986), p.120.

¹³ Department of Industries and Commerce, Annual Report 1971, *AJHR* 1971, H.44, p.7.

¹⁴ The Trade and Industry Amendment Act 1972 changed the name of the Department from Industries and Commerce to Trade and Industry. See 'Ken Futter: fortune smiled the second time', *National Business Review*, 19 February, 1975, p.7, for comments by the new Secretary of Trade and Industry, on long-term policy. Futter's reference to the Industrial Efficiency Act 1936 indicates his sense of the long history of his Department's policy.

The most important element of this policy was price control, that is the direct regulation of retail, wholesale and manufacturers' prices, usually with some review allowed based on cost changes, and indirect regulation by way of controls on margins and rates of return.¹⁵ By the 1970s, the ad hoc management of price control developed over many years by the Price Tribunal and Trade and Industry's Price Control Division began to attract sharper criticism from manufacturers. The New Zealand Manufacturers' Federation, for example, spelt out the disastrous effects on industry of attempting to hold down profit levels according to 'profit ceilings'. It argued that the existing unwieldy system gave no incentive to manufacturers to be more efficient and increase productivity, that the Department of Trade and Industry's powers were weakened by delegation from the Price Tribunal, and that much greater efforts to control inflation were needed in order to boost local manufacturing. In short, the Federation was demanding a new system of price stabilisation.¹⁶

The third Labour Government (1972-1975) responded cautiously to such pressure by passing the Commerce Act 1975 to amend and consolidate the Trade Practices Act 1958 and the Control of Prices Act 1947. It also established the Commerce Commission, which replaced both the Price Tribunal and the Trade Practices and Prices Commission, and gave jurisdiction to the Minister of Trade and Industry to fix maximum prices for the goods and services published in a 'Positive List' of Controlled Goods and Services still subject to price control.¹⁷ Under this tortuous legislation, much of the existing price control over costs, rates of return, profit margins and selling prices remained in place. When determining prices, the

¹⁵ See Alan Bollard, 'More market: the deregulation of industry', in *Economic Liberalisation in New Zealand*, ed. Alan Bollard and Robert Buckle (Wellington, Allen & Unwin/Port Nicholson Press, 1987), pp.28-29 for a summary of the tangle of official measures.

¹⁶ New Zealand Manufacturers' Federation, Submissions on Price Control to the Minister of Trade and Industry, W.W. Freer, 7 March, 1973, pp.1-29. ABDI box 225, PC 60/4/- Part 14, Accession W4256. See also 'Seconds out for the big fight over profits', *National Business Review*, 16 October, 1974, p.8.

¹⁷ Kerrin Vautier, 'Competition policy and competition law in New Zealand', in *Economic Liberalisation in New Zealand*, ed. Bollard and Buckle, p.57.

Department of Trade and Industry could still allow manufacturers and suppliers of services to recover full costs plus their established margins of profit.¹⁸

In spite of official policy, Trade and Industry reports suggested an awareness that, where meaningful competition existed, as well as legislation to prevent monopoly and other unfair trading practices, direct controls on prices were unnecessary. Indeed, the Secretary of Trade and Industry, K.J. Futter, acknowledged that, in practice, price control amounted simply to cost-plus addition, so that when a company gained permission to increase prices on the basis of increased costs it was likely to ensure that it claimed all allowable costs each time it sought such a rise. In general, employee groups sometimes expected price control alone to hold down inflation right across the economy. Its 'failure' could be used by these groups to push for controls on incomes to be relaxed. Nevertheless, because the Department's policy was still to provide incentives for investment by commerce and industry, particularly manufacturing industry, and to ensure profits sufficient to boost production, it preferred to hold the status quo in the meantime.¹⁹

Anxious questioning of the principles of government price control continued. The New Zealand Planning Council, for example, established under the Muldoon National Government in 1977 following a report by a Task Force on Economic and Social Planning, suggested that the Government should no longer guarantee to cover the assessed costs of production of any particular product because producers must adapt to changing market conditions overseas. It followed that unnecessary price controls should be removed where competition was reasonably effective. When control was required, prices should be more important than profits - which could be improved through greater efficiency at a fixed price.²⁰

¹⁸ Minister of Trade and Industry to all Government Members, Operation of Price Control, undated (February, 1976), p.3. ABDI Box 225 PC 60/4/- Part 14, Accession W4256.

¹⁹ Futter, Secretary, to Minister Trade and Industry, Price Control Policy, 9 December 1975, pp.1-6. ABDI PC 60/4/56, Accession W4256.

²⁰ New Zealand Planning Council, *Planning Perspectives 1978-1983* (Wellington, New Zealand Planning Council, 1978), pp.86,91

Meanwhile, National's powerful Cabinet Economic Committee ordered a review of all price control policy in 1978 to which the Prime Minister's Department, the Treasury and the Department of Trade and Industry would contribute. The resulting Review of Pricing Legislation spelt out several serious weaknesses in price control, namely that it encouraged cost-plus pricing and had little direct effect on the overall level of prices. Indeed, its cost-plus basis could even encourage business to be 'lax' about cost control and to be more concerned about recovering increased costs. Most importantly, the emphasis on recovering increased costs in price control legislation could stifle competition. The regulations that allowed established wholesale and retail margins to continue could be seen as official 'sanction' of existing margins rather than forcing competition on price. The most serious charge against widespread price control was its long-term effect on resource allocation; efficient traders could not raise their profit margins to the extent the market allowed, enabling them to expand operations, while inefficient traders could continue trading and make adequate profits.²¹

The Department of Trade and Industry price control on drugs supplied under the Pharmaceutical Benefits Scheme seemed to confirm these criticisms. The Government's policy of encouraging local representatives of all the major international drug companies to supply New Zealand's small market as importers and manufacturers was incongruous. Nevertheless, according to Trade and Industry, increasing the depth of local drug manufacture would lessen dependence on overseas principals, earn foreign exchange, develop specialised technology, and possibly widen the scope for job opportunities in the chemical industry.²²

All drugs were included in the Positive List of Goods and Services and so remained under direct price control in the 1970s. When approving maximum profit margins

²¹ Cabinet Economic Committee, Review of Pricing Legislation, 28 April 1978, p.3. AATJ T & I 3/1/42, Accession W3566. See also Alan McRobie, 'The politics of volatility', in *The Oxford History of New Zealand*, Second Edition, ed. Geoffrey W. Rice (Wellington, Oxford University Press, 1991), pp.392-395.

²² Department of Industries and Commerce, Draft Report, Pharmaceutical Industry, December 1972, pp.15-16. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256.

for pharmaceutical importers and manufacturers, wholesalers and pharmacists, Trade and Industry officials allowed recovery of production costs, together with a stated return on shareholders' funds or assets. To calculate a 'controlled' maximum selling price to drug wholesalers, officials negotiated with each importer or manufacturer a 'formula', which consisted of a percentage margin of gross profit to be added to the landed cost or New Zealand manufactured cost of drugs. The gross margin was designed to allow companies to recover expenses and to achieve 'a reasonable level of profit'.²³

Under the Commerce Act 1975, the Department in theory had all necessary powers to obtain information from drug companies. Yet it had still no powers to require overseas companies to provide detailed information which could legally be obtained from local firms.²⁴ Because local subsidiaries were wholly or largely owned by companies based in Europe or the United States, price control amounted largely to rubber-stamping price applications. Indeed, one officer was moved to comment on the 'psychological effect on the poor drone who has to process this paper':

If, after a while, the officer doesn't seriously question the purpose of the exercise there would be grounds for wondering whether he/she is the sort of material this dept needs. At the moment our central records clerk is doing some of this work and hardly considers it to be [as] challenging as processing the daily mail.²⁵

Each company regularly applied to revise its formula, claiming increased operating costs, including those on labour and raw materials, and fluctuations in exchange rates. When dealing with individual price approval applications, officials simply required evidence of the claimed cost of importing or manufacturing drugs to establish that the profit sought was 'reasonable'. Hence companies had only to

²³ Barrett, Trade and Industry, Procedure Sheet - Positive List Drug Applications, undated, circa 1979, p.1. BAJA 35/30 Part 6, Accession A602.

²⁴ Shroff for Secretary Trade and Industry to Barrett, Pricing of Pharmaceuticals, 4 October 1979, p.2-3. BAJA 35/30 Part 6, Accession A602.

²⁵ Barrett to Pickering, Automatic Price Approvals - Pharmaceuticals, 9 December 1980, p.1. BAJA 35/30 Part 6, Accession A602.

'prove' increased costs, which could be translated into prices. To strengthen its case each company continued to show only modest profits (or even losses) on pharmaceutical production, which could have resulted from payment of inflated transfer prices for raw materials supplied by parent companies, plus the payment of royalties and other substantial fees such as rents and 'technical services' or 'management services'.²⁶ Investigating officers attempted to verify increased costs by citing invoices which recorded raw material imports from parent companies or associate companies, and checking the arithmetic of each company's calculations. If they recommended a lower price increase than that sought, the applicant could appeal to the Commerce Commission.

In September 1971, for example, May and Baker (NZ) Ltd applied for a revised pricing formula based on its United Kingdom selling price to wholesalers, to calculate its selling price to wholesalers in New Zealand.²⁷ The general manager, N.J. Baxter, stressed the company's declining profits for prescription medicines. He claimed that operating costs had risen by 10 per cent since the previous year, but that the company required a margin of more than 18 per cent.²⁸ He estimated that the proposed new formula would increase selling prices by an average of 9.2 per cent which, he claimed, was justified by financial results for the previous three trading years.²⁹ On a base figure of products to the value of £100 in the United Kingdom, Baxter provided a sample calculation using his proposed revised formula. To the £100 he added a margin for May and Baker (NZ) Ltd of 17.6 per cent (£117.6) plus the drug wholesaler's 'approved' margin of 25 per cent (£147.0) plus the pharmacist's margin of 50 per cent (£220.5) plus an exchange surcharge of £6.4,

²⁶ In 1974, for example, Sandoz Pharma Ltd in Auckland, paid a 'Technical Services Fee' of \$26,000 to its parent company in Basle.

²⁷ Williamson, Medical Sales Department, May and Baker (NZ) Ltd, 6 September 1971, p.1. IC Box 11 file 3/92, Accession W2268.

²⁸ Baxter, May and Baker (NZ) Ltd, Submission to the Price Tribunal, Application for New Pricing Formula, 23 February 1972, pp.14, 22-32. IC Box 11 file 3/92, Accession W2268.

²⁹ Beard for Secretary, Industries and Commerce to President, Price Tribunal, 19 January 1972, p.2. IC Box 11 file 3/92, Accession W2268.

bringing the total to £226.9 (which equalled a New Zealand dollar amount of \$453.8).³⁰

A senior member of the Department, C.E. Beard, concluded that the net cost of imported drugs to May and Baker (NZ) Ltd was 'probably higher than a normal arms-length landed cost', although he had been unable to 'secure specific information on this aspect from the company'. Because May and Baker appeared to be making satisfactory returns already, according to departmental guidelines, Beard recommended that this application for a new formula be declined.³¹ May and Baker appealed unsuccessfully to the Price Tribunal. Baxter rejected the contention that links between May and Baker (NZ) Ltd and its parent company had allowed inflated landed costs of imported drugs, and continued to argue that the company was making a loss on a large part of its activities. He maintained that the Voluntary Price Regulation Scheme between the United Kingdom Ministry of Health and the pharmaceutical industry was a guide to 'fair and reasonable prices'.³²

Despite Baxter's claims, United Kingdom prices were far from being a reliable starting point for calculating New Zealand prices. Chapter 6 has shown how the Voluntary Price Regulation Scheme, which governed price negotiations between the industry and the British Minister of Health, gave no guarantee of firm information on costs. Each successive version was weakened by an absence of government powers. Like its predecessors, the sixth pricing scheme, negotiated in 1978 and renamed the Pharmaceutical Price Regulation Scheme, side-stepped the crucial issue

³⁰ May and Baker (NZ) Ltd, Current Approved Pricing Formula, Appendix B, Williamson Medical Sales Department, to the Secretary, Industries and Commerce, 6 September, 1971. IC Box 11 file 3/92, Accession W2268.

³¹ Beard for Secretary, Industries and Commerce to President Price Tribunal, 19 January 1972, pp.1-7. IC Box 11 file 3/92 Accession W2268. The Department calculated that profits from local drug manufacture represented a tax-paid return of 15.9 per cent on investment. If it accepted May and Baker's allocation of costs (including royalties to parent company), the net return would be only 11.6 per cent. Paper for Tribunal hearing 28 March 1972, p.3. IC Box 11 file 3/92, Accession W2268.

³² May and Baker (NZ) Ltd, Submission to the Price Tribunal, Application for New Pricing Formula, 23 February 1972, pp.5, 18-32. IC Box 11 file 3/92, Accession W2268.

of transfer pricing and still depended on voluntary agreement between government and industry. Companies had simply to use their 'best endeavours' to inform the Ministry of Health of profit margins or contributions included in the transfer prices of significant items. Most importantly, under the terms of the 1978 version, agreement on prices would be based on a target rate of profit for each company. In effect, the British Government would *reward* those firms with good investment records and higher rates of profit.³³ In this way, the British Ministry of Health was still hamstrung by conflicting roles: on one hand it regulated and controlled the local pharmaceutical industry under the National Health Service; at the same time, it sponsored the industry as an export earner of foreign exchange. A similar conflict of interests existed within the New Zealand Government.

In June 1972, Baxter warned the Minister of Industries and Commerce of the possible consequences of the Tribunal's recent unfavourable decision on the company's pricing formula. Because the parent company was 'particularly concerned', he was being called to London to discuss the position. He thought it possible that the parent company 'might feel disposed to review the operations of its subsidiary in New Zealand, if it was unable to make more progress on the pricing front'.³⁴ Shortly after, at an informal meeting of the Price Tribunal, the President assured Baxter that May and Baker was free to make a fresh application 'seeking relief from additional cost' as a result of fluctuations in exchange rates and extra operating costs not reflected in the accounts for the company's 1971 trading year. Such extra costs as established 'would be taken into account by the Tribunal and the

³³ For the sixth PPRS in operation see Leigh Hancher, *Regulating for Competition: Government, Law, and the Pharmaceutical Industry in the United Kingdom and France* (Oxford, Oxford University Press, 1990), pp.194-196; Joe Collier, 'The Pharmaceutical Price Regulation Scheme: a time for change', *The Lancet* (13 April 1985), pp.862-863; Ronald W. Lang, *The Politics of Drugs: A Comparative Pressure-Group Study of the Canadian Pharmaceutical Manufacturers' Association and the Association of the British Pharmaceutical Industry, 1930-1970* (Farnborough, Saxon House, 1974), Chapter 7. See also John Parker, *Pharmaceutical Patents in New Zealand* (Auckland, IMS NZ, 1991), p.102.

³⁴ Beard for Secretary, Industries and Commerce to President, Price Tribunal, 12 June 1972, IC Box 11 file 3/92, Accession W2268.

formula reviewed accordingly'.³⁵ Clearly, government officials were prepared to compromise with local drug firms so that, in practice, the prices of drugs charged to the Department of Health (like those charged to the British National Health Service) bore little relation to the cost of manufacture, but were decided by what each firm believed the market would stand. Because this was the sort of leverage that the system not only permitted, but encouraged, the compromise with May and Baker was by no means unique.

Like May and Baker, Merck Sharp and Dohme (NZ) Ltd had also made substantial investments for local production of both prescription and veterinary drugs. Like other local pharmaceutical manufacturers, Merck made regular, successful applications for revised prices for both imported and locally produced medicines, basing its claims on increasing labour costs, factory overheads, changes in exchange rates and, especially, on increases in raw material prices. Each separate 'Special Approval' was simply based on Merck's current pricing formula.

In 1969, the Price Tribunal had provisionally approved a pricing formula for Merck's locally produced drugs of 10 per cent on United Kingdom prices, with a right to go to a ceiling 'plussage' of 18 per cent on any new line. This formula was to apply to production at the company's new plant at Wiri in Auckland.³⁶ During the next two years, Merck successfully pressured the Minister of Industries and Commerce, N.L. Shelton, as well as departmental officials, for a more liberal formula - for example, a basic margin for drugs produced in New Zealand of 18 per cent on United Kingdom prices with a 'ceiling' of 25 per cent, based on its estimation of freight building and production costs. Industries and Commerce tried

³⁵ Note of an informal meeting of Tribunal, 13 June 1972, p.1. IC Box 11 file 3/92, Accession W2268.

³⁶ Beard for Secretary Industries and Commerce to President Price Tribunal, Memo, Merck, Sharp & Dohme (NZ) Ltd, Manufacturing Druggists, 23 May 1969, pp.1-7. IC Box 10 file 3/87, Accession W2268; Beard to Minister, Industries and Commerce, Memo, Merck Sharp & Dohme (NZ) Ltd, Pricing of Drugs, 21 September 1972, pp.1-3. IC Box 10 file 3/87, Accession W2268.

in vain to insist on provision of detailed production figures to support Merck's claim.³⁷ Merck's finance director, J. Kelly, insisted that the 25 per cent margin, approved 'in principle' and reduced to an effective 22.5 per cent by a surcharge relating to the devaluation of New Zealand currency in 1967, was so low as to make local production unprofitable and was 'totally unacceptable' to the company. He argued, for example, that the margin approved for the 50 mg strength of the antibiotic Tryptanol meant that the company would make 'substantial losses year after year'. This treatment was 'hardly a positive incentive' for further investment in New Zealand, he said, and was 'particularly disappointing' in the light of the \$2 million plant just completed at Wiri. Because the company was 'one of the few in the Industry' with a substantial investment in land and buildings, it was 'quite unrealistic' to apply the same 'arbitrary' margin to Merck as to others who had not made significant local investment, and who were not employing local labour and resources.³⁸ Accordingly, Merck threatened to halt all local packaging of Tryptanol, based on bulk supplies from Bermuda, and import the drug fully packed from Australia.³⁹ Trade and Industry agreed to the 'interim' formula, but insisted that Merck apply for a separate price approval for each new individual item of production.⁴⁰ Merck's rhetoric was typical of most manufacturers' pressure on the New Zealand Government in pursuit of higher profits.

Merck preferred to operate what it called a 'Standard Cost System', however, to calculate 'actual and forecasted costs plus production volumes necessary to

³⁷ Beard for Secretary Industries and Commerce to Crowley, Managing Director, Merck Sharp and Dohme (NZ) Ltd, 22 June 1971, pp.1-3. IC Box 10 file 3/87 Accession W2268. Beard for Secretary to Minister of Industries and Commerce, Merck Sharp and Dohme - Pricing Formula, 22 September 1972, p.3. IC Box 10 file 3/87, Accession W2268.

³⁸ Kelly, MSD to Murphy, Industries and Commerce, 5 April 1972, p.1-2. BBAJ Box 191 MSD 1972-1979, Accession A342.

³⁹ Kelly, MSD to Murphy, Industries and Commerce, 9 August 1972, pp.1-2. BBAJ Box 191 MSD 1972-1979, Accession A342.

⁴⁰ Beard to Minister, Industries and Commerce, 21 September 1972, p.7. IC Box 10 file 3/87, Accession W2268.

acknowledge forecasted sales'.⁴¹ Under such a system, Merck would be able to impose its own method of calculation, despite price control. In March 1977, for example, the company submitted a schedule which set out price calculations for a number of drugs including Aldomet, Hydromet, Tryptanol and Alphacillin all in various strengths, in accordance with its 'approved formula of Factory Cost + 60% = Wholesale Price'. These proposed prices were based on current labour costs, changes in the cost of local raw materials and packing, factory overheads and royalties paid to the parent company.⁴²

During this period, the price of some Merck medicines rose dramatically. In March 1975, for example, a Departmental official, J.A. Preston, approved a maximum selling price for Tryptanol 75 mg x 100 of \$6.56 to wholesalers, and \$7.65 to pharmacists.⁴³ In August 1977, another official approved further price increases for various strengths of Tryptanol as a result of Merck's introduction of new safety 'strip' packaging, so that the price to wholesalers of the 75 mg strength x 100 increased to \$13.81, and the price to pharmacists to \$16.57.⁴⁴ In June 1978, Merck's proposed price for the same strength and pack size of Tryptanol was \$17.54 to wholesalers and \$21.05 to pharmacists.⁴⁵

⁴¹ Baker, MSD to Norton, Trade and Industry, Category A - Cost Allocation, 11 July 1978, pp.1-2. BBAJ Box 191 MSD 1972-1979, Accession A342.

⁴² Barr, Burgess and Stewart to Secretary, Trade and Industry, Merck Sharp and Dohme (NZ) Ltd, Change in Pharmaceutical Prices, 30 March 1977, pp.1-5. BBAJ Box 191 MSD 1972-1979, Accession A342.

⁴³ Trade and Industry Control of Prices Act 1947, Minute of Decision, Merck Sharp and Dohme (NZ) Ltd, Application: Increase selling prices of listed product Tryptanol, 18 March 1975, p.1. BBAJ Box 191 MSD 1972-1979, Accession A342.

⁴⁴ Trade and Industry Special Approval Merck Sharp and Dohme (NZ) Ltd, Increased prices for Concordin and Tryptanol to meet costs of safety packaging, D.L. Leishman, Executive Officer, 22 August 1977, p.1. BBAJ Box 191 MSD 1972-1979, Accession A342.

⁴⁵ Baker, Manager Accounting, Merck Sharp and Dohme (NZ) Ltd, to Shroff, Trade and Industry, Pharmaceutical Price Increases, 21 June 1978, p.3. BBAJ Box 191 MSD 1972-1979, Accession A342.

A network of associate companies around the world allowed Merck to continue to price its high-cost drugs most expediently to each subsidiary, in order to recover parent company expenditure on research and development. As we have seen, the United States parent company in Rahway, New Jersey, could ship raw material, such as methyldopa or Aldomet, one of the 30 top-selling medicines on the Drug Tariff in the 1970s, from MSD Quimica de Puerto Rico to its New Zealand subsidiary and charge inflated transfer prices. The New Zealand subsidiary could then specify increasing raw material prices, among other rising costs, when applying for price increases. In August 1979, Merck's local accounting manager, J. Baker, explained that because two of the company's imported raw materials, methyldopa (Aldomet) and magnesium probenecid (Benemid), had increased in price, it was 'forced' to increase the prices of finished products based on these materials according to its current formula.⁴⁶ With this notification, Baker submitted details of price increases sent from MSD Quimica de Puerto Rico to the parent company in New Jersey. Trade and Industry officials simply checked that the correct formula had been used (factory cost + 60 per cent = wholesale price), noted the various costs including royalties, and recommended that the prices applied for by Merck be approved.⁴⁷

In the same way, the American-based Squibb Corporation manufactured penicillin in Humacao, also in Puerto Rico.⁴⁸ The Squibb subsidiary in Auckland could import supplies of penicillin or Dexacillin from its parent by way of Puerto Rico (among several other associate companies, including one in Ireland). The Auckland company could show inflated prices for these purchases in order to claim increased local costs when applying for price increases, based on its established formula of landed cost plus 40 per cent to calculate its selling price to wholesalers. Trade and

⁴⁶ Baker, MSD to Barrett, Trade and Industry Auckland, Category A price increases, 14 August 1979, pp.1-2. BBAJ Box 191 MSD 1972-79, Accession A342.

⁴⁷ Duong for Secretary Trade and Industry to Brookes Prices Division, District Officer Auckland, MSD Ltd, Prices Application for Category A Pharmaceuticals, 5 September 1979, p.1. BBAJ Box 191 MSD 1972-1979, Accession A342.

⁴⁸ Squibb Corporation, Financial Report 1978, p.6. BBAJ box 232, E.R. Squibb Vol 1 1962-1980, Accession A342.

Industry officials, swamped in paper, could simply check the arithmetic and, if they were available, verify Squibb's customs invoices.⁴⁹

While admitting that transfer prices could be pitched at 'unacceptable levels', Trade and Industry officials continued to insist on clear evidence before committing resources and staff to follow up this matter. The fact that more than 30 drug companies operated in New Zealand, and the prospect of more local manufacturing, was taken as a commitment to local industry, and some sort of guarantee against 'unreasonable' transfer prices. As long as these companies did not feel 'unreasonably penalised' by the Department's pricing practices, there would be 'less direct pressure' for such 'undesirable' practices.⁵⁰ One officer, P.W. Barrett, noting the low profits of local drug manufacturers and importers revealed by a reintroduction of reviews of detailed financial accounts, again raised the question of transfer pricing, but concluded hopelessly that any genuine attempt to police it 'would be difficult, time-consuming and expensive'.⁵¹

At the same time, the Department of Inland Revenue had begun to uncover evidence that confirmed that multinational companies had proved to be 'significant sources' of understated profits, and therefore taxes, by importing drugs through companies based in known tax havens. A comparison of taxation rates in different countries could reveal the countries in which multinationals were likely to disclose a profit and therefore to 'export' at questionably high prices.⁵²

⁴⁹ A 1979 Trade and Industry study of the New Zealand pharmaceutical industry showed that Puerto Rico was the second most important source (by dollar value after Australia) of imported antibiotics in the nine months to March 1979. Trade and Industry, Structure and Nature of the Pharmaceutical Industry, Draft, July 1979, Appendix V. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256.

⁵⁰ Hardy for Secretary Trade and Industry to Barrett, Pharmaceutical Pricing, 10 December 1979, p.2. BAJA 35/30 Part 6 Drugs & Druggists' Lines, Accession A602.

⁵¹ Barrett for District Officer to Hardy, Memo, Pricing of Pharmaceutical Drugs, p.2. 26 March 1980. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256.

⁵² Barrett to Secretary Trade and Industry, attention Shroff, Pricing of Pharmaceutical Drugs, 10 July 1979, pp.1-5. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256. Barrett to Hardy, Trade and Industry, Pricing of Pharmaceuticals, 5 November 1979, p.1. ABDI Box 291 PC

Furthermore, a subsequent Canadian commission of inquiry on the pharmaceutical industry cited statistical evidence to show how multinational drug companies could shift profits by using transfer prices. The Commission supplemented this evidence with its knowledge of particular cases, in which transfer prices charged to Canadian subsidiaries had occasionally increased dramatically when the sourcing or the payment shifted to a low tax from a higher tax jurisdiction.⁵³

Although by 1980 Trade and Industry officials were gaining more understanding of the practice as well as the principles of transfer pricing, the Government was still hamstrung by the patent system, which meant that only the local representative of each patent holder in Switzerland, France or the United States could legally supply the New Zealand market. The life of a New Zealand patent grant was 16 years.⁵⁴ In 1968 the Public Expenditure Committee had bravely recommended that the Government should consider reducing the period of patent protection on drugs from 16 years to 10 years and that legislation be passed to allow hospital boards to purchase drugs patented in New Zealand from non-patented sources.⁵⁵ Like other 'too hard' recommendations made by this Committee, however, the patent proposal was shelved indefinitely. Government policy was to continue to guarantee the monopoly on the market held by New Zealand subsidiaries of international patent holders. Accordingly, the Department of Trade and Industry adopted a contrary view and firmly supported an *extended* patent life for drugs, claiming that its own price and margin setting prevented drug companies making 'excessive' monopoly

22/6/2 Part 1, Accession W4265.

⁵³ Commission of Inquiry on the Pharmaceutical Industry (Eastman Commission), *Report* (Ottawa, Minister of Supply and Services Canada, 1985), Table 13.3, p.434.

⁵⁴ Patent life was also 16 years in Australia, 17 years in the United States, and 20 years in the United Kingdom.

⁵⁵ Public Expenditure Committee 1968, *AJHR* 1968, I.12, p.20.

profits.⁵⁶ In this way, Trade and Industry policy appears less as regulation of the local companies, than their representation inside the state.

At first D.N. McKay, the Minister of Health, cautiously supported the proposal to shorten the term of patent protection on drugs. McKay acknowledged that a certain period of protection enabled manufacturers to recoup expenses on research and promotion but pointed out that, under the present system, 'monopoly prices' were being paid for longer than was necessary. He took up the matter with the Minister of Justice.⁵⁷ In reply, J.R. Marshall, who became Minister of Justice after the 1969 election (and also Minister of Industries and Commerce and Minister of Overseas Trade), grimly explained the 'controversial' nature of such a proposal. In a response in which the influence of Industries and Commerce officials could be detected, he argued that the Government 'could hardly contemplate' shortening the term of existing patents without compensation to their holders, because such an action would amount to a confiscation of rights formally granted by the Crown, 'which would be hard to justify both nationally and internationally'. Implementing the Public Expenditure Committee's recommendation would amount to confiscation, he said, because it was an infringement to import a product protected by a New Zealand patent without the licence of the patent holder. All Marshall could offer as a more speedy remedy than amending existing law was the possibility of invoking the compulsory licensing provisions of the Patents Act to counter 'any abuse' of patent rights.⁵⁸ At the same time, and under pressure from Merck Sharp and Dohme, Marshall stressed the importance of maintaining pharmaceutical manufacture in New Zealand: 'any changes in the law to shorten the terms of patents for pharmaceuticals

⁵⁶ Trade and Industry, *Background on Industry Studies, Structure and Nature of the Pharmaceutical Industry*, 1979, Section 51. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256.

⁵⁷ McKay, Minister of Health to Hanan, Minister of Justice, 9 July 1969, p.1. H1 208-53-1 35927, Accession W2676.

⁵⁸ Marshall to McKay, 11 August 1969, p.1. H1 208-53-1 35927, Accession W2676.

or to limit the right to royalties could reduce the protection available to a local manufacturer'.⁵⁹

As we have seen, procedures available under Sections 51 and 55 of the Patents Act strengthened the Government's hand, at least in theory, against the patent holders' monopoly. Section 51 allowed the Commissioner of Patents to award a New Zealand company a licence to produce a cheaper brand of a patented drug from a non-patented source (such as Italy), if the company could demonstrate that it was in the public interest to do so.⁶⁰ In this way, a rival local company could enter the market before a patent expired, either by local production from imported bulk materials, simply importing finished goods from the cheapest source - or both. Section 55, the 'Crown use' provision, allowed a government department, such as the Department of Health, to purchase drugs from non-patented sources for the services of the Crown (for use in hospitals, for example), although neither provision had yet proved to be any use in practice. Few New Zealand companies even applied for compulsory licences, let alone managed to make use of these. Even when the Commissioner of Patents found a case to exist for granting such a licence, well-funded patent holders could seize on every technical legal point to resist such grants.

In 1969, for example, W.M. Bamford Ltd, a Lower Hutt firm, sought a licence from Hoffman La Roche to produce diazepam (Valium). In 1973, the Commissioner of Patents granted compulsory licences under section 51 in respect of the drugs

⁵⁹ Marshall to McKay, 19 September 1969, p.1. H1 208-53-1 35927, Accession W2676. Marshall's view is interesting because it foreshadows his later stand in National's fight with the British and American owners of Comalco in 1976-1977 over the price the firm would pay for electricity to run the aluminium smelter at Tiwai Point. Marshall acted as Comalco's legal adviser in the negotiations and, along with his clients, fought Prime Minister Muldoon's demands for higher electricity prices. Comalco's concessions, however, eventually resulted in a compromise and a new agreement. John Marshall, *Memoirs Volume Two: 1960-1988* (Auckland and Sydney, Collins, 1989), pp.43-46; Robert Muldoon, *My Way* (Wellington, Reed, 1981), pp.121-122.

⁶⁰ Section 51 of the Patents Act 1953 stated that, in settling the terms of licences under this section the Commissioner should endeavour to ensure that medicines 'shall be available to the public at the lowest prices consistent with the patentees' deriving a reasonable advantage from their patent rights', in other words, the royalties that could be charged by the patent holder.

diazepam (Valium), chlordiazepoxide (Librium) and nitrazepam (Mogadon) to W.M. Bamford. The Swiss-based patent holder, Hoffmann La Roche, fought the terms of this original grant through the Supreme Court and the Court of Appeal for the next two years.⁶¹ Bamford, disillusioned, eventually abandoned any idea of exploiting the licences it had been granted. Such failures discouraged other local firms from attempting to break the monopoly of patent holders. The compulsory licence provision of the New Zealand Patents Act (Section 51) was to linger on until 1992 and proved to be extremely contentious for the National Government in view of what it saw as its intellectual property obligations under the General Agreement on Tariffs and Trade.

As well as being firmly discouraged by the Minister of Justice, the Minister of Health was also warned off this proposed reduction of patent protection by the Managing Director of Merck Sharp and Dohme, B.J. Crowley. Any attempts to implement the Public Expenditure Committee's recommendations on patents, Crowley said, would endanger further investment in pharmaceutical manufacturing in New Zealand. Economies gained by such moves would be 'trivial' compared with damage caused to the country's image among foreign investors.⁶² In response to these threats, the Department 'reluctantly' deferred as 'impracticable' further attempts to persuade the Government to amend existing patents legislation.⁶³

In this way, New Zealand continued to follow the trend in other developed countries toward strengthening pharmaceutical patents. The United Kingdom Banks Committee, for example, which reported in 1970, favoured lengthening the patent

⁶¹ F Hoffmann-La Roche & Co AG v W M Bamford & Co Ltd, Court of Appeal, 12 March; 21 May 1975, *New Zealand Law Reports* (Wellington, Butterworths, 1975, Vol 2), pp.507-23; F Hoffmann-La Roche & Co AG v W M Bamford & Co Ltd (No 2), Supreme Court, 10 October; 13 November 1975, *New Zealand Law Reports* (Wellington, Butterworths, 1976, Vol 1), pp.371-378. See also Andrew Brown and Anthony Grant, *The Law of Intellectual Property in New Zealand* (Wellington, Butterworths, 1989), pp.538-539.

⁶² Crowley to McKay, 21 July 1969, pp.1-2. H 1 208-53-1 35927, Accession W2676.

⁶³ Digby, Health Department to Porter, Drug Patents, Trade Marks and Names, 11 February 1970, p.5. H 1 208-53-1 35927, Accession W2676.

term.⁶⁴ In the light of this recommendation, as we have seen, the British Labour Government dropped compulsory licences from the British Patents Act 1977. The same Act extended to 20 years the life on all new patents, and on existing patents with more than five years of their term remaining, mainly on the grounds that an increase of the term would be in accord with international trends.⁶⁵

One cautious provision of the New Zealand Social Security Amendment Act 1973 gave the Minister of Health power to purchase drugs for pharmaceutical benefits from non-patented sources. It provided that the decision to exercise the power was to be made only by the Minister, 'after taking into account the terms on which the pharmaceutical requirements' were available in New Zealand and elsewhere, 'and the manner in which the patentee's rights' were exercised.⁶⁶ In theory, the Government could still make use of Section 55 of the Patents Act to make drug purchases from cheaper, non-patented sources, but this power was never to be used. Instead, official reports stressed the crucial importance of maintaining the goodwill of the local industry to ensure not only the supply of medicines, but also the up-to-date pharmaceutical information provided by drug companies.⁶⁷ The Government's dilemma was summed up baldly by National's Minister of Health, A.G. Malcolm, as a balance 'between cutting health expenditure, playing fair with the multinationals by contributing ... to their research and development costs, and protecting jobs in the multinational's local pill-making plants'.⁶⁸

⁶⁴ Committee to Examine the Patent System and Patent Law (Banks Committee) *The British Patent System, Report*, Cmnd 4407 (London, HMSO, 1970), p.117.

⁶⁵ Pharmaceutical Manufacturing Industry Inquiry, *Report* (Ralph Report) (Canberra, Australian Government Publishing Service, 1979), p.17.

⁶⁶ Department of Health, Annual Report 1974, *AJHR* 1974, E.10, p.78.

⁶⁷ State Services Efficiency Review Committee, Report on an efficiency and economy review of the Pharmaceutical Services in the Department of Health, December 1974, p.66. Ministry of Health New Archives 381.4561.

⁶⁸ 'Aussie Malcolm: a question of balance between cost, rewards', *National Business Review* (3 May 1982), p.24.

During the 1970s, governments in Canada and in Australia attempted to break free from this kind of dilemma by deciding to forgo the development of a local pharmaceutical industry in favour of greater efficiency in the economy and reductions in government spending. Each government used its power as a 'monopsony' purchaser (a single dominant purchaser which could influence prices merely by threatening to withdraw its custom) in bargaining with drug companies to hold down prices and in effect to 'free ride' on the international industry.⁶⁹

During the 1970s, the Australian Federal Government whittled down the scope of the Pharmaceutical Benefits Scheme, so that it began to evolve into a 'Pensioner Benefit Scheme'. With a more restricted list of drugs available in this way, the Pharmaceutical Benefits Pricing Bureau could drive a harder bargain with international drug companies. The freedom of medical practitioners to prescribe as they wished was left inviolate, however, though with the implication that individuals or their insurers would bear a greater share of the cost.⁷⁰ Canada's Liberal Government made a similar decision to confront the monopoly of local subsidiaries of international firms, and to relinquish the development of a local industry, with even more financial clout. As Chapter 7 has shown, however, this success was dampened by persistent counter-pressure from international patent-holding companies.

In New Zealand, there was still no such willingness to confront the industry or to test its threats. Indeed, the industry's alliance with its doctor 'customers' continued to reinforce the stranglehold of the patent system. Because pharmacists were still compelled to dispense the brand prescribed, doctors determined both the brand and volume of medicines supplied and were, in effect, responsible for spending substantial sums of government money on drugs. During 1978, for example, each

⁶⁹ The local firms could still refuse to supply; but because they were still making reduced by satisfactory profits, they did not.

⁷⁰ Robert Wallace, 'The Industries Assistance Commission's Report on Pharmaceutical Products', in *Health Economics: Australian Readings*, ed. J.R.G. Butler and D.P. Doessel (Sydney, Australian Professional Publications, 1989), pp.348-362; pers. comm. James Gillespie, 15 August 1995.

full-time general practitioner wrote, on average, scripts to the value of \$60,000.⁷¹ In spite of the introduction of expensive new beta blockers, antibiotics and aerosols used in the treatment of asthma and hay fever, no restrictions limiting prescribing to a specified range acceptable to all parties had been discovered. The Division of Clinical Services did its utmost to respect professional privileges and staunchly maintained that any attempt to 'shackle' the medical profession with some kind of state salary, and thus some kind of contract, was out of the question. Doctors practising on a fee per service were definitely 'not under contract' and had 'moral and professional obligations only'.⁷² In the absence of up-to-date statistics on each doctor's prescribing to show cost per patient, the Division relied on two 'visiting practitioners', who called on each general practitioner once a year to discuss prescribing and to encourage them to give more thought to the cost of the drugs they used.⁷³ The other main method of moral exhortation was the Division's regular Clinical Services Letter, through which it warned of the rising cost of medicines and appealed to 'everybody to do his share', and not to order 'more than is needed'.⁷⁴

Because they were under contract to the Department of Health, pharmacists seemed to be an easier target than doctors for cost-cutting. Pharmacists in more than 1150 pharmacies still received government payment for dispensing based mainly on drug wholesale prices and as a dispensing fee for each script.⁷⁵ This income was boosted by discounts from drug wholesalers. Traditional wholesalers (such as Kempthorne

⁷¹ Department of Health, Annual Report 1978, *AJHR* 1978, E.10, p.30.

⁷² Department of Health, Annual Report 1972, *AJHR* 1972, H.31, pp.80-81.

⁷³ Department of Health, Annual Report 1971, *AJHR* 1971, H.31, p.77; State Services Efficiency Review Committee, Report on an efficiency and economy review of the Pharmaceutical Services in the Department of Health, December 1974, pp.30-31. Ministry of Health New Archives 381.4561; Department of Health, Annual Report 1978, *AJHR* 1978, E.10, p.29.

⁷⁴ Clinical Services Letter No.141 to Medical Practitioners and Dentists (Wellington, Department of Health, 12 September 1974), p.1.

⁷⁵ McKay, Memorandum for Cabinet 7 January 1970, p.4.H 1 208-25-2 35989 Box 35, Accession W2676; Department of Trade and Industry, Background on Industry Studies, Structure and Nature of the Pharmaceutical Industry, Draft, July 1979, Section 35. ABDI Box 291 PC 22/6/2, Part 1 Accession W4256.

Medical Supplies) increasingly had to compete for pharmacists' custom with co-operative wholesalers established by pharmacist groups, for example the Canterbury Drug Company, which distributed profits by way of discounts and rebates to their members.⁷⁶

The Public Expenditure Committee in 1968 had recommended that pharmacists receive a more 'realistic' dispensing fee and a lower profit margin on the cost of drugs. During the next two years, representatives from the Chemists' Guild and the Department of Health fought out a compromise which eventually resulted in the on-cost payment to pharmacists being reduced from an average of about 43 per cent to 20 per cent in 1970. To compensate, however, the Department of Health agreed to a higher 'service' or dispensing fee based on time and skill in dispensing. The two groups had calculated this new fee so that pharmacists would gain the same average profit per script as before and would, moreover, be guaranteed an annual adjustment in line with national movements in rates of pay in the private sector.⁷⁷ The average container allowance, paid whether the pharmacist provided a container or dispensed an original pack, would also be reviewed annually according to surveys of packaging and container costs. Even this fee amounted to more than a million dollars per annum by the mid-1970s.⁷⁸

⁷⁶ Rodda, President Price Tribunal, to Minister Trade and Industry, 6 October 1972, p.2. IC Box 20 file 4/29, Accession W2268.

⁷⁷ Department of Health, Annual Report 1971, *AJHR* 1971, H.31, p.77. Thompson to Minister of Health, Reapportionment of Payment to Retail Pharmacists for Pharmaceutical Benefits, 10 December 1969, pp.1-2. H 1 208-25-2 35989 Box 35 Accession W2676; Brooks, Secretary to Cabinet, Memo to Minister of Health, 1968 Report of the Public Expenditure Committee on Cost of Drugs, Pharmaceutical Benefits, Reapportionment of Payment to Retail Pharmacists, 17 February 1970, p.1. H 1 208-53-1 35927 Box 33, Accession W2676.

⁷⁸ State Services Efficiency Review Committee, *Report on an Efficiency and Economy Review of the Pharmaceutical Services in the Department of Health* (Wellington, State Services Commission, 1974), pp.36-37, Appendix 2, Table 2. Ministry of Health New Archives 381.4561. In April, the fee for the financial year was set by adjusting the previous year's fee according to the percentage movement in the average weekly wage calculated by the Department of Labour.

Department of Health calculations for payment to pharmacists under the old and the new systems, based on a large sample of prescriptions taken during 1969, showed that, for the year ending 30 June 1969, the average cost per prescription of ingredients and containers was 84.4 cents (a). A devaluation surcharge of 5 cents (b), a net on-cost of 43 per cent (50 per cent less special discounts), 36.3 cents (c), and a dispensing fee of 11.3 cents (d) added up to 136.8 cents. From this figure, pharmacists subtracted a discount of 2.5 per cent on all except (b), to give an average cost per prescription of 133.5 cents. The profit to pharmacists per script, (c) + (d) - (e) was therefore 44.1 cents. The proposed new payment system negotiated with the Chemists' Guild *reduced* the on-cost to 20 per cent on (a) + (b), but *increased* the dispensing fee from 11.1 cents to 26.2 cents. With the 2.5 per cent discount dropped, the average cost per prescription and the profit to pharmacists were calculated to remain at exactly the same figure, that is, 133.5 and 44.1 cents respectively.⁷⁹

Because the Department of Health had agreed with the Chemists' Guild to preserve pharmacists' profit margins in *one form or another*, government payments to pharmacists steadily increased in line with inflation. In the year ending March 1972, for example, the cost of pharmaceutical benefits was \$33.3 million, an increase of almost \$2.5 million over the previous year's figure. About \$1 million of this increase resulted from a 14.5 per cent adjustment to dispensing fees in accordance with Department of Labour recommendations on rates of pay.⁸⁰ In 1973, the cost of pharmaceutical benefits increased by 18.3 per cent to well over \$39 million, a major part of which could be accounted for by a 15.8 per cent increase in pharmacists' dispensing or service fee.⁸¹ Pharmacists claimed that their industry was labour

⁷⁹ McKay, Minister of Health, Memorandum for Cabinet (undated, January 1970), 1968 Report of the Public Expenditure Committee on Cost of Drugs, Pharmaceutical Benefits, Reapportionment of Payment to retail pharmacists, p.2. H1 208-25-2 35989 Box 35, Accession W2676.

⁸⁰ Department of Health, Annual Report 1972, *AJHR* 1972, H.31, p.84.

⁸¹ Department of Health, Annual Report 1973, *AJHR* 1973, E.10, p.96. The annual adjustment in pharmacists' service fee was 7.5 per cent in 1974, 17.9 per cent in 1975, and 18.4 per cent in 1976. Total payment to pharmacists in millions of dollars (in constant dollar values)

intensive, used highly trained labour and that these high returns on dispensing were justified. Yet they received generous payments for dispensing often pre-packaged drugs, had only minimal capital tied up in stock because of frequent deliveries by wholesalers, and received substantial discounts and rebates from competing wholesalers - all adding up to substantial profits from the medicines supplied under the Pharmaceutical Benefits Scheme.⁸²

In 1980, after several months of 'very difficult' and even 'explosive' negotiations between the Department of Health, Treasury and the Chemists' Guild, National's Minister of Health, G. Gair, announced the Government's pruning of pharmacists' mark-up on wholesale ingredient costs from 20 per cent to 15 per cent, and also its recovery of half the discounts and rebates allowed to pharmacists by wholesalers. He calculated that this cut in profit margins should save about \$600,000 a year on the cost of pharmaceutical benefits, by 1980 costing more than \$132 million a year. (This saving amounted to only 0.46 per cent of the cost.) At the same time, however, pharmacists would get an average 13.56 per cent rise in their fee for dispensing each script, taking this amount to about \$1.80 per prescription. Henceforth, instead of an annually adjusted dispensing fee, they would receive what the Department of Health called a 'negotiated professional fee'.⁸³ The Chemists' Guild subsequently negotiated such a fee effective from 1 April 1981, resulting in

was \$13.7 in 1969, \$14.3 in 1970, \$13.4 in 1971, \$13.9 in 1972, \$15.1 in 1973, and \$15.5 in 1974. State Services Efficiency Review Committee Report on an efficiency and economy review of the Pharmaceutical Services in the Department of Health, December 1974, Appendix 2, Table 3. Ministry of Health 381.4561 New Archives.

⁸² Background on Industry Studies, Structure and Nature of the Pharmaceutical Industry, Draft report July 1979, Sections 119-120. ABDI Box 291 PC 22/6/2 Pt 1 Pharmaceutical Policy, Accession W4256.

⁸³ Department of Health, Annual Report 1980, *AJHR* 1980, E.10, pp.29-30; Department of Health Annual Report 1981, *AJHR* 1981, E.10, p.36. See summary of total expenditure on pharmaceutical benefits in Department of Health, Annual Report 1986, *AJHR* 1986-87, E.10, p.88. See also Shroff, Trade and Industry, Memo, Proposed Meetings with Chemists Guild and Wholesale Druggists Federation, 10 October 1979, pp.1-2. ABDI Box 291 PC 22/6/2 Part 1 Accession W4256. See also 'Drug Dispensing Profit Margin Pruned by Govt', *New Zealand Herald* (28 February 1980).

a further substantial increase of 16 per cent on the existing average fee.⁸⁴ In a smooth public relations statement, Prime Minister R.D. Muldoon explained that this new basis for negotiating pharmacists' professional fees 'would ensure that the burden of restraint on rising health costs was carried as fairly and evenly as possible'.⁸⁵ In spite of such statements, the Government had ensured that pharmacists' incomes were safeguarded, or even improved, depending on the amount of dispensing by individual pharmacies.

At the same time as it negotiated with pharmacist representatives to set official payments for dispensing, the Department of Health Clinical Services Division continued to fight a rearguard action with the drug companies over the prices of individual medicines on the Drug Tariff, and the terms and conditions of supply. The Clinical Services Division negotiated a minimum 'bench-mark' price within each therapeutic group of medicines, that is groups of medicines used in the treatment of similar medical conditions, such as cardiovascular system preparations or preparations acting on the nervous system.⁸⁶ Provided that constant supplies could be guaranteed of that particular brand, or that particular generic version, payment was based on the lowest price. If a medicine cost more than the maximum amount decided it carried a part-charge to the patient. Because manufacturers wished to avoid a part-charge, they could often be persuaded to reduce their price to meet that of competing brands. If no close substitute drug with equivalent therapeutic effect was available, officials' bargaining power was minimal and they accepted the maximum price set by Trade and Industry.

In spite of its limited success so far, the Department of Health's pricing policy began to attract strong criticism from the Department of Trade and Industry, the

⁸⁴ Department of Health, Annual Report 1982, *AJHR* 1982, E.10, p.27.

⁸⁵ 'PM endorses "generics first" policy', *New Zealand Pharmacy* (May 1981), p.15. The Prime Minister was opening the centennial conference of the Pharmaceutical Society in Christchurch.

⁸⁶ Review of Pharmaceutical Benefits Scheme, 26 November 1984, pp.4-5. Ministry of Health 208-53-1.

Pharmaceutical Manufacturers' Association and individual companies as a major threat to the survival of the local industry. According to each group, the Department's power as a monopsony purchaser, and its undercutting of the maximum prices approved by Trade and Industry, was the reason why local drug companies were failing to achieve returns on assets allowed under approved pricing formulae. A survey by the Association of its member companies had found that on average almost 1.5 out of each company's top five products had a Trade and Industry approved price greater than the Pharmaceutical Benefits Scheme price paid by the Department of Health.⁸⁷ A departmental survey appeared to confirm the 'plight' of the local industry. The financial accounts of 11 importers for the 1978/79 financial year - Schering (NZ) Ltd, E.R Squibb, Pharmaco, Upjohn, Essex Laboratories, Boehringer Ingelheim, Ethnor, Lilly, Cyanamid, Smith Kline & French and Beecham - gave sales of \$20,910,907 and a loss of \$152,973. With promotional allowances included, operating profits for these companies totalled only \$790,001, though there is no indication of the extent of offshore profits made by these companies.⁸⁸ Claiming to be uncertain of the industry's future in New Zealand, the Pharmaceutical Manufacturers' Association pressed for a clear statement of government policy to enable decisions on investment in further local production to be made in more confidence.

It was rewarded by firm support from the Department of Trade and Industry. It took the view that New Zealand had an important asset in its local pharmaceutical manufacturing industry in plant, buildings, labour employed and local materials used, and other industries could learn from pharmaceutical manufacturers, for example quality control. If the Government wanted drug manufacturing in New Zealand, it simply had to 'make it attractive for these companies to invest'. Multinationals needed 'added incentives'. Equipment in some factories was being used well below

⁸⁷ Trade and Industry, Background on Industry Studies, Structure and Nature of the Pharmaceutical Industry, Draft, July 1979, Section 78. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256.

⁸⁸ Barrett to Hardy, Trade and Industry, 21 January 1980, Pharmaceutical Pricing, pp.1-2. ABDI Box 291 PC 22/6/2 Part 1, Accession W4256. Transfer pricing would mean substantial 'losses' in New Zealand, while parent companies made substantial profits.

capacity, particularly tablet and foil packaging machines, and several sub-standard premises needed replacement. Yet current market conditions and government policies meant that returns were so low that large-scale expenditure could not be justified to overseas principals.⁸⁹ Given the perceived plight of the local industry and the Government's monopoly position as the sole buyer of prescription medicines, Trade and Industry officials affirmed that price control was no longer necessary.⁹⁰ This steadfast encouragement prompted the managing director of Pfizer Laboratories Ltd, M.D. Eppingstall, to salute the Department's 'understanding of the economic realities of the market place' and its 'willingness to provide a reasonable return on investment'.⁹¹

The Pharmaceutical Manufacturers' Association continued to push for radical change in current arrangements for setting the prices for Drug Tariff medicines, and to find support within the Department of Trade and Industry. It accused the Department of Health of setting prices 'well below' Trade and Industry approved levels which threatened the 'viability of an important industry', meant that patients were denied access to new products on the Drug Tariff which were being withdrawn from the New Zealand market, and also meant the loss of employment opportunities because any future investment in local manufacturing was now doubtful. Parent companies claimed that their policies were determined by the 'low prices and poor financial performance' of their New Zealand subsidiaries, and the 'limited protection given to intellectual property by the short effective patent life in New Zealand'. In short, overseas management disparaged New Zealand's environment as 'unfavourable for multi-nationals and high technology innovation'. The Pharmaceutical Manufacturers' Association therefore urged that Trade and Industry prices should rule for the

⁸⁹ Trade and Industry, Background on Industry Studies, Structure and Nature of the Pharmaceutical Industry, Draft, July 1979, Sections 6, 83, 97, 103, 105, 151. ABDI Box 291, PC 22/6/2 Part 1, Accession W4256.

⁹⁰ See for example, Trade and Industry memorandum, Review of Positive List, unsigned, 1 February 1982, p.3. ABDI Box 172 PC 60/4/44 Part 4, Accession W4256.

⁹¹ Eppingstall, managing director, Pfizer Laboratories, to Barrett, 13 August 1981, p.1. BAJA 35/30 Part 6 Drugs and Druggists Lines Vol 7, Accession A602.

Department of Health, and that the Pharmacology and Therapeutics Committee be 'relieved of pricing work'.⁹²

This push from one particular sector to dismantle elaborate price control procedures was part of wider unrest in the New Zealand economy by the early 1980s. In mid-1982, the Muldoon National Government introduced a freeze on prices and wages in the face of strong Treasury opposition to counter a sharp upward movement in the Consumer Price Index. Mounting opposition in New Zealand to such firm government controls was strengthened by the success in 1983 and 1984 of the Australian Labor Government's liberal economic policies. When the Department of Trade and Industry proposed radical changes in the administration of the Pharmaceutical Benefits Scheme as part of a broad programme of deregulation under a new Labour Government in New Zealand, drug manufacturers would be ready to take the opportunity offered.

⁹² The Pharmaceutical Industry in New Zealand, Position Paper prepared for the Minister of Health by the Pharmaceutical Manufacturers' Association, July 1983, pp.3-6, 22. BAJA 35/30 Part 6 Drugs & Druggists' Lines 1980-84, Accession A602.

9 Changing the Rules 1984-1986

By the early 1980s, New Zealand's small, vulnerable economy was weighed down by government regulation, high inflation, heavy overseas borrowing, rising unemployment and large demands on the welfare state. Re-elected in 1981, the National Government continued its earlier cautious moves to open the economy to foreign competition and foreign investment. A series of industry development plans, the introduction of import licensing tenders, and the 1983 Closer Economic Relations Trade Agreement with Australia, all aimed to reduce protection and push manufacturers away from substitution of imports of consumer goods and towards internationally competitive activities. In contrast to these initial moves, however, the Minister of Finance, Prime Minister R.D. Muldoon quickly responded to the growing economic crisis in 1982 by introducing comprehensive anti-inflation measures to freeze wages, prices, fees and rents under the Economic Stabilisation Act 1948.¹ Influential economists (including some who were prominent in the Labour Party) grew increasingly impatient with such heavy-handed government management of the economy. In 1984, when Labour swept to power after a snap election, a radical programme for economic reform quickly took shape. Pharmaceutical manufacturers, who had gained so much from the regulated economy and the welfare state, recognised further opportunities offered by Labour's promotion of competition in the market through the lifting of price controls from many products, including medicines, and its encouragement of more patient part-payment of health and welfare costs. When the Labour Government lifted comprehensive price controls from medicines (along with other products and services) under the Commerce Act 1986, all responsibility for the negotiation of medicine prices passed to the Department of Health. At long last, this Department had the opportunity to establish a clear, unambiguous policy for the provision of medicines. At the same time, however, the policies and strategies of powerful private interests associated with the pharmaceutical industry remained fundamentally unchanged.

¹ Department of Trade and Industry, Annual Report 1983, *AJHR* 1983, G.14, p.25.

Since its narrow 1978 election defeat, the Labour Opposition had been uncertain about its economic policies. Like some members of Muldoon's caucus faced with persistent inflation and rising unemployment, key members of the Labour Party were disillusioned and impatient with current government management of the economy. When Labour lost the 1981 election, Roger Douglas, the Labour MP for Manurewa, with supporters from the universities and the Treasury, began to study possible strategies for re-organising New Zealand's economy. As time went on, their inclination was to break with the long-term commitment to import substitution and full employment which dated back to the first Labour Government of the 1930s.² Indeed, Douglas soon came to regard state intervention as the root of all economic evil. He grew increasingly sceptical about the value of government-funded industrial development, for example. While still in Opposition, Douglas argued in an 'Economic Policy Package' paper for a rapid reduction in trade protection, while recognising and accepting that output and employment would fall initially. This paper eventually formed the basis of Labour's economic policy for the 1984 election.³

Douglas and his supporters were not alone in taking an interest in such deregulation policies. During the 1970s, governments in Britain, France, West Germany, the United States and Australia, regardless of their political allegiance, had challenged many current assumptions about the state's economic and social roles, in favour of a belief that political freedom and economic prosperity depended upon economic freedom. Enthusiasm for radical change in Britain and the United States was strengthened by an international revival of monetarist theory and the political philosophy which became known as the 'New Right'. This classical approach held out the prospect of growth and prosperity if the myriad of regulations, controls and welfare responsibilities assumed by states in the preceding decades could be abandoned. The intellectual origins of these ideas can be found in the writing of

² Geoff Bertram, 'Keynesianism, neoclassicism, and the state', in *State & Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), pp.29-30, 34, 42.

³ W. Hugh Oliver, 'The Labour caucus and economic policy formation, 1981 to 1984', in *The Making of Rogernomics*, ed. Brian Easton (Auckland, Auckland University Press, 1989), pp.16-18.

economists such as Milton Friedman and F.A. Hayek, who questioned the principles of Keynesian macroeconomics. Specifically, they rejected the philosophical basis of state planning, control and redistribution policies of the post-war era which had greatly enlarged the role of contemporary governments. Labour's disillusionment with the broad economic regulation of the New Zealand economy was similar to the stand taken by Britain's Conservative Government from 1979 and was in stark contrast to the principles of 'Muldoonism' seen in the policies of National Governments in the early 1980s. Indeed, New Zealand's deteriorating economic performance from the mid-1970s, with high inflation and rising unemployment, in some ways matched the British experience.⁴ Closer to home, the remarkably free-market and successful economic policies of the Australian Labor Government, elected in mid-1983, lent firm support to Labour's ideas.⁵

By the time Labour defeated National by a large majority in 1984, a firm line of opinion was forming among members of the Labour Caucus Economic Committee. Led by Douglas, and encouraged by members of the powerful and influential Treasury and Reserve Bank, the Committee developed policies in favour of economic deregulation, a flexible exchange rate, and a move to a monetary policy similar to that of the Thatcher Government of the early 1980s.⁶ Labour's snap election victory meant that it was not beholden to the traditional supporters of the status quo, including manufacturing groups and farmers. The opportunity was now open for a coalition committed to liberal, free-market government in New Zealand, to dominate policy-making. The new Labour Government quickly revealed the direction of its economic policy by ending a moratorium on applications by Australian companies

⁴ Jonathan Boston, 'Thatcherism and Rogernomics: changing the rules of the game - comparisons and contrasts', *Political Science*, 39:2 (1987), pp.74-86. See also Jane Kelsey, *Rolling Back the State: Privatisation of Power in Aotearoa/New Zealand*, 'The Rise of the "New Right"', (Wellington, Bridget Williams Books, 1993), pp.295-303.

⁵ These policies included floating the Australian dollar in December of that year. Len Bayliss, *Prosperity Mislaid: Economic Failure in New Zealand and What Should be Done About It* (Wellington, GP Publications, 1994), pp.18-19. See also Ann Capling and Brian Galligan, *Beyond the Protective State: The Political Economy of Australia's Manufacturing Industry Policy* (Cambridge, Cambridge University Press, 1992), pp.xi, 117-166.

⁶ Bertram, 'Keynesianism, neoclassicism, and the state', pp.42-43.

to invest in New Zealand. A foreign exchange crisis, provoked by a run on foreign exchange reserves just before the election, provided an immediate opportunity for Labour to devalue the dollar. This move, along with the lifting of long-standing controls on the movement of foreign capital and investment, the floating of the dollar in 1985, and the dismantling of the old import licensing system, clearly indicated the ideological direction that Labour would take.⁷

The new Government's principal adviser on economic policy was the Treasury. The latter's diagnosis of New Zealand's problems was set out in comprehensive 'briefing' papers to the new Government, subsequently published as *Economic Management*. In a devastating review of past government policies, Treasury described a 'sclerosis' that had built up, so that the economy was 'beset with serious structural difficulties' and had simply ground to a halt. Governments had relied too heavily on particular forms of intervention in the economy, and on specific controls, 'rather than general policy instruments'. Many of these interventions were ineffective, and were frustrating the achievement of higher living standards. For whatever reasons these government controls had been instituted, many were difficult to remove because groups able to exploit such interventions had come to see their advantages as a right. The list of interventions that could be questioned was long and reached 'into every corner of the private and public sectors of the economy'. Treasury now firmly advised against the use of direct government controls, and instead argued for harnessing and supplementing markets, instead of suppressing them, in order to regulate decisions of individuals and firms. According to this view, market forces were the 'touchstone' in economic activity and offered 'an efficient means for reconciling competing demands'.⁸

⁷ Colin James, *New Territory: The Transformation of New Zealand 1984-92* (Wellington, Bridget Williams Books, 1992), pp.152-153; Jan L. Whitwell, 'The Rogernomics monetarist experiment', in *The Fourth Labour Government: Politics and Policy in New Zealand*, ed. Martin Holland and Jonathan Boston, Second Edition (Auckland, Oxford University Press, 1990), pp.102-104; Paul Wooding, 'Liberalising the international trade regime', in *Economic Liberalisation in New Zealand*, ed. Alan Bollard and Robert Buckle (Wellington, Allen & Unwin/Port Nicholson Press, 1987), pp.97-98.

⁸ The Treasury, *Economic Management* (Wellington, The Treasury, 1984), pp.104-107, 111.

At the same time as Labour attacked government regulation and protection of the economy, it questioned the state's traditional commitments to provide welfare, education and health care. The basic principle behind the Social Security Act 1938 was that all citizens were equally entitled to benefits, regardless of their ability to pay. Since then, New Zealand governments had not seriously questioned this idea of entitlement, namely provision on the basis of need rather than the ability to pay. In 1984, however, the Treasury proposed what it called the 'targetting' of assistance much more specifically to those in need, in order to ensure maximum welfare gain at the least cost, and greater opportunities for individuals 'to make their own welfare-improving choices' (including, among other things, choosing to pay for private health insurance). According to the Treasury, government provision of many health services at no charge to consumers removed the price signals which ensured that the amount and quality of services closely reflected consumer demands. Therefore, universal state provision of health services weakened the incentive for suppliers to provide services at least cost.⁹ Thus Treasury proposed government subsidisation rather than provision, and increased use of charges.

Douglas, as the new Minister of Finance, along with two associate finance ministers, Richard Prebble and David Caygill, also senior members of the Cabinet, found themselves in agreement with Treasury views and formed close links with their senior advisers. Douglas and his colleagues believed that the economy was in such dire difficulty that drastic treatment was called for. They accepted Treasury's view that close management of the economy, in particular the strict controls of the Muldoon National Government, had not served the public interest and had failed to assure economic growth or full employment. All three served on the Cabinet's key committee, the Policy Committee and at least one of the three sat on each of the five sectoral Cabinet committees. In this way, these three senior ministers could defend

⁹ Ibid., pp.119, 251, 261, 270-271.

and argue for economic and social aims which had, at least in part, been framed inside the Government with the help of the Treasury.¹⁰

During its first term of office, the fourth Labour Government was preoccupied more with economic and fiscal change rather than with changes to the provision of health and social security benefits. The broad purpose of Labour's economic liberalisation programme was to open markets to competition.¹¹ The whole apparatus of government price control, that is the monitoring of prices for goods and services and the surveillance of profit 'ceilings' according to official regulation, was definitely out of step with such a policy. The National Government during the early 1980s had already begun to remove price control from goods it considered were in adequate supply, were not subsidised and were subject to competition. If conditions changed in an industry so that competition increased to a 'satisfactory level', the Department of Trade and Industry or the Commerce Commission had recommended the removal of price control. By 1981, following such recommendations, the Government had removed bread, apples and pears, and colour television receivers and exotic timber from the Positive List of Controlled Goods and Services on the grounds that there was sufficient competition in relation to these goods.¹² In 1982, more than thirty commodities such as building materials and hardware, and foodstuffs including eggs, sugar, butter, flour, and chemicals and chemical substances including drugs, still remained on the Positive List. In each case, long-standing government protection of the manufacturer's or supplier's monopoly from competition by imported products (for example canned foods or sheet window glass), or because the manufacturer received a government subsidy (medicines, fertilisers), or the pressure of public

¹⁰ Jonathan Boston, 'The Treasury: its role, philosophy and influence', in *New Zealand Politics In Perspective*, Third Edition, ed. Hyam Gold (Auckland, Longman Paul, 1992), p.208; Shaun Goldfinch and Brian Roper, 'Treasury's role in state policy formulation during the post-war era', in *State & Economy in New Zealand*, ed. Roper and Rudd, pp.50-73; Jonathan Boston, 'The Treasury and the organisation of economic advice', in *Making of Rogernomics*, ed. Easton, p.77.

¹¹ James, *New Territory*, p.153.

¹² Department of Trade and Industry, Annual Report 1981, *AJHR* 1981, G.14, p.19; Annual Report 1982, *AJHR* 1982, G.14, p.18.

opinion, made removal from price control difficult.¹³ National's 1982 wage-price freeze had slowed the steady pruning of items from the Positive List by the Department of Trade and Industry.¹⁴ In 1984, the Labour Government imposed a short price freeze, but soon after began to review the need for continued price control on all goods and services remaining on the Positive List.

At the same time, the Government planned to strengthen existing legislation to promote competition in goods and services markets. The Commerce Act 1986, which set out Labour's new competition policy, had had its beginnings in 1983 in a Bill which only narrowly missed being introduced into Parliament by National. It was to have been called the Competition Bill and was prompted by the need to harmonise Australian and New Zealand trade practices law as a result of the Closer Economic Relations agreement. The Government had decided not to proceed at that stage, however. In 1985, Labour reintroduced the same general provisions as the Commerce Bill.¹⁵ The Minister of Trade and Industry, Caygill, described the proposed legislation as a key part of government policy to restore and maintain long-term economic growth as regulation of markets diminished. He emphasised the proposed statute's ability to ensure conditions for 'workable and effective competition', and to help ensure economic efficiency and growth.¹⁶

As earlier chapters have shown, price control on medicines amounted to more or less automatic approval by Department of Trade and Industry officials for thousands of

¹³ Egan for Secretary Trade and Industry to Minister of Trade and Industry, Draft memorandum, Review of Positive List of Controlled Goods and Services, undated, early 1982, p.1. ABDI Box 172 PC 60/4/44 Part 4, Accession W4256. An item could be removed from the Positive List by referral to the Commerce Commission, which held a public hearing and made recommendations to the Minister of Trade and Industry. Alternatively, the minister could remove an item from the Positive List by notification in the *Gazette*.

¹⁴ Secretary Trade and Industry to the Minister of Trade and Industry, Memo, Review of Positive List of Price Controlled Items, pp.1-2, Appendices I, II. ABDI box 172 PC 60/4/44 Part 4, Accession W4256.

¹⁵ Yvonne van Roy, *Guidebook to New Zealand Competition Laws*, Second Edition (Auckland, CCH New Zealand, 1991), p.6.

¹⁶ *NZPD*, 463(1985), p.4681.

applications for price increases on individual products according to the approved 'formula' of each importer or manufacturer. This cursory scrutiny and analysis more or less ignored the possibilities of transfer pricing between affiliated companies. Each company informed the Department of all price increases, so that these could be subjected to random checks.¹⁷ Because three-quarters of New Zealand's medicines were imported ready packaged, government price freezes did not appreciably lessen the number of price increases. When each price freeze ended, these same medicines increased in price again, as importers' margins and wholesalers full margins were restored.¹⁸ These increases, and changes in the mix of drugs being prescribed, pushed up the average cost of each prescription under the Pharmaceutical Benefits Scheme by 5.8 per cent from \$6.91 in 1983 to \$7.31 in 1984, and by a further 16.4 per cent to \$8.51 in 1985.¹⁹ Expressed in 1986 dollars, the average cost per head of population of pharmaceutical benefits increased from \$80.9 in 1983 to \$90.1 in 1985.²⁰

Trade and Industry officials, weighed down by the tedium of drug price approvals and the sheer volume of paperwork, scathingly described the exercise as being 'solely for the benefit of the Health Department'.²¹ Nevertheless, as the Director of Stabilisation of Prices and Research, J.P. Egan, pointed out, because the right of everyone to have the medicines they required as cheaply as possible was

¹⁷ Hill, Office Solicitor, Pharmaceutical Pricing, 16 April 1981, pp.1-3. BAJA 35/30/6, Drugs and Druggists' Lines Vol 7, Accession A602; Barrett to Minister Trade and Industry, Review of Price Control on Pharmaceutical Drugs: Background Report, pp.2-3. BAJA 35/30/6, Accession A602.

¹⁸ A review of the number of price *changes* for medicines during the decade ending March 1985 showed a 400 per cent increase, from an average of 150 per month to 600. Numbers of price changes doubled from 1975 to 1980 and doubled again from 1980 to 1985. Department of Health, Annual Report, *AJHR* 1985, E.10, p.34.

¹⁹ Department of Health, Annual Report 1984, *AJHR* 1984 E.10, pp.32,94; Annual Report 1985, *AJHR* 1985, E.10, p.32.

²⁰ Coopers & Lybrand Associates, *Report on the Removal of Medicines from Price Control* (Wellington, Department of Health, 1986), Table 1.3.

²¹ Barrett, District Office, to Pickering, Trade and Industry, Memo, Automatic Price Approvals - Pharmaceuticals, 9 December 1980, p.1. BAJA 35/30 Part 6 Vol 7 1980-84, Accession A602.

'sacrosanct', drugs were still a 'very sensitive item politically' and therefore should remain under price control in the meantime.²² Departmental officials continued to question whether this exercise was warranted, given the monopoly power of the Department of Health as the single main 'purchaser' of prescription medicines in Zealand.²³

With the passing of the Commerce Act in view in 1985, the Minister of Commerce requested reports and recommendations from government departments on each of the items remaining on the Positive List of Controlled Goods and Services under the Commerce Act 1975. Since Labour came to power in 1984, nine items had already been removed from the Positive List, and the number of products included in two other items had been reduced. Of the 24 items remaining on the Positive List by November 1985, government decisions had been made to remove five further items completely, including flour and sugar, and partially to remove steel in various forms. Chemicals and chemical substances, including drugs, were among a number of items still under serious review, with the possibility of de-control.²⁴

Because of its commitment to promoting free market competition, in other words a different form of official intervention to attempt to hold down drug prices, the Department of Trade and Industry had gained a reputation among pharmaceutical companies for being 'disinterested', and for 'working for the aims of the Commerce Act rather than acting as a cost saving agent for the government'.²⁵ Departmental officials took the view that tough bargaining by the Department of Health to push

²² Egan to Struthers, Memo, Review of Positive List, 18 May 1981, pp.1-4. ABDI box 172 PC 60/4/44 Part 4, Accession W4256.

²³ Stevenson, Trade and Industry, Review of Positive List, 1 February 1982, p.3. ABDI box 172 PC 60/4/44 Part 4, Accession W4256.

²⁴ Secretary of Trade and Industry to Minister Trade and Industry, Review of Positive List of Price Controlled Items, 22 November 1985, pp.1-2; Appendix I, Positive List of Controlled Goods and Services 1981 as at 25 November 1985, pp.1-4; Appendix II, Summary of Future Positive List Review Action, pp.1-2. ABDI box 172 PC 60/4/44 Part 4, Accession W4256.

²⁵ Smith, Trade and Industry advisory officer, Auckland Regional Office, Review of Price Control on Pharmaceuticals, 18 September 1985, Sections 1-5. BAJA 35/30/6 Part 1, Accession A602.

down drug prices was steadily undermining the profits and future prosperity of New Zealand's local pharmaceutical industry. They estimated that the Department of Health could 'dictate' lower prices to pharmaceutical manufacturers or importers for between 40 and 60 per cent of the medicines on the Drug Tariff, so that the margins and profit levels for pharmaceutical companies approved by the Secretary of Trade and Industry were 'rarely, if ever, achieved'.²⁶

The Department of Trade and Industry canvassed more than a hundred companies, societies and associations, seeking opinion on the lifting of price control from medicines.²⁷ The Government's clear intention to remove formal price controls from most goods and services, to treat such controls as a measure of last resort, and instead to prefer open competition, encouraged the pharmaceutical industry to lobby for the dismantling of the current system of drug price negotiation.²⁸ Manufacturers and importers believed that inadequate profit margins were holding down prices, which seemed to suggest a general price increase would be achievable if price control was abolished. Moreover, if the local subsidiaries of international firms such as Merck and Glaxo had the chance of raising their prices even further on products *not* subject to competition, and could hold prices right down on products facing generic competition, the gradual demise of generic producers could well follow. Over time, patent-holding companies could recoup losses previously and deliberately engineered.²⁹ Most companies continued to insist that Department of Health pricing practices threatened the industry's survival in New Zealand and argued for a new regime in which they set their own prices, the Department of Health would

²⁶ Barrett, Notes for Directors' Meeting, Commerce Division, 25 September 1985, p.1. BAJA 35/30/6 Part 1 1985, Accession A602.

²⁷ Smith, Trade and Industry advisory officer, Auckland Regional Office, Trade and Industry, Review of Price Control on Pharmaceuticals, 18 September 1985, p.1. BAJA 35/30/6 Part 1, Accession A602.

²⁸ Sheppard, Ministry of Commerce, Note for file, Drug Pricing, 18 October 1985, p.1. BAJA 153a, Accession A602.

²⁹ Church, Manager, CDC Pharmaceuticals (Wholesale Druggists, Christchurch), to Regional Director, Department of Trade and Industry, Commerce Act 1975: Price Controlled Goods, 22 August 1985, pp.1-2. BAJA 153a, Accession A602.

determine what it would pay (that is, the level of government subsidy) and the patient would pay the difference as a part-charge. In this way, the Department of Health's role could be limited to negotiating reimbursement levels, that is, determining the cost of benefits, rather than price-setting.

B.J. O'Grady, the Managing Director of Merck Sharp and Dohme (NZ) Ltd, for example, claimed that drug prices and profits had been 'consistently squeezed' by the 'predatory and monopsonistic pricing policies' [sic] of the Department of Health. The original intention behind each Trade and Industry cost-plus pricing formula was to provide a specific return on assets employed. Now, however, each firm's approved formula was being undermined, he said. 'Arbitrary' decisions that certain medicines, often generic copies, were medically or chemically comparable, and could therefore be reimbursed at equivalent prices, destroyed 'fair and reasonable' returns on assets employed by pharmaceutical companies, detracted from investment and employment in New Zealand and could 'eventually deny New Zealand access to new and significant products and/or technology'. Research-based pharmaceutical companies could ensure that New Zealand continued to receive a continuous supply of modern medicines. But in return, he argued, manufacturers required 'reasonable competitive freedom' to sell their products at prices that were 'fair and reasonable' by international standards to both the Government and ultimate consumers. For new or revolutionary 'breakthrough' products, they should be allowed 'premium' prices, which had not been 'artificially driven down' by 'arbitrary' categorising into therapeutic groups.³⁰

May and Baker's Medical Manager, E.A. Moody, took a similar view, claiming that an increasing amount of the firm's business was actually controlled by the Department of Health. This control made a 'mockery', he said, of May and Baker's pricing formula, approved by Trade and Industry, and calculated to provide a 'fair'

³⁰ O'Grady to Trade and Industry Regional Director, Commerce Act 1975: Price Controlled Goods, 16 September 1985, pp.1-2. BAJA 35/30/6 Part 1, Accession A602.

return on assets. Consequently, he believed that 'a move to a free market situation would be a healthy one'.³¹

Glaxo's Managing Director, A.R. Hewett, argued that current Trade and Industry cost-plus formulae were no longer appropriate in a 'market economy'. Moreover, Glaxo could not accept that the Department of Health could decide what medicines in a particular group to include or exclude from reimbursement; rather, the doctor prescribing should decide which medicine to use. Hewett argued that all suppliers should be offered 'reasonable competitive freedom to sell their products' and in return must ensure that a continuous supply of high quality modern medicines was always available.³²

On behalf of its member firms, the Pharmaceutical Manufacturers' Association lobbied for the complete removal of price control on medicines, correctly claiming that the 'political climate' was 'right' for competition in the market for pharmaceuticals, 'based on the amount of additional expense to the patient for their prescribed medicines'.³³ In other words, patients could expect more part-charges and standard prescription charges. The Association's president, Nigel Andrews, argued that Trade and Industry price control, which preceded Department of Health negotiation, safeguarded the interests of the *buyer* (the Government) by establishing a ceiling or maximum price. No such protection existed for the *seller* (the drug company), he claimed, because the Department of Health could 'establish a price at any level'. The manufacturer's only recourse was to refuse to supply or have a part-charge imposed. As Andrews correctly pointed out, any 'dictating' of prices by the Department of Health as a monopoly buyer in the absence of an appeal body was out of step with the thrust of the proposed Commerce Act - which was to remove

³¹ Moody to Barrett, Trade and Industry Regional Director, 4 October 1985, pp.1-2. BAJA 35/30/6 153a Part 1, Accession A602.

³² Hewett to Barrett, Commerce Act 1975: Price Controlled Goods, Pharmaceutical Supplies and Pricing, 1 August 1985, pp.1-4. BAJA 35/30/6 153a, Accession A602.

³³ Risely for Deputy Director Division of Clinical Services to Minister of Health, Price Control on Pharmaceuticals, 7 October 1985, p.1. BAJA 35/30/6 Part 1, Accession A602.

controls and allow market forces to determine prices. Instead, the new legislation would recognise the seller's right to charge an 'appropriate' price and to make price adjustments 'according to competitive forces', that is user demand and buyer resistance. On behalf of member companies, Andrews proposed a free market in which individual firms negotiated prices with the Department of Health 'in a normal buyer/seller negotiation'; when prices could not be agreed, a Tribunal would rule. The maximum reimbursement or subsidy set by the Government would not limit the total price charged by a member company, which could mean increased patient part charges.³⁴

Clearly, the Pharmaceutical Manufacturers' Association was aiming for drug companies to set whatever price they thought the market would bear, for state subsidy of part of the cost of each prescription, and for increased patient co-payment (through private insurance to cover those who could afford it, and the provision of state assistance for those who could not), in line with Labour's broad intention to 'target' assistance to those in need rather than providing reimbursement for all.

Unlike the Department of Trade and Industry, the Department of Health did not appear to have embraced the new economic orthodoxy and firmly opposed the removal of price control from medicines. The Minister, Michael Bassett, returned to the principles underlying the policies of the first Labour Government. Pharmaceutical benefits had been established, he said, to ensure that an effective medicine was available free of charge to patients; where there was no choice, even the most expensive and exotic preparations could be prescribed, albeit sometimes with restrictions. Now, however, economic considerations were being allowed to undermine the Drug Tariff as an 'instrument of social policy'. The Minister argued that the removal of price control could not increase competition in the drugs market. As the Minister rightly pointed out, drug companies competed fiercely in order to

³⁴ Andrews, President Pharmaceutical Manufacturers' Association to Barrett, 18 October 1985, pp.1-2. BAJA 35/30/6 Part 1; Martin, Executive Director, Pharmaceutical Manufacturers' Association, to Secretary Trade and Industry and Director-General of Health, Commerce Act 1975: Price Controlled Goods, 10 December 1985, pp.1-2. BAJA 153a, Accession A602.

persuade doctors to prescribe their particular *brand* of medicine, but such vigorous competition did not apply to *prices*; this situation would not change if price control was removed. Instead, companies would gradually increase their proposed prices which, in turn, would threaten the fundamental principle of free medicines.³⁵ Departmental officials supported this view; they could not accept that sufficient competition existed in the pharmaceutical industry for any sort of 'free market' approach to be successful. Therefore, the matter appeared to rest on whether the Labour Government was prepared to pay for its principles and pay the extra cost if the Department of Health had to rely solely on competition to establish prices.³⁶

By continuing to refine its price negotiation, based on the setting of a minimum or 'bench-mark' price for each therapeutic group of drugs (a range of comparable medicines for treating a certain illness), the Clinical Services Division of the Department of Health had successfully introduced an element of price competition to the market. If a medicine within such a group was clearly superior to others in the same group because it had special attributes such as fewer side-effects, the Department was prepared to pay the full price charged. When more than one equivalent medicine in a group was available, however, either another brand or a generic, the Division could set a minimum price for the whole group based on the lowest-priced medicine available. The more expensive drugs in the same group then carried a part charge to be paid by the patient when collecting the prescription from

³⁵ Bassett to Chairman, Cabinet Committee on Development and Marketing, Removal of Medicines from Price Control, undated (March 1986), pp.1-2. BAJA 35/30/6 Part 1, Accession A602.

³⁶ Smith, Advisory Officer, Trade and Industry, Minutes of meeting 2 December 1985 at Health Department concerning the proposed removal of pharmaceuticals from price control, 4 December 1985, pp.1-2. BAJA 35/30/6 Part 1 1985, Accession A602. This comment proved to be an accurate prediction of the rapid increase in the cost of pharmaceutical benefits from \$346.3 million in 1985-86, to \$439.6 million in 1986-87 to \$506.7 million in 1987-88. Audit Office, *Department of Health: Administration of the Pharmaceutical Benefits Scheme* (Wellington, Audit Office, 1992), p.11.

the pharmacist. To avoid such an imposition, which drug companies regarded as the 'kiss of death', some manufacturers reluctantly agreed to lower their prices.³⁷

For example, Glaxo's Ventolin (salbutamol sulphate) dominated the New Zealand market for asthma drugs in the 1980s, and Beecham's Amoxil was the only brand available of the top-selling antibiotic, amoxycillin trihydrate. Four brands of the top-selling antibacterial co-trimoxazole competed for a share of the market, however, Bactrim (Roche), Cotrizol (Parke Davis), Septrin (Wellcome) and Trisul (Pacific). In the same way, Douglas, Schering and Pacific all sold a brand of verapamil, used to treat angina and abnormal heart rhythm.³⁸ The drug companies were against such 'dictatorial' grouping of their products which, they argued, neither compared 'apples with apples' nor adequately recognised drugs with 'superior efficacy or other qualities, let alone cost differentials'.³⁹

Even within such groups, the Department of Health could not hold down prices. The basis for comparing prices for new products and for price increases was the cost of an 'average daily dose', that is the 'therapeutic group average'. The Clinical Services Division listed all the drugs within such a group and drew a line where the average daily dose fell. Because this information was never passed on to drug companies, a company never knew whether its product fell above, below or on the line. Departmental negotiators admitted, however, that companies acting in unison could 'beat the system of therapeutic pricing' and indeed suspected that this had occurred. In practice, therefore, the Department could take only 'the best price offered' by the drug companies. While officials 'did admit to some commercial bargaining they were

³⁷ Phillips, Director, Division of Clinical Services to Trade and Industry Regional Director, 27 August 1985, pp.1-2. BAJA 35/30/6 Part 1, Accession A602; Barrett Trade and Industry Regional Office to Minister Trade and Industry, 17 January 1986, pp.4,8. BAJA 35/30/6, Accession A602.

³⁸ Smith for Trade and Industry Regional Director, to Hardy, Trade and Industry Head Office, 4 February 1986, p.2. BAJA 153a, Accession A602.

³⁹ Barrett, Trade and Industry Regional Office to Minister Trade and Industry, 17 January 1986, p.8. BAJA 35/30/6, Accession A602.

in effect still price takers rather than price makers'.⁴⁰ Because competitors did not necessarily have to undercut the bench mark price, but simply set prices to meet it, this procedure gave manufacturers the opportunity to inflate the prices of cheaper drugs, including generics, although these could be produced for far less than the original.

As a consequence, 70 per cent of all drugs sold locally were within 10 per cent of the approved maximum price set by the Department of Trade and Industry on a cost-plus basis. Indeed, 72 per cent of new drugs had prices lower in the country of origin than in New Zealand.⁴¹ This trend was confirmed by an Australian study, which showed that of nine out of the ten most commonly prescribed medicines in Australia and New Zealand, New Zealand prices were higher by some 37 per cent.⁴²

If price control were abolished, the Clinical Services Division would be left to devise a new negotiating system to control the costs of medicines, perhaps similar to that used by the Australian Department of Health. However, as the Division's director, J.S. Phillips, correctly pointed out, tough bargaining by the Australian Ministry of Health was attracting increasing conflict with local drug companies over their declining profits.⁴³ Phillips had put his finger on the heart of the matter. If price control were lifted, and the Department of Health attempted to drive a hard bargain

⁴⁰ Smith, Trade and Industry Commerce Division, Review of Price Control on Pharmaceuticals, Minutes of a meeting between the Department of Health and Trade and Industry, 1 October 1985, pp.1-2. BAJA Accession 35/30/6 Part 1, Accession A602.

⁴¹ Collins for Secretary, to Minister Trade and Industry, Pharmaceutical Manufacturers' Association of NZ Inc: Representation of the Association's Concerns, 28 March 1985, p.2. BAJA 152c, Accession A602.

⁴² Australian Industries Assistance Commission, *Report on Pharmaceutical Products* (Canberra, Australian Government Publishing Service, 1986), p.95.

⁴³ Phillips to Regional Director, Auckland Regional Office, Trade and Industry, 27 August 1985, pp.1-2. BAJA 35/30/6 Part 1, Accession A602; Smith, Trade and Industry, Review of Price Control on Pharmaceuticals, Minutes of a meeting between the Department of Health and the Department of Trade and Industry, 1 October 1985, pp.1-2. BAJA 35/30/6 Part 1 1985, Accession A602.

and push down prices, drug companies would continue to complain about declining profits and threaten to withdraw from the market. In this way, the Government would still be under pressure to guarantee a certain level of profit for each company. Therefore the parallel drawn with the Australian Ministry of Health was appropriate. That ministry was successfully using its purchasing power based on the Pharmaceutical Benefits Scheme to squeeze drug company prices. Indeed, the Australian Pharmaceutical Manufacturers' Association argued that local prices were some 30 to 40 per cent below the general level of western world prices. Industry concern had prompted the Minister for Industry and Commerce in 1984 to instruct the Australian Industries Assistance Commission to inquire into the pharmaceutical industry. The Commission's report fuelled a debate about overturning this hard-nosed attitude and, instead, fostering a domestic industry.⁴⁴

The same dilemma remained unresolved in New Zealand. The state provision of medicines was still linked to the profits of local drug companies (as well as to the profits of pharmacists). In the 1980s, about 40 subsidiaries or branches of multinational companies based overseas were operating in New Zealand. Almost all were involved in other product categories including veterinary, chemicals and cosmetics. Only about 15 had their own manufacturing facilities for making tablets, or encapsulating and blending creams and lotions based on imported materials.⁴⁵ Income from prescription medicines made up only about 25 per cent of the total income of these firms, but together they employed more than 600 people.⁴⁶ Whether drug company threats to abandon local investment were seen by the Government as bullying rhetoric, or as simple commercial realism, either way the

⁴⁴ Australian Industries Assistance Commission, *Report, Part 1*; Robert Wallace, 'The Industries Assistance Commission's Report on Pharmaceutical Products', in *Health Economics: Australian Readings*, ed. J.R.G. Butler and D.P. Doessel (Sydney, Australian Professional Publications, 1989), pp.348, 351, 354-55.

⁴⁵ Barrett for Regional Director, Trade and Industry, to Minister Trade and Industry, Review of Price Control on Pharmaceutical Drugs: Background Report, 17 January 1986, p.6. BAJA 35/30/6, Accession A602.

⁴⁶ Collins for Secretary Trade and Industry, to Minister Trade and Industry, Memorandum, Pharmaceutical Manufacturers Association: Representation of the Association's concerns, 28 March 1985, p.1. BAJA 152c, Accession A602.

withdrawal of this investment could be felt in a fall in balance of payments or loss of employment in New Zealand.

Under pressure from individual drug companies and the Pharmaceutical Manufacturers' Association, and despite Department of Health views to the contrary, Trade and Industry officials firmly advised their Minister of 'substantial' competition among manufacturers and importers. This healthy state of affairs clearly appeared to fulfil official requirements for the lifting of Trade and Industry price control on medicines. Indeed, officials advised, the Government had little alternative, in terms of Clause 53 of the Commerce Bill 1985.⁴⁷ In support of this argument Departmental officials stressed that 'arbitrary and dictatorial' price setting by the Department of Health was preventing most importers and manufacturers from achieving price and profit levels approved of, or indeed acceptable to, the Secretary of Trade and Industry. Under the proposed new Commerce Act, however, any reluctance by the Secretary of Trade and Industry to approve company applications for increased prices and profits could be challenged. Moreover, in line with developments overseas, for example in Australia and Canada, certain companies had threatened that poor profits from New Zealand operations could leave them 'no option' but to withdraw from local manufacture and even the entire New Zealand market.⁴⁸ Accepting such arguments, the Secretary of Trade and Industry recommended to the Minister that price control on medicines was no longer

⁴⁷ Barrett to Minister of Trade and Industry, Review of Price Control on Drugs, 16 January 1986, p.2. BAJA 35/30/6 Part 1, Accession A602. See also Caygill, Minister of Trade and Industry to Chairman Cabinet Committee on Development and Marketing, Draft paper, Drugs: Removal from Price Control (undated, March 1986), p.3. BAJA 35/30/6 Part 1, Accession A602.

⁴⁸ Barrett to Minister of Trade and Industry, Review of Price Control on Pharmaceutical Drugs - Background Report, 17 January 1986, pp.1-3,8. BAJA 35/30/6 Part 1, Accession A602. Four firms, Ciba-Geigy, MSDA, Parke Davis and Upjohn, had shifted in varying degrees to importing drugs in fully finished form over the past 10 years. These firms claimed that this change in policy resulted from Pharmaceutical Benefits Scheme pricing policies. Australian Industries Assistance Commission, *Report*, p.97.

necessary and, indeed, could no longer be imposed in its current form under the proposed Commerce Act.⁴⁹

The main provisions of the new Act, passed in 1986, dealt with restrictive trade practices, mergers and takeovers, and a marked scaling down of price control. Part IV provided that price control could be imposed only when there was limited competition in a market for goods or services, or where control was seen by the Minister of Trade and Industry as necessary or desirable in the interests of users, consumers and suppliers. In short, the Government retained the power to control the prices of particular goods or services, but only as a measure of last resort. The Second Schedule of the Act lifted comprehensive price controls from medicines. It amended the Social Security Act 1964 so that price control on medicines could henceforth be imposed only by the Governor-General by Order-in-Council (as distinct from a decision by a minister alone) on the recommendation of the Minister of Health.⁵⁰ In this way, the Act dispensed with the role of the Minister of Trade and Industry in the administration of price control on medicines. The Department of Health became solely responsible both for negotiations with suppliers over medicine prices, as well as the amount it would pay for each product on the Drug Tariff.

Under this new regime, this Department could begin to manage the purchase of medicines for the Pharmaceutical Benefits Scheme as a single, major, commercial task based on a clear and unambiguous policy - acquiring medicines at the lowest available price. The separation of Department of Health negotiations on drug prices from the policy and practices of the Department of Trade and Industry was a significant step in government efforts to hold down expenditure on pharmaceutical

⁴⁹ Stevenson, Assistant Secretary Trade and Industry to Minister Trade and Industry, Drugs: Removal from Price Control, 14 March 1986, p.1. BAJA 35/30/6 Part 1, Accession A602.

⁵⁰ *Statutes of New Zealand*, 1986, Vol 1, pp.111-113, 161; see also Commerce Commission, *Commerce Act 1986: An Outline* (Wellington, Commerce Commission, 1986) and van Roy, 'Control of prices', in *New Zealand Competition Laws*, pp.258-268. In general, see Kerrin Vautier, 'Competition policy and competition law in New Zealand', in Bollard and Buckle, *Economic Liberalisation*, pp.46-66, and Richard Miller, 'Price fixing, price setting, and competition policy', in *The Economics of the Commerce Act*, ed. Alan Bollard (Wellington, New Zealand Institute of Economic Research, 1989), pp.120-143.

benefits. At the same time, however, the Department of Health would still have to gain control of the volume and composition of doctors' prescribing, relinquish the state guarantee to maintain pharmacists' profits from dispensing, and strengthen its bargaining hand in negotiations with manufacturers by promoting further price competition between suppliers of close drug substitutes. Because the interests of doctors, pharmacists and drug manufacturers remained essentially unchanged, these groups would continue to challenge such measures. Indeed, subsequent government efforts to cut costs by amending arrangements for the provision of medicines were easily over-turned by the lobby groups representing each of these powerful interests.

As independent professionals free of contractual obligations with the state, doctors could still act as a powerful group to resist the introduction of any measures which threatened to curtail their autonomy. Labour's quarrel with doctors in 1985 over alleged infringements of their professional freedom, for example, was similar to the the quarrel between doctors and the first Labour Government more than 40 years before. In the 1980s, most general practitioners still received a fee for service paid under the general medical services benefit, but could charge their patients a fee over and above this subsidy. Because this benefit had not been raised since 1972 (although special adjustments had been made in 1974 and 1978), it continued to decline as a proportion of total fees charged to patients from almost 50 per cent in 1973 to 30 per cent in 1981.⁵¹ In 1985, to fulfil an election promise, Labour introduced a 'Special Arrangement' for the payment of higher benefits for doctors' services to children, so that doctors' services would become cheaper for this group of patients. Prolonged discussion with the New Zealand Medical Association and considerable public debate preceded the introduction of this new scheme, the Paediatric GMS Scheme, which was open to all general practitioners who accepted official 'fee guidelines' for the treatment of children.⁵²

⁵¹ Committee to Review Primary Medical Services, *Report* (Wellington, Department of Health, 1982), p.14. Ministry of Health, W 84 KN4 [Q], Accession 69448, Location WH.

⁵² Department of Health, Annual Report 1985, *AJHR* 1984-85, E.10, pp.28-29.

Most doctors refused to join it, however, because they saw it as state interference in the setting of their fees, and were angered at the prospect of being forced to trade off a higher subsidy for children for a limit on their fees. Three Auckland doctors took a case to the High Court where Mr Justice Vautier ruled the Government's original fee limitation scheme invalid. This set-back forced the Minister of Health, Bassett, to reopen negotiations with the New Zealand Medical Association on an entirely new scheme which dropped fee limits and instead relied on regional committees and officers of the Medical Association to monitor doctors' fees. The Government was still committed to pay more toward children's visits to the doctor, while doctors could still charge amounts over and above the state contribution and had maintained their incomes and professional independence.⁵³

To gain revenue for its increase in the general medical services benefit, Labour instituted a standard patient charge on prescriptions - in effect shifting the balance of spending from pharmaceutical benefits to the general medical services benefit. From February 1985, pharmacists collected \$1 for each dispensing of any drug (except contraceptives), although more than half of the population - superannuitants, children, beneficiaries and the chronically ill - was exempt from the charge.⁵⁴ Labour's imposition of a flat fee was an indicator of its attitude to the principle of universal entitlement to health and welfare benefits, and the new dominance of economic over political considerations. The Government deflected some criticism of the charge, however, by emphasising that the revenue was paying for a social service, the general medical services benefit. Because the standard \$1 fee was not based on a percentage of the total cost of each script, however, it revealed nothing of this cost to doctors and their patients.

⁵³ Parliamentary Correspondent, 'Politics and health', *New Zealand Medical Journal*, 99:794 (1986), p.20; Karen Fisher, 'Politics and health', *New Zealand Medical Journal*, 98:773 (1985), p.110; Department of Health, Annual Report 1986, *AJHR* 1986-87, E.10, p.29; Iain Hay, *The Caring Commodity: The Provision of Health Care in New Zealand* (Auckland, Oxford University Press, 1989), p.161.

⁵⁴ Children, social security beneficiaries and national superannuitants were exempt from this charge; prescriptions for contraceptives were also exempt; the charge could also be waived for people who required frequent medical treatment because they were chronically ill. Department of Health, Annual Report 1985, *AJHR* 1984-85, E.10, p.32.

At the same time as the Government introduced its standard prescription charge, it lifted regulations on the prescribing of 'extended supplies' of medicines, other than tranquillisers, so that doctors could issue prescriptions for three instead of only one month's supply of medicines.⁵⁵ If their medicines were dispensed on one occasion, however, patients could avoid paying the flat charge on each repeat dispensing, thus encouraging doctors to prescribe larger quantities of drugs on each script. In this way, the Department of Health's easing of regulations on extended supply prescriptions had the desired effect of *reducing* the total number of prescriptions issued by doctors, but (the undesired effect of) *increasing* the number of items in each script.⁵⁶ In 1986, the average cost per script increased sharply by 32 per cent over the previous year. In the same year, total spending on pharmaceutical benefits increased from \$254.8 million to \$346.3, representing almost 15 per cent of the health vote.⁵⁷ The Government sought to cut this spending by increasing the first modest \$1 charge on prescriptions to \$5 in 1989.⁵⁸ By increasing the patient charge, the Government strengthened the trend toward prescribing for longer periods, thereby increasing the average cost of prescriptions, and pushed further costs on to consumers rather than attempting to confront the doctors and drug companies.

Like doctors, pharmacists also managed successfully to defend their protected, small business status against threats of radical change by the Labour Government. Although pharmacists' profit margins had been reduced to 15 per cent in 1980, they continued to receive an annually adjusted dispensing fee plus substantial discounts from pharmaceutical companies, sometimes amounting to as much as 30 per cent. Because pharmacists were reimbursed at an average level of discounting, however

⁵⁵ Department of Health, Annual Report 1985, *AJHR* 1985, E.10, p.33.

⁵⁶ L.A. Malcolm and A. Mehl, 'Recent trends in drug prescribing rates and costs in New Zealand', *New Zealand Medical Journal*, 101:845 (1988), p.234. See also Frances Sutton, *Trends in Pharmaceutical Benefit Expenditure Over the Last Decade* (Wellington, Department of Health, 1988), Exhibit 1.1, p.1.

⁵⁷ The average cost included the value of the \$1 prescription charge. Department of Health, Annual Report 1986, *AJHR* 1986-87, E.10, pp.32,88.

⁵⁸ Department of Health, Annual Report 1989, *AJHR* 1987-90, E.10, p.58.

cheaply they purchased their drugs from wholesalers, only part of these discounts were clawed back by the Government. Moreover, whenever pharmacists had an influence over what drug was prescribed or a choice of what to dispense, they had a financial incentive to choose a more expensive drug, or one which had been heavily discounted by the manufacturer or wholesaler.⁵⁹

As well as its guarantee of a generous income from dispensing, the Labour Government also continued, reluctantly, to support the principle of an extensive national network of small, independent pharmacies. In 1985, taking advantage of Labour's interest in deregulation, the arch enemy of local pharmacists, Boots the Chemist (NZ) Ltd, appealed to the Minister of Trade and Industry, Caygill, to lift strict controls on the ownership of retail pharmacies, that is the one pharmacist one pharmacy rule, as set out in the Pharmacy Act 1970. Keen to add to the number and size of its nine shops, Boots argued that relaxing ownership rules to allow economies of scale could lead to substantial reductions in the costs of dispensing.⁶⁰

In response to Boots' challenge, the Government began to re-evaluate the special, regulated status of retail pharmacy. It established a committee of officials from the Departments of Trade and Industry, Health and Treasury, and asked it to recommend the minimum legislative restrictions on pharmacy ownership consistent with the needs of patients.⁶¹ The officials were inclined to agree with Boots. They concluded that keeping pharmacists as small businesses resulted in high costs, while accepting that professional pharmacy must always be under the direct supervision and control of a trained pharmacist in order to protect public health. The Officials' Committee

⁵⁹ Pauline Norris, 'The changing role of pharmacists and the distribution of pharmaceuticals in New Zealand', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), p.44; Audit Office, *Administration of Pharmaceutical Benefits*, p.51.

⁶⁰ Jim Eagles, 'Chemists need recipe for a rescue from Rogernomics', *National Business Review*, 4 April 1986, pp.35-36; Norris, 'Changing role of pharmacists', p.136.

⁶¹ Department of Health, Annual Report 1986, *AJHR* 1986-87, E.10, p.33; Department of Trade and Industry, Department of Health, The Treasury, *Officials' Report on Restrictions on the Ownership of Pharmacies* (Wellington, Department of Trade and Industry, 1985), pp.1-2.

proposed lowering the minimum legal level of pharmacist ownership of a pharmacy from 75 per cent to 51 per cent, thus providing for multiple holdings in pharmacies and relaxing restrictions on investment by non-pharmacists, but still requiring the managing pharmacist of each shop to hold the majority of the minimum 51 per cent of professional ownership.⁶² These provisions effectively excluded distribution of medicines through supermarkets, for example.

The powerful Chemists' Guild bitterly opposed this clear threat to pharmacists' protected, small-business status, just as it had opposed Boots' arrival in the 1930s. The Guild lobbied the Ministers of Trade and Industry and Health, insisting on professional control of pharmacies by pharmacists. It arranged meetings in the main centres to organise submissions and, moreover, threatened to launch a publicity campaign with slogans such as 'Today this man owns three used car lots, four massage parlours and a hamburger bar. Tomorrow he could own a chemist shop'.⁶³ Bassett, sharing these concerns, firmly supported the status quo which, in his view, was 'a professional pharmaceutical service of high standard'. He could not agree with Trade and Industry's idea of 'a blank sheet of paper on which to propose a minimum set of restrictions'.⁶⁴

In the face of such firm opposition, and not wishing to alienate another powerful group in the health sector, the Labour Government compromised by agreeing to allow pharmacies to remain under the control of pharmacists, while providing for more capital from other sources, that is 51 per cent instead of 75 per cent pharmacist ownership, but still prohibiting multiple ownership. According to Labour's compromise on limited deregulation for pharmacy, the Pharmacy Bill 1989 confirmed the sections of the Pharmacy Act 1970 which provided that no person

⁶² *Officials Report* pp.9, 10, 15, 17-21, 27-28.

⁶³ Pauline Toni Norris, 'The Negotiation and Re-negotiation of Occupational Control: A Study of Retail Pharmacy in New Zealand 1930-1990', PhD thesis (Victoria University of Wellington, 1993, pp.136-138.

⁶⁴ Bassett, Minister of Health, to Caygill, Minister of Trade and Industry, 17 October 1985, pp.1-2. BAJA, 153a, Accession A602.

could keep or manage a pharmacy not under the direct control of a pharmacist. Pharmacists could have a controlling interest (51 per cent) in only one pharmacy company, but both pharmacists and non-pharmacists could hold up to 49 per cent of the share capital in any number of pharmacies. Historical anomalies, such as Boots and the United Friendly Societies, were now legally in business under the new legislation, but would have to comply with the new restrictions if the shareholding changed or new pharmacies were established.⁶⁵ Because the Pharmacy Bill, along with much other draft legislation, was carried forward to the next session of Parliament, the Labour Government did not manage to get its proposed legislation enacted before it lost office to National in 1990, so that the situation outlined in the Pharmacy Act 1970 continued to prevail for pharmacists.⁶⁶ Meanwhile, the Pharmacy Guild successfully lobbied senior Health Department officials to maintain government payments for dispensing and to defend the status of pharmacists against threats of other national distribution methods for medicines.⁶⁷

Just as it had compromised with powerful lobby groups representing doctors and pharmacists, the Labour Government was also forced to abandon an initiative to side-step the monopoly of drug patent holders by attempting to import medicines on its own behalf. Department of Health research showed that the ten top-selling medicines in New Zealand were selling in Australia at an average of 37 per cent less than in New Zealand. An asthma drug sold in Australia for \$NZ4.50 but in New Zealand for \$NZ8.24, for example. The Department of Health sought to take advantage of this situation by proposing to purchase medicines in Australia under the Crown Use provisions of the Patents Act 1953, and sell them in New Zealand through drug wholesalers in direct competition with the usual suppliers. The Department proposed to purchase \$72 million worth of medicines annually (about one-fifth of the New

⁶⁵ *NZPD*, 503 (1989), pp.13789-13801; Norris, 'Retail Pharmacy in New Zealand', pp.138-139; Anonymous, 'Draft legislation would change the face of pharmacy', *New Zealand Pharmacy*, 10:1 (1990), pp.2-8.

⁶⁶ *NZPD*, 510 (1990), p.4360; *NZPD*, 530 (1992), p.12055.

⁶⁷ Anonymous, 'Major lobby campaign', *New Zealand Pharmacy*, 10:8 (1990), pp.2-3, 30.

Zealand prescription medicines market) from one of the largest Australian drug wholesalers.⁶⁸

The Department of Health would be 'parallel importing' medicines, that is importing brand-name, patented products sold in a lower-price country (Australia), into a higher-price country (New Zealand). To proceed with this scheme required an amendment to the Medicines Act 1981. Accordingly, Cabinet agreed that legislation to allow the Crown to import pharmaceuticals should be introduced and passed in the 1989 Budget. In this way, under the Medicines Amendment Act 1989, the Department was given power to import and sell patented medicines in competition with manufacturers of those products.⁶⁹

Because parallel importing threatened to infringe patent rights, pressure was brought to bear on the Government to abandon this initiative on a number of grounds. Since the beginning of the Uruguay round of the General Agreement on Tariffs and Trade in 1986, the New Zealand Government had been particularly susceptible to United States pressure in commercial matters. These negotiations were a crucial part of Government bargaining to achieve improved access to major world markets, especially for agricultural products. Within this round, New Zealand was an active participant in negotiations concerning Trade Related Aspects of Intellectual Property Rights (TRIPS), which included patents, copyright, or plant breeding rights, and which were important to United States negotiators. The 1989 TRIPS agreement allowed the drawing up of new rules for protecting and enforcing intellectual property rights.⁷⁰ If the New Zealand Government was seen as condoning patent piracy, it weakened its argument for free trade in agriculture.

⁶⁸ Audit Office, *Department of Health*, pp.30, 34-35.

⁶⁹ Caygill, Minister of Finance, *Securing Economic Recovery: Summary of Social Policy Announcements*, 27 July 1989, p.14; Clark, Minister of Health, *Press Statement*, 27 July 1989, p.1; *NZPD*, Supplement, 1989, Vol.2, pp. 1337-1339.

⁷⁰ See in general New Zealand Ministry of External Relations & Trade, *The GATT Uruguay Round: Where New Zealand Stands* (Wellington, Ministry of External Relations & Trade, 1989) and John Parker, *Pharmaceutical Patents in New Zealand* (Auckland, IMS NZ, 1991), Chapter 7, 'New Zealand Policy'.

To add to the pressure, the American Pharmaceutical Manufacturers' Association promptly filed a formal complaint with the United States trade representative in New Zealand, C. Hills. It claimed that the New Zealand legislation would seriously undermine the Trade Related Intellectual Property negotiations of the Uruguay round of the GATT and hinted that the United States Government would take retaliatory action against New Zealand trade should the matter continue to be seen as being unsatisfactorily resolved. Officials of the Department of Justice and the Ministry of Commerce nervously acknowledged the Labour Government's possible breach of international conventions and agreements to which it was party. The Customs Department was even concerned that, as an importer, the Crown might evade its own customs duties and Goods and Services Tax.⁷¹

In response to this United States pressure, Labour backed down by amending its Budget-night legislation to restrict parallel importing to brand-name medicines for which patent protection had expired, and to generic medicines. In this way, the Government axed the most crucial provision of the original legislation, but left in place provisions allowing the Department of Health to buy drugs overseas and import them regardless of contracts agreed to by local drug companies and distributors.⁷² To avoid relying on one supplier, the Department of Health tried to establish purchasing arrangements with a number of Australian wholesalers. In Australia, at least one drug manufacturer quickly arranged a supply agreement between itself and wholesalers prohibiting the 'on-selling' of medicines to other countries, such as New Zealand. Other drug manufacturers may have done likewise. An international network of affiliated companies enabled each major firm to cut out small buyers like the New Zealand Department of Health, preventing it from importing as much as a single aspirin tablet under these arrangements.⁷³

⁷¹ Helen Clark, 'Pharmaceutical costs and regulation: from the Minister's desk', in Davis ed. *For Health or Profit?*, pp.65-67.

⁷² *NZPD*, 509 (1990), pp.3174-3176, 3183. See also Simon Kilroy, 'Clark drug move may hurt NZ's Gatt chances', *Dominion*, 29 September 1990, pp.1-2.

⁷³ Audit Office, *Department of Health*, pp. 34-38.

Just as Labour's plan to break the monopoly of drug patent holders foundered under pressure from international firms, the new National Government, elected in 1990, also bowed to the same pressure to repeal the compulsory licence provisions of the Patents Act 1953. In 1990, the United States Government became aware of applications for compulsory licences under section 51 of the Act by a New Zealand distributor of generic drugs, Pacific Pharmaceuticals Ltd, which related to patents owned by American drug companies.⁷⁴ Of particular concern was Pacific's applications to manufacture and sell generic versions of two anti-hypertensive drugs, Enalapril and Captopril, under New Zealand patents owned by Merck Sharp and Dohme and Squibb respectively.⁷⁵

In 1991, both the New Zealand Researched Medicines Industry Association (the former Pharmaceutical Manufacturers' Association) and a number of individual United States drug companies, including Merck Sharp and Dohme, protested strongly to the National Government, opposing the continued existence of provisions for granting compulsory licences under the New Zealand Patents Act.⁷⁶ Ministers repeatedly pleaded that this provision was not new, that a decision on the new applications was subject to appeal to the High Court, and that the Government had not initiated and could not interfere in the process. They also explained that all intellectual property legislation was under review and likely to be revised in the light of the December 1991 agreement on Trade Related Aspects of Intellectual Property

⁷⁴ Office of the United States Trade Representative, 1991 National Trade Estimate Report on Foreign Trade Barriers, undated, pp.1-2; Cable from Wellington to Washington Embassy, Subject: Patents, Compulsory Licensing Applications, 13 August 1990 p.1. Documents supplied to Pacific Pharmaceuticals under Official Information Act, March 1992.

⁷⁵ Gregory West-Walker and Philip McCabe, 'Compulsory Licences in New Zealand', *Viewpoint New Zealand*, October 1991, p.3. At the same time, Pacific Pharmaceuticals had also applied for the grant of a compulsory licence under a New Zealand patent owned by Allen & Hanburys Ltd, a subsidiary of the Glaxo Group, relating to the ulcer drug ranitidine, sold under the trade name Zantac. The Commissioner of Patents quickly found that a prima facie case existed for the grant of compulsory licences to Pacific. Allen & Hanburys and Glaxo appealed to the High Court for judicial review.

⁷⁶ Moore, Managing Director, Merck Sharp and Dohme (NZ) Ltd to McKinnon, Deputy Prime Minister, 16 August 1991, pp.1-2. Documents supplied to Pacific Pharmaceuticals under the Official Information Act, March 1992.

Rights, as part of the General Agreement on Tariffs and Trade, negotiated in the Uruguay Round. Nevertheless, the United States Trade Representative's office placed New Zealand, along with 23 other countries, on a 'watch list' under provisions of the American Omnibus Trade and Competitiveness Act 1988.⁷⁷ This Act established categories to summarise the attitudes of countries toward intellectual property, based on the principle that a violation of intellectual property was a restraint of trade. The provisions in the Act dealing with priority watch lists (the 'special 301' provisions) required that a foreign country that failed to protect intellectual property rights must be identified and investigated. United States retaliation could take the form of trade sanctions.⁷⁸ In this way, New Zealand could lose its 'most favoured trading nation' status, by having tariffs placed on imports into the United States, for example.

In the face of such threats and continued pressure from drug companies, the Ministers of Commerce, Phillip Burdon, External Relations and Trade, Don McKinnon, and the Associate Minister of Health, Maurice Williamson, together announced the Government's intention to repeal the offending provision of the Patents Act and, moreover, to 'lapse' or cancel pending compulsory licence applications from Pacific Pharmaceuticals. Cabinet confirmed this announcement, which was 'warmly received' by United States officials. Thus defeated, Pacific Pharmaceuticals withdrew its compulsory licence application in relation to Merck's patent covering Enalapril, after litigation and the conclusion of a confidential commercial settlement with Merck.⁷⁹ The Patents Amendment Act 1992 duly

⁷⁷ Pacific Pharmaceuticals Ltd, Submission to the Commerce and Marketing Select Committee, Patents Amendment Bill, 29 May 1992, pp.5-7.

⁷⁸ Woody, United States Embassy, to Falconer, MERT, Text of 'Special 301' Press Release, 29 April 1991. Documents supplied to Pacific Pharmaceuticals under the Official Information Act, March 1992.

⁷⁹ Burdon, McKinnon, Williamson, Press Statement: New Zealand's Intellectual Property Legislation to be Revised, 19 December 1991, p.1; Cabinet Minute CAB (91) M 53/7, 20 December 1991, p.1. Documents supplied to Pacific Pharmaceuticals under Official Information Act, March 1992; Pacific Pharmaceuticals Ltd, Submission to the Commerce and Marketing Select Committee, Patents Amendment Bill, pp.3,6-7. See also D.C.Calhoun, President, NZ Institute of Patent Attorneys, letter to the Editor, *Listener*, 18 December 1993. There were 15 separate negotiations in the current Gatt round; New Zealand had sought better access for its agricultural products in one of these. The Government had undertaken

repealed section 51 of the original Act, thus removing the possibility of encouraging competition from generic drug producers and instead strengthening protection offered under New Zealand pharmaceutical patents. The new legislation also cancelled every application already pending.⁸⁰

Clearly, the fourth Labour Government had made important changes in the administration of pharmaceutical benefits as part of its radical reform programme. Its removal of price control from medicines allowed for the first time the possibility of establishing a single government negotiating centre for the purchase of medicines. Because the Department of Health no longer needed to be concerned with maximum prices and profit margins already set by the Department of Trade and Industry, its negotiating position with drug companies appeared to be strengthened by greater unity of state purpose and action. The policies and strategies of prescribers, dispensers and producers of medicines remained unchanged, however. Doctors continued to control the volume and mix of prescriptions, but were still not responsible for, or clearly aware of, the cost per patient. Pharmacists maintained their protected status, so that the Government's responsibility to ensure the efficient distribution of medicines at the lowest possible cost continued to conflict with its commitment to protect the profitability of pharmacies. In addition to these pressures, as a signatory to the Uruguay Round of the GATT the New Zealand Government had a duty to uphold the rights of intellectual property holders, including patent holders. In short, the distinctive features of the international pharmaceutical industry remained unchanged, that is, the monopoly allowed to patent holders, the network of associate companies that allowed transfer pricing of materials, and the special nature of the product being traded and therefore the difficulty for any government of denying reasonable access to it.

to provide fair and equitable intellectual property protection consistent with that called for in the Dunkel text of December 1991 (that is the Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations). National's introduction and passing of the Patents Amendment Act underlined this point.

⁸⁰ *Statutes of New Zealand*, 1992, Vol 2, No.81, pp.1128, 1134.

10 Conclusion: Past and Present

For almost 50 years, New Zealand government policy on medicines was based on the principle of universal and substantially free entitlement. This policy was part of a broader commitment to the welfare state in New Zealand outlined by the first Labour Government in the health provisions of the Social Security Act 1938. In practice, however, official planning and action on medicines was constrained and compromised by private professional and commercial providers, as well as by pressure from the general public. In this way, medicines became both an important public issue, bound up with the principle of entitlement, as well as the source of significant private gain.

The Social Security Act 1938 provided for a series of monetary benefits and the creation of a national health service to include free hospital treatment, a free general practitioner service and free medicines. By passing this legislation, the first Labour Government intended to offer security to all, whether in the work-force or not. At the same time, the Government was concerned to provide employment by developing local industries. These commitments produced many contradictions: what has concerned us here were irreconcilable policies within the Government over prescription medicines. While the Department of Health aimed to make available a full range of medicines at no or low cost to patients, the Department of Trade and Industry was concerned with ensuring good returns on investment for local industry, including pharmaceutical manufacturers and importers.

Outlining the broad principles of legislation was one thing; devising and implementing its specific provisions was a very different matter. To get the Pharmaceutical Benefits Scheme working, the Labour Government agreed to contracts with the Chemists' Service Guild under which pharmacists' profits were tied to the volume and wholesale cost of the medicines they dispensed. In this way the Government guaranteed the future prosperity of a national network of independent small pharmacies, which was in line with its commitment to full

employment and local industry, but cut across its aim to control government spending on health services. A crucial trade-off in 1941 with doctors' representatives to allow fee-for-service payments also cast a long shadow over the state provision of medicines for decades to come. Doctors were free to charge their patients an amount over and above the General Medical Services benefit, which was originally intended to cover the entire fee charged by doctors. In this way, doctors ensured that their payment did not come wholly from the state. The free universal medical service envisaged by Labour in the 1930s was drastically revised in order to preserve doctors' private professional status, independent from official controls yet greatly enhanced by the health provisions of the Social Security Act.

With these arrangements in hand, free medicines were at long last introduced in May 1941. The Minister of Health would pay from the Social Security Fund for medicines listed in a Drug Tariff which doctors chose to prescribe. Although in principle the Tariff was a 'limited list', right from the start its scope was in practice unlimited. Once established, free medicines became one of the cornerstones of the welfare state, so that attempts to control costs, for example by imposing patient payments for all drugs prescribed or instituting limits on prescribing, were often obscured by political charge and countercharge over issues of patients' rights. Indeed, the weight of public opinion meant that both Labour and National governments feared to undo the original arrangements, and in general administered what Labour had introduced.

At the same time as the first Labour Government struggled ineffectually to control the volume of prescribing and dispensing during the 1940s, the pharmaceutical industry was transformed by discoveries in organic chemistry in Europe and the United States. The world of the policy makers, and what was possible and desirable then, was changed for ever by the dramatic growth of the international pharmaceutical industry during the 1940s. Clearly, the New Zealand Government, like any government committed to a public health service, would face great difficulty withholding the rapidly growing array of new medicines produced by this industry. Yet it could gain access to these products only on the terms of the major world

suppliers as long as they held the patents. Proprietary or brand-name, patented drugs, specifically excluded from the scope of pharmaceutical benefits in 1941 because of their high cost, quickly began to dominate all prescribing. Both Labour and National governments alike were helpless in the face of voracious demand for powerful new drugs such as antibiotics, tranquillisers and diuretics. At the same time, in their view, a key role of the state was to ensure access to these drugs. Because the Department of Health more or less automatically included expensive brand-name medicines in the Drug Tariff as these became available, allowed doctors the freedom to prescribe according to their view of patient needs and demands, and paid pharmacists according to the wholesale cost and volume of dispensing, as prescribing and dispensing increased dramatically during the 1940s and 1950s, so did the cost of pharmaceutical benefits.

Department of Health negotiations over drug prices with major overseas suppliers were compromised by the long-term government commitment to foster local manufacturing. From the 1960s, the Department of Industries and Commerce encouraged the growth of a fledgling pharmaceutical industry, which supplied the medicines provided under Pharmaceutical Benefits Scheme. The Department administered import restrictions in such a way as to push several British and United States firms into undertaking the finishing of their patented drugs in New Zealand. Small-scale drug production began, but always on the terms of each individual firm. Once established, threats to cease supplying the small market combined with pressure from doctors and their patients to force governments to continue to provide a full range of new drugs.

Because most subsidiaries appeared to show poor profits from local sales and production of pharmaceuticals, their managers could drive a hard bargain with Department of Industries and Commerce price control officials when seeking approval for increased profit margins. Transfer pricing between affiliated companies allowed the costs and profits of local firms to be manipulated so as to minimise their New Zealand income, however. Parent companies could charge high prices for bulk or finished drugs sold to New Zealand subsidiaries, thus raising prices to the

Government as the major purchaser of prescription medicines but keeping profits largely in the home country. Such transactions, hidden from government scrutiny, allowed each firm in practice to dictate prices according to what the New Zealand market would bear. Hence the development of effective and legitimate *national* bureaucratic regulations and price control systems, and the application of these to an *international* industry, proved to be well beyond the administrative and political capacities of government departments New Zealand, as in Britain, the United States, Canada and Australia.

Neither the cost-plus price 'setting' regime administered by the Department of Industries and Commerce, nor the price 'taking' regime administered by the Department of Health, was effective in scrutinising, let alone controlling, the costs and profits of local firms. The broad intention of Department of Industries and Commerce price control was to ensure that prices were fixed on the basis of producers' costs, together with an officially approved margin of profit to provide sufficient reward and incentive for continued local production. Department of Health selection for the Drug Tariff was largely under the control of the doctor members of the Pharmacology and Therapeutics Committee. Lacking independent criteria of its own, the Department on the whole concentrated on making available a wide range of safe and effective drugs under the Pharmaceutical Benefits Scheme, rather than taking a tough line on costs.

The Department of Health could threaten to exclude a product from the Drug Tariff in order to bargain over prices. It could also use the lowest-priced product in a particular therapeutic group to establish a 'bench-mark' for all products in that group. Such savings depended upon several competing brands of one drug being available on the market, however. Departmental efforts to tender for the supply of some commonly used drugs from lower-priced sources meant infringing the patent rights of major world suppliers.

New Zealand governments were not alone in facing such problems and dilemmas. Governments in the United States, Canada, the United Kingdom and Australia also

had great difficulty instituting effective controls on doctors' prescribing. Each government attempted to use its power as a major purchaser of pharmaceuticals under a national health scheme, in order to bargain on prices with local firms. Deciding to confront the industry by holding down prices for medicines and, in effect, to sacrifice the development of a local drug industry, was a possibility in each case. Because of the lobbying power of local firms in these countries, however, this question remains unresolved.

In the 1980s, the fourth Labour Government in New Zealand set about dismantling systems built up over the past 40 years, and the rhetoric of free market economics replaced that of national planning. The lifting of price controls from medicines, and the clear separation of the Department of Health from the policies and strategies of what had become the Department of Trade and Industry, opened up the possibility of instituting a new commercial regime for the purchase of medicines. After all, the Pharmaceutical Benefits Scheme was now operating in a different ideological and political climate from that of the 1950s and 1960s, when the idea, let alone the practice, of levying substantial standard patient charges on prescriptions, and government encouragement of import substituting manufacturing, was unacceptable to politicians.

The National Government elected in 1990 also made the reduction of state spending an important priority. Determined to break decisively with the 1938 welfare state regime for health care provision, National pushed forward a major reform of all health services. It established four Regional Health Authorities, whose appointed members were intended to use their health sector, management, and financial skills to purchase most hospital and primary care services for all citizens in their regions from a range of both public and private providers. Policy was left to a streamlined Ministry of Health.¹ The Government also increased user charges for primary care

¹ Geoff Fougere, 'Struggling for control: the state and the medical profession in New Zealand', in *The Changing Medical Profession: An International Perspective*, ed. Frederic W. Hafferty and John B. McKinlay (New York and Oxford, Oxford University Press, 1993), pp.121-122; Geoff Fougere, 'The state and health-care reform', in *Leap Into the Dark: The Changing Role of the State in New Zealand since 1984*, ed. Andrew Sharp (Auckland, Auckland University

for large sectors of the population, and introduced charges for public hospital stays and out-patient visits. Patient charges for prescription medicines were substantially increased, in effect shifting more costs on to consumers, rather than taxpayers in general.

In 1993, as part of the new, administrative framework for health services, the Regional Health Authorities together established a Pharmaceutical Management Agency Limited (Pharmac) to manage the purchase and subsidy of prescription medicines, under the direction of a former Treasury economist. The former Drug Tariff administered by the Department of Health, became the Pharmaceutical Schedule.

In spite of Pharmac's determination to take a hard line on value for money, however, the powerful private interests ranged around the public provision of medicines remain unchanged. Pharmacists' profit margins had been cut by the previous National Government, but their privately owned, small business status was not threatened. Most importantly, no new form of remuneration and reimbursement to pharmacists had been devised, so that their prosperity still depends on keeping drug prices high. Both Labour and National governments have challenged the medical profession to accept greater responsibility for managing resources as well as encouraging and rewarding efficiency.² Nevertheless, doctors still dominate the provision of health care and, to a lesser extent, the making of health policy in New Zealand, and remain free of formal government controls on prescribing. The eight members of the Pharmacology and Therapeutics Advisory Committee, which now advise Pharmac instead of the Department of Health, are all senior doctors in active practice. Most importantly, because the market-driven strategies of major pharmaceutical suppliers remain unchanged, the long-standing alliance between the industry and its doctor 'customers' is alive and well. Doctors still depend on big-

Press, 1994), pp.107-124.

² Gavin S.M. Kellaway, Economic constraints and prescribing patterns in New Zealand, *PharmacoEconomics*, 2:3 (1992), pp.189-197.

brand companies to sponsor much post-graduate medical education and the often lavish entertainment which accompanies it. These companies would be reluctant to continue this sponsorship unless doctors prescribe their brands. Furthermore, prescription medicines are still bound up with issues of justice and 'fairness', just as they were in 1941. Hence the political costs of withholding subsidies on expensive medicines, such as the antibiotic amoxycillin and clavulanic acid (Augmentin, SmithKline Beecham) so commonly prescribed in winter, dornase alfa (Pulmozyme, Roche) used to treat cystic fibrosis, the schizophrenia drug clozapine (Clorazil, Sandoz) and the anti-depressant fluoxetine hydrochloride (Prozac, Eli Lilly) continue to haunt government health ministers.³ Through their Medical Association, doctors can most effectively add to such pressure by accusing the Government of threatening patients' well-being by setting strict limits on medicines spending. Therefore, the balance of interests has still not really changed.

To return to Martin's contention then, this history of private bargaining and public spending has shown clearly that policy making is far from being a 'Big Bang' process. Instead it is more fruitful to view it, as Martin suggests, as 'the development over time of courses of action in response to problems in society defined and determined by the interaction of many parties within and external to the government'.⁴ Labour had made a clear policy choice by 1938, that is, a commitment to the principle of universal entitlement for health services, including the medicines prescribed by doctors. All subsequent government action on pharmaceutical benefits, however, most importantly including the way in which the Social Security Act itself was implemented, was a response to the political, economic and social pressure of commercial, professional and consumer interests. Consequently, 'policy' on medicines became a jumble of formal and informal arrangements resulting from compromises and tactical retreats, as the two main

³ See, for example, Joanna Wane, 'A bitter pill: patients suffer, and even die, as a drug-funding squabble intensifies', *New Zealand Listener* (28 October 1995), pp.42-46 and Wendy Moffett, 'Pharmac's price cutting tactics unworkable say drug firms', *Pharmacy Today* (March 1994), pp.1-2.

⁴ See above, Chapter 1, p.1.

government departments involved pursued the more or less conflicting aims inherent in a long-term commitment to the welfare state.

This story of ambiguity and contradiction tells us much about how governments operate on a day to day basis and the politics of public spending. It confirms Heclo and Wildavsky's claim that governments function as a federation of departments, each linked to its own client group, with only rare re-thinking and revision of broad policy issues.⁵ For almost 50 years, the Department of Industries and Commerce (later Trade and Industry) and the Department of Health each maintained more or less independent administrations based on separate, indeed contradictory, policies for pharmaceutical benefits. Each department was more concerned with maintaining stable relationships with doctors, pharmacists and drug companies, so avoiding conflict and abrupt policy change, rather than with confronting uncomfortable issues. Hence government activities and decisions seldom brought together the views of different agencies in a co-ordinated way so as to give ministers a comprehensive picture of the intractable issues confronting them, and alternative ways of dealing with these. When some of these issues *were* surveyed in a reasonably comprehensive inquiry by the Public Expenditure Committee in the 1960s, the vested interests of government departments, strongly supported by professional and commercial groups, meant that recommendations for change languished. This history therefore contradicts Galvin's smooth statement, in a recent New Zealand study of the policy-making process, that the 'whole aim and purpose of consulting other departments and attempting to co-ordinate the advice that comes from the public service is to ensure that ministers have a comprehensive picture both of the issues they are dealing with and the possible courses of action open to them'.⁶

⁵ See Chapter 1, p.8. and Hugh Heclo and Aaron Wildavsky, *The Private Government of Public Money: Community and Policy Inside British Politics*, Second Edition (London, Macmillan, 1981), p.lxv.

⁶ Bernard Galvin, *Policy Co-ordination, Public Sector and Government* (Wellington, Victoria University Press for the Institute of Policy Studies, 1991), p.27.

In short, this history has modified and extended the literature on the politics of public-private collaboration in national health care schemes. In order to implement official commitments, government departments depended not just on the co-operation and advice of private groups, as Beer suggested, but on their professional knowledge and commercial products. To provide pharmaceutical benefits, New Zealand governments depended on doctors and pharmacists in private practice. Representatives of these groups were allowed easy access to government decision making, indeed to a large extent they were partners in this process. Furthermore, an official commitment to foster a small local pharmaceutical industry, which in turn was greatly strengthened by the monopoly of the world-wide patent system and a long-standing alliance with the medical profession, meant that New Zealand governments, like other governments with divergent interests as both customers and sponsors, became price 'takers' rather than price 'setters'. Taking a hard line with the medical profession in order to institute firm official controls on prescribing, radically revising long-standing arrangements for reimbursement to pharmacists, and confronting local drug importers and producers, proved to be just as difficult in New Zealand as in the United States, Canada, Britain and Australia.

An understanding of the history of this one aspect of government health services enriches our understanding of the wider history of the welfare state in New Zealand, and how the mechanisms which sustained it operated in practice. In spite of, indeed because of, elaborate systems to manage the 'stabilisation' of the economy and to facilitate industrial development through price control, their strangle-hold on the New Zealand market allowed local pharmaceutical companies to beat the system and charge what the market would bear. Governments were easily defeated in their efforts to ensure a small local share-holding in foreign-owned New Zealand subsidiaries and, therefore, that policy decisions and the control of profits were in local hands and not determined from overseas. Profits, capital payments for bulk materials, royalties and various fees flowed steadily from New Zealand to parent companies in Europe and the United States. Clearly, this particular health provision deserves a much more significant place in the literature of the New Zealand welfare state.

Bibliography

Primary Sources

Unpublished: Official

Department of Health files, National Archives, Head Office, Wellington
H Series 1

- H 1 142-70 23368
Drugs 1948-1951
- H 1 142-70 27720
Drugs 1950-1961
- H 1 182-24 25887
Pharmacy Act: Inspection of pharmacies 1949-1955
- H 1 182-3 24816
Pharmacy Act 1939: 1948-1954
- H 1 182-3 25985
Pharmacy Act 1939: 1954-1956
- H 1 206-23 42834
Social Security report on medical, pharmaceutical and dental benefits 1954-1955
- H 1 207 11568
Doctors - Medical Benefits, Regulations 1941
- H 1 207 42833
Social Security, Medical Benefits Regulations 1941
- H 1 207 42790
Medical Benefits Modified Scheme 1940-1944
- H 1 208 17977
Pharmaceutical Benefits: Policy and general 1942-1947
- H 1 208 23569
Pharmaceutical Benefits: Policy and general 1951-1952
- H 1 208 24468
Pharmaceutical Benefits: Policy and general 1952
- H 1 208 25858
Pharmaceutical Benefits: Policy and general 1953-56
- H 1 208 26484
Pharmaceutical Benefits: Policy and general 1956-1957
- H 1 208 33232
Pharmaceutical Benefits: Policy and general 1960-1968
- H 1 208 25470
Pharmacy Plan: Social Security matters from Industries & Commerce
Department 1941-1942
- H 1 208 25471
Pharmacy Plan: Pharmaceutical Benefits
- H 1 208 25472
Pharmacy Plan: Pharmaceutical Benefits
- H 1 208 27373
Social Security Pharmaceutical Benefits 1958-1961

- H 1 208-1 17734
Pharmaceutical Benefits public enquiries 1942-1946
- H 1 208-1 19880
Pharmaceutical Benefits public enquiries 1946-1947
- H 1 208-1 20803
Pharmaceutical Benefits general enquiries 1948
- H 1 208-2 17120
Pharmaceutical Benefits: Central Advisory Committee 1941-1946
- H 1 208-2 19526
Pharmaceutical Benefits: Central Advisory Committee & Drug Committee 1941-1947
- H 1 208-2 24341
Social Security Pharmaceutical Benefits: Central Advisory Committee & Drug Committee 1950-1953
- H 1 208-2 28200
Social Security Pharmaceutical Benefits: Central Advisory Committee & Drug Committee 1960-1962
- H 1 208-2 25876
Social Security Pharmaceutical Benefits: Central Advisory Committee, Constitution, Personnel, Travelling Allowances 1953-1956
- H 1 208-25 23207
Pharmaceutical Benefits 1939-1951
- H 1 208-2-2 25408
Prescribing Pricing Review 1951-1955
- H 1 208-3 15804
Social Security Pharmaceutical Benefits: PPIC Reports & Recommendations 1941-1945
- H 1 208-3 23180
Social Security Pharmaceutical Benefits: PPIC Reports & Recommendations 1949-1951
- H 1 208-3-1 19450
Social Security Pharmaceutical Benefits: PPIC pricing etc 1942-46
- H 1 208-3-1 20643
Social Security Pharmaceutical Benefits: PPIC pricing etc 1947-48
- H 1 208-2-3 29655
Social Security Pharmacology & Therapeutics Advisory Committee Meetings 1959-1964
- H 1 208-2-3 31351
Social Security Pharmacology & Therapeutics Advisory Committee meetings 1964-1966
- H 1 208-2-3 33197
Social Security Pharmacology & Therapeutics Advisory Committee meetings 1966-1968
- H 1 208-2-3 39783
Social Security Pharmacology & Therapeutics Advisory Committee meetings
- H 1 208-2-18 29306
Glaxo Labs Ltd 1960-1964

- H 1 208-2-21 30236
Eli Lilly & Co Pharmaceutical Benefits 1956-1965
- H 1 208-2-22 33024
May & Baker Pharmaceutical Benefits 1961-1967
- H 1 208-2-25 31652
Parke Davis & Co 1961-1966
- H 1 208-2-30 30204
Searle & Co (N.M. Peryer Ltd) 1961-1964
- H 1 208-2-39 32046
E.R. Squibb & Sons (NZ) Ltd 1965-1966
- H 1 208-4-1 11680
Pharmaceutical Benefits drug tariffs 1942-43
- H 1 208-5 23264
Pharmaceutical Benefits: pharmacy organisations 1941-1951
- H 1 208-5-3 23397
Pharmaceutical benefits: irregularities & offences 1948-1952
- H 1 208-25 23207
Social Security Pharmaceutical Benefits 1939-1951
- H 1 208-25 34186
Pharmaceutical Benefits: general including acts & regulations 1951-1969
- H 1 208-25-2 26230
Social Security Pharmaceutical Benefits Drug Tariff 1953
- H 1 208-25-2 30124
Pharmaceutical Benefits Drug Tariff 1963-1964
- H 1 208-26 23165
Drug Tariff
- H 1 208-31-2 34082
Social Security Pharmaceutical Benefits 1964-1968
- H 1 208-35 32165
Social Security Pharmaceutical Benefits costly prescribing 1961-1967
- H 1 208-35-8 29957
Social Security costly prescribing: Pharmaceutical Benefits 1961-1964
- H 1 208-38 25467
Social Security Pharmaceutical Benefits Drug Tariff, Sales Tax, Prescription Pricing and Ruling 1947-1950
- H 1 208-38 33803
Social Security Pharmaceutical Benefits Drug tariff, sales tax 1966-1968
- H 1 208-38-2 30477
Social Security Pharmaceutical Benefits drugs exempt from price control 1961-1965
- H 1 208-51 33026
Social Security Pharmaceutical Benefits price alterations approved by Price Tribunal 1961-1967
- H 1 208-53-1 28425
Social Security Pharmaceutical Benefits 1961-1962
- H 1 208-53-1 33858
Social Security Pharmaceutical Benefits reviews of pharmaceutical benefits schemes 1967-1968

- H 1 208-53-7 32177
Social Security Pharmaceutical Benefits review of pharmaceutical benefits schemes 1963-1967
- H 1 208-57 31170
Social Security Pharmaceutical Benefits circulars, general distribution letters to general practitioners 1963-1966
- H 1 208-57 33025
Social Security Pharmaceutical Benefits circulars, letters to medical practitioners general 1966-1967
- H 1 208-1 34998 box 18, Accession W2676
Social Security Pharmaceutical Benefits: general enquiries 1968-1969
- H 1 208-3 35223 box 21, Accession W2676
Social Security Pharmaceutical Benefits: PPIC Reports and Recommendations
- H 1 208-3-7 35226 box 22, Accession W2676
Social Security Pharmaceutical Benefits, Report by Dr Hulme on Cost of Drugs
- H 1 208-4-4 35239 box 22, Accession W2676
Social Security Pharmaceutical Benefits: departmental circulars & information, circulars to contractors 1942-1949
- H 1 208-4-5 35238 box 32, Accession W2676
Social Security Pharmaceutical Benefits
- H 1 208-5-5 35341 box 22, Accession W2676
Social Security Pharmaceutical Benefits: Inspection of claims & prescriptions 1942-1950
- H 1 208-25-2 35989 box 35, Accession W2676
Social Security Pharmaceutical Benefits: Drug Tariff 1969-1970
- H 1 208-26 35390 box 25, Accession W2676
Social Security Pharmaceutical Benefits, Tuition in Prescription Reading & Pricing 1941-1950
- H 1 208-28 35392 box 25, Accession W2676
Social Security Pharmaceutical Benefits, Provisional Payments 1942-1944
- H 1 208-53-1 35927 box 33, Accession W2676
Social Security Pharmaceutical Benefits Review of Schemes 1968-1970
- H 1 208-62 34695 box 9, Accession W2676
Social Security Pharmaceutical Benefits: Pharmaceutical Negotiating Committee 1966-1969
- H 1 208-4-4 35237 box 22, Accession W2191
Social Security pharmaceutical benefits - formularies & relevant correspondence 1941-1950

Department of Health unserialised accessions, National Archives, Head Office Wellington (Code AAFB)

- AAFB 208-2 38347, Accession W3563
Social Security PAC 1970
- AAFB box 164 208-29 27386, Accession W3464
Pharmaceutical Benefits 1941-1955

AAFB box 73 208-2-2 25906, Accession W3464
 Pharmaceutical Benefits 1954-1956
 AFB box 5, 208-3-1 34762, Accession W3563
 Pharmaceutical Benefits: PPIC

**Department of Industries and Commerce files, National Archives, Head Office,
 Wellington (Code IC)**

IC 1 49/1 Part 1, Accession W392
 Licensing Pharmacy Industry 1936
 IC 1 49/1 Part 2, Accession W392
 Licensing pharmacy industry 1937
 IC 1 49/1 Part 3, Accession W392
 Licensing pharmacy Industry 1938
 IC 4 22/1 Vol 1, Accession W3852
 Price Control Division, Industries and Commerce, Medicines and Drugs 1939-
 1964
 IC 4 22/1/1, Accession W3852
 Chemicals & Drugs - automatic mark-up Part 1 1948-1949
 IC 1 file 5/33, Accession W2357
 NZ Economic Policy: Cabinet Committee Part 6
 IC 1 301/1/10, Accession W1534
 Price Tribunal Establishment
 IC 1 box 1 file 1/8, Accession W2268
 Circulars issued by Price Control (Distribution) Division & memoranda issued
 by Department
 IC 1 box 1 file 1/12, Accession W2268
 Cabinet Papers 1950-1952
 IC 1 box 2 file 1/24, Accession W2268
 Memoranda to Director of Price Control - general 1951-1975
 IC 1 box 2 file 1/25, Accession W2268
 Reports by Director of Price Control 1953-1954
 IC 1 box 4 file 42, Accession W2268
 Trade Practices & Prices Commission 1958-1973
 IC 1 file 3/31, Accession W709
 Pharmacy 1951-1957
 IC 1 box 20 file 4/28
 Kempthorne Prosser & Co Ltd 1967-1975
 IC 1 box 20 file 4/29, Accession W2268
 Drugs 1949-1972
 IC 1 file 72/1/14, Accession W1955
 Royalties, Vol 3 1966-1965
 IC 1 file 72/1/14, Accession W1955
 Royalties: Policy Vol 4 1966-1967
 IC 1 box 10, 22/3/51
 Price Control

- IC 1 box 10 file 3/81
 - Bayer Pharma Pty Ltd 1962
- IC box 10 file 3/83, Accession W2268
 - Glaxo Labs 1964-1970
- IC box 10 file 3/87, Accession W2268
 - Merck Sharp & Dohme (NZ) Ltd 1969-1972
- IC box 11 file 3/92, Accession W2268
 - May & Baker (NZ) Ltd 1972
- IC 1 42/1 Vol 2, Accession W1697
 - Medical Pharmaceutical Products Manufactured in NZ import/export 1959, 1960-1961
- IC 1 42/1 Vol 3, Accession W1697
 - Medical Pharmaceutical Products Manufactured in NZ import/export 1963-1965
- IC 1 42/2/2 Vol 1, Accession W1697
 - Proposals by May & Baker Ltd 1962-1966
- IC 1 file 42/2/3 Vol 1, Accession W1697
 - Proposals by Abbott Labs Ltd 1949-1968
- IC 1 file 57/9/372, Accession W2680
 - Merck Sharpe & Dohme (NZ) Ltd 1976-1977
- IC 1 file 57/9/75, Accession W2680
 - Henry H York & Co Ltd Petone 1971-1975
- IC 1 57/9/37
 - Glaxo Laboratories (NZ) Ltd 1971-1976
- IC 1 57/9/125
 - May & Baker (NZ) Ltd 1972-1973
- IC 1 57/9/372
 - Merck Sharp & Dohme (NZ) Ltd 1976-1977
- IC 51 file 1/10, Accession W2618
 - Policy Toward Price control Part 1 1949-1951; Part 2 1951-1954; Part 3 1954-1973
- IC 51 file 1/24
 - Letters to Directors 1947-1951
- IC 51 file 1/25, Accession W2618
 - Director's Reports - general 1948-1953
- IC 1 file 3/24, Accession W709
 - Economic Stabilisation 1951-1955
- IC 1 file 5/33, Accession W2357
 - NZ Economic Policy: Cabinet Committee Parts 1-2-3
- IC 8/1, Accession W2357
 - Import Control 1968-1969
- IC 8/2, Accession W2357
 - Import licensing Policy 1970

Department of Trade and Industry files, National Archives, Auckland Regional Office (code BBAJ)

BBAJ box 191 Vol 1, Accession A342

Merck Sharp & Dohme 1972-1979

BBAJ box 223, Accession A352

Pfizer (NZ) Ltd Vol 1

BBAJ box 230, Accession A342

Sandoz Pharma Vol 1

BBAJ box 232, Accession A342

E.R. Squibb Vol 1 1962-1980

BBAJ box 159, Accession A342

Douglas Pharmaceuticals Vol 1 1967-1976, Vol 2 Pricing October 1976-June 1981

BBAJ file 4/5/16, Accession A634

Drugs and Druggists Vol 1 December 1952-March 1980

Ministry of Commerce files, National Archives, Head Office, Wellington
unserialised accessions (code AATJ)

AATJ T & I 3/1/42, Accession W3566

Prices, Control of 1947-1978

Ministry of Commerce files, National Archives, Auckland Regional Office
unserialised accessions (code BAJA)

BAJA box 230, Accession A342

Sandoz Pharma Vol 1

BAJA 35/30 Part 6, Accession A602

Drugs & Druggists' Lines, Policy & Procedure 1974-1980

BAJA 35/30 Part 6, Accession A602

Drugs & Druggists' Lines, Policy & Procedure Vol 7 1980-1984

BAJA 35/30/6 Part 1, Accession A602

1985 Review of Price Controls on Drugs

Commerce Commission files, National Archives, Head Office, Wellington
unserialised accessions (code ABDI)

ABDI box 225 PC 60/4/- Part 14, Accession W4256

Operation of Price Control in NZ

ABDI box 172 PC 60/4/44 Part 4, Accession W4256

Price Control, Stabilisation of Prices

ABDI box 198 PC 60/4/56, Accession W4256

Government policy - party manifestos and information April 1971-February 1980

ABDI box 177 PC 60/4/100 Part 1, Accession W4256

Stabilisation of Prices, Price Control February 1985-March 86

ABDI box 291 PC 22/6/2 Part 1, Accession W4256

Pharmaceutical Policy April 1976-November 1982

**Legislative Department files, National Archives, Head Office, Wellington
(Code Le)**

Le 1/1938/10

Evidence submitted to the National Health & Superannuation Select Committee
1938 - box 896, box 897, box 898, box 899.

Le 1/1941/189

Order in Council making regulations under the Social Security Act 1938 with
respect to the provision of Pharmaceutical Supplies Benefits

Le 1/1942/186

Order in Council Social Security (Pharmaceutical Supplies) Regulations 1941
Amendments 1942, 1946

Le 1/1948/308 (161)

Report of the Medical Services Committee submitted to the Minister of Health
1948

Le 1/1965/185 box 1294

Order in Council under the Social Security Act 1964, Social Security
(Pharmaceutical Benefits) Regulations 1965

Le 1/1968/7/

Public Expenditure Committee, Master File - Recess 1967-1968 & 1968 and
PEC Report

Le 1/1968/7/1 box 1353

Public Expenditure Committee Correspondence 11/1967-1/1968

Le 1/1968/7/1 box 1354

Cost of drugs - Pharmaceutical Benefits, PEC Subcommittee submissions

Le 1/1968/7/1 box 1355

Public Expenditure Committee Inquiry

**Cabinet Office files, National Archives, Head Office, Wellington
unserialised accessions (code AAFD)**

AAFD Accession W3738 box 1

Cabinet Meetings CM (61) 1, CM (61) 2, CM (61) 3, CM (61) 4

AAFD 134K 63/29/1 Vol 1

Cabinet Decisions 1955

**Department of Justice files, National Archives, Head Office, Wellington
(Code J)**

J 1 18-31-39, Accession W2304

Patents for pharmaceuticals, foodstuffs Part 1 1971

Official Publications of the New Zealand Government

Appendices to the Journals of the House of Representatives

Commerce Commission, Annual Report 1984-1987, *AJHR*, G.34.

Department of Health, Annual Report 1936-1972, *AJHR*, H.31; 1973-1989, *AJHR*, E.10.

Department of Industries and Commerce, Annual Report 1936-1972, *AJHR*, H.44.

Department of Social Security, Annual Report 1942-1944, 1970, *AJHR*, H.9.

Department of Trade and Industry, Annual Report 1973-1983, *AJHR*, G.14.

National Compulsory Superannuation and Health Insurance (Report of the Departmental Committee on, 1935), *AJHR* 1935, H.30.

National Health and Superannuation Committee (Report of the), on the Proposal of the Government to Establish in New Zealand a National Health Service and a National Superannuation Service, *AJHR* 1938, I.6.

Public Expenditure Committee 1968, *AJHR* 1968, I.12.

Report of the Medical Services Committee (Cleary Committee), *AJHR* 1948, H.31B.

Royal Commission on Social Security in New Zealand, *Social Security in New Zealand*, *AJHR* 1972, H.53.

Departmental and Related Publications

Audit Office, *Department of Health: Administration of the Pharmaceutical Benefits Scheme* (Wellington, Audit Office, 1992).

Commerce Commission, *Commerce Act 1986: An Outline* (Wellington, Commerce Commission, 1987).

Committee to Review Primary Medical Services, *Report* (Wellington, Department of Health, 1982).

Coopers & Lybrand Associates, *Report on the Removal of Medicines from Price Control* (Wellington, Department of Health, 1986).

Department of Health, *Social Security Act, 1938: Part III, Medical and Allied Benefits, Circular Letter to Medical Practitioners* (Wellington, Government Printer, 1939)

Department of Industries and Commerce, *Industrial Development Conference: Organisations and Delegates, Statistical and Schedule Information and Background Papers* (Wellington, Department of Industries and Commerce, 1960).

Department of Industries and Commerce, *Industrial Development Conference: Report* (Wellington, Department of Industries and Commerce, 1960).

Department of Social Security, *The Growth and Development of Social Security in New Zealand* (Wellington, Government Printer, 1950).

Department of Trade and Industry, Department of Health, The Treasury, *Officials' Report on Restrictions on the Ownership of Pharmacies* (Wellington, Department of Trade and Industry, 1985).

Economic Monitoring Group, *The Regulated Economy* (Wellington, New Zealand Planning Council, 1985).

Ministry of Commerce, *Reform of the Patents Act 1953: Proposed Recommendations* (Wellington, Ministry of Commerce, 1992).

Ministry of Health, *A Health Service for New Zealand* (Wellington, Government Printer, 1975).

Ministry of Health, *Review of Pharmaceutical Benefits Scheme* (Wellington, Ministry of Health, 1984).

Muthumala, D., W. G. Scott, J.C. Westrate and A. Morris, *Health Expenditure Trends in New Zealand 1980-1989* (Wellington, Department of Health, 1989).

National Development Conference, *Recommendations Approved, Second Plenary Session 5-9 May 1969* (Wellington, National Development Conference, 1969).

National Development Conference, *Recommendations, Action Completed as at 31 October 1969, Social and Cultural Committee Recommendations* (Wellington, National Development Conference, 1969).

New Zealand Gazette, No. 52, 31 July 1952; No. 28, 10 May 1956.

New Zealand Law Reports (Wellington, Butterworths, annually), 1975 Vol 2; 1976 Vol 1.

New Zealand Ministry of External Relations & Trade, *The GATT Uruguay Round: Where New Zealand Stands* (Wellington, Ministry of External Relations & Trade, 1989).

New Zealand Official Yearbook (Wellington, Department of Statistics, annually) for

appropriate periods and as cited in footnotes.

New Zealand Parliamentary Debates (Wellington, Government Printer, 1936-1990), for appropriate periods and as cited in footnotes.

New Zealand Planning Council, *Economic Strategy 1979* (Wellington, New Zealand Planning Council, 1979).

New Zealand Planning Council, *Planning Perspectives 1978-1983* (Wellington, New Zealand Planning Council, 1978).

Oliver, W.H., 'Social Policy in New Zealand: An Historical Overview', in Royal Commission on Social Policy, *Report, Volume I, New Zealand Today* (Wellington, The Royal Commission on Social Policy, 1988), p.3-45.

Pharmacy Plan Industrial Committee, *Prescription Pricing, Official Schedules and Rules* (Wellington, PPIC, 1944)

Royal Commission on Social Security in New Zealand, *Social Security in New Zealand* (Wellington, Government Printer, 1972).

Scott, Claudia, Geoff Fougere and John Marwick, *Choices for Health Care: Report of the Health Benefits Review* (Wellington, Department of Health, 1986).

Special Committee on Pharmaceutical Benefits, *Report* (Wellington, Government Printer, 1957).

Special Committee on Pharmaceutical Benefits 1961-62, *Report* (Wellington, Government Printer, 1963).

State Services Efficiency Review Committee, *Report on an Efficiency and Economy Review of the Pharmaceutical Services in the Department of Health* (Wellington, State Services Commission, 1974).

Statutes of the Dominion of New Zealand (Wellington, Government Printer), 1936, 1938, 1939, 1941.

Statutes of New Zealand (Wellington, Government Printer), 1953, Vol I; 1964, Vol 2; 1986, Vol 1; 1992, Vol 2.

Statutory Regulations, 1941 (Wellington, Government Printer, 1942).

Sutton, Frances, *Trends in Pharmaceutical Benefit Expenditure over the Last Decade* (Wellington, Department of Health, 1988).

The Treasury, *Economic Management* (Wellington, Treasury, 1984).

Other Official Reports

Australian Industries Assistance Commission, *Report on Pharmaceutical Products* (Canberra, Australian Government Publishing Service, 1986).

Committee on Cost of Prescribing (Hinchliffe Committee), *Final Report* (London, HMSO, 1959).

Committee of Enquiry into the Relationship of the Pharmaceutical Industry with the National Health Service 1965-1967 (Sainsbury Committee), *Report*, Cmnd 3410 (London, HMSO, 1967).

Committee to Examine the Patent System and Patent Law (Banks Committee), *The British Patent System, Report*, Cmnd 4407 (London, HMSO, 1970).

Commission of Inquiry on the Pharmaceutical Industry (Eastman Commission), *Report* (Ottawa, Minister of Supply and Services Canada, 1985).

Monopolies Commission, *Beecham Group Limited and Glaxo Group Limited, The Boots Company Limited and Glaxo Group Limited: A Report on the Proposed Mergers* (London, HMSO, 1972).

Monopolies Commission, *Chlordiazepoxide and Diazepam: A Report on the Supply of Chlordiazepoxide and Diazepam* (London, HMSO, 1973).

Pharmaceutical Manufacturing Industry Inquiry, *Report* (Ralph Report), (Canberra, Australian Government Publishing Service, 1979).

Royal Commission on the National Health Service, *Report*, Cmnd 7615 (London, HMSO, 1979),

House of Commons Special Committee on Drug Costs and Prices (Harley Committee), *Proceedings*, No.34 (Ottawa, Queen's Printer and Controller of Stationery, 1967).

Newspapers

Auckland Star

Australian Financial Review

Canberra Times

Chemical Age

Dominion

Economist

Independent

National Business Review

New Zealand Herald
New Zealand Listener
New Zealand Observer
New Zealand Pharmacy

Secondary Sources

Books

- Abel-Smith, Brian, *An Introduction to Health: Policy, Planning and Financing* (London and New York, Longman, 1994).
- Abel-Smith, Brian, *Value for Money in Health Services: A Comparative Study* (London, Heinemann, 1976).
- Adams, Stanley, *Roche versus Adams* (London, Jonathan Cape, 1984).
- Ashford, Douglas E., *Policy and Politics in Britain: The Limits of Consensus*, (Philadelphia, Temple University Press, 1981).
- Ashford, Douglas E., *The Emergence of the Welfare States* (Oxford, Basil Blackwell, 1986).
- Atkinson, Michael M. and William D. Coleman, *The State, Business, and Industrial Change in Canada* (Toronto, University of Toronto Press, 1989).
- Bailey, David, George Harte and Roger Sugden, *Making Transnationals Accountable: A Significant Step for Britain* (London and New York, Routledge, 1994).
- Baker, J.V.T., *The New Zealand People at War: War Economy* (Wellington, Historical Publications Branch, Department of Internal Affairs, 1965).
- Ballance, Robert, János Pogány and Helmut Forstner, *The World's Pharmaceutical Industries: An International Perspective on Innovation, Competition and Policy* (Aldershot, Edward Elgar, 1992).
- Bayliss, Len, *Prosperity Mislaid: Economic Failure in New Zealand and What Should be Done About It* (Wellington, GP Publications, 1994).
- Beer, Samuel H., *Britain Against Itself: The Political Contradictions of Collectivism* (London, Faber, 1982).
- Beer, Samuel H., *Modern British Politics: Parties and Pressure Groups in the Collectivist Age*, New Edition (London, Faber, 1982).

- Bezold, Clement, *The Future of Pharmaceuticals: The Changing Environment for New Drugs* (New York, John Wiley & Sons, 1981).
- Blank, Robert H., *New Zealand Health Policy: A Comparative Study* (Auckland, Oxford University Press, 1994).
- Blum, Richard, Andrew Herxheimer, Catherine Stenzl and Jasper Woodcock (eds.), *Pharmaceuticals and Health Policy: International Perspectives on Provision and Control of Medicines* (London, Croom Helm, 1981).
- Bollard, Alan (ed.), *The Economics of the Commerce Act*, Research Monograph 52 (Wellington, New Zealand Institute of Economic Research, 1989).
- Braithwaite, John, *Corporate Crime in the Pharmaceutical Industry* (London, Routledge & Kegan Paul, 1984).
- British Medical Association, *Guide to Medicines & Drugs* (London, Dorling Kindersley, 1988).
- Brown, Andrew and Anthony Grant, *The Law of Intellectual Property in New Zealand* (Wellington, Butterworths, 1989).
- Bryder, Linda (ed.), *A Healthy Country: Essays on the Social History of Medicine in New Zealand* (Wellington, Bridget Williams Books, 1991).
- Capling, Ann and Brian Galligan, *Beyond the Protective State: The Political Economy of Australia's Manufacturing Industry Policy* (Cambridge, Cambridge University Press, 1992).
- Castles, Francis G., *The Working Class and Welfare: Reflections on the Political Development of the Welfare State in Australia and New Zealand, 1890-1980* (Wellington, Allen & Unwin/Port Nicholson Press, 1985).
- Cawson, Alan, *Corporatism and Welfare: Social Policy and State Intervention in Britain* (London, Heinemann, 1982).
- Chetley, Andrew, *A Healthy Business? World Health and the Pharmaceutical Industry* (London and New Jersey, Zed Books, 1990).
- Coleman, Vernon, *The Medicine Men* (London, Temple Smith, 1975).
- Collier, Joe, *The Health Conspiracy: How Doctors, the Drug Industry and the Government Undermine Our Health* (London, Century, 1981).
- Combes, Reg., *Pharmacy in New Zealand: Aspects and Reminiscences* (Auckland, Ray Richards for the Pharmaceutical Society of New Zealand, 1981).

- Condliffe, J.B., *The Welfare State in New Zealand* (London, Allen & Unwin, 1959).
- Considine, Mark, *Public Policy: A Critical Approach* (Melbourne, Macmillan, 1994).
- Cooper, Michael H., *Prices and Profits in the Pharmaceutical Industry* (Oxford, Pergamon Press, 1966).
- Cooper, Michael H., *Rationing Health Care* (London, Croom Helm, 1975).
- Daniel, Ann, *Medicine and the State: Professional Autonomy and Public Accountability* (Sydney, Allen & Unwin, 1990).
- Davenport-Hines, R.P.T. and Judy Slinn, *Glaxo: A History to 1962* (Cambridge, Cambridge University Press, 1992).
- Davis, P., *Health and Health Care in New Zealand* (Auckland, Longman Paul, 1981).
- Davis, Peter (ed.), *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand* (Auckland, Oxford University Press, 1992).
- Deane, Roderick S., *Foreign Investment in New Zealand Manufacturing* (Wellington, Sweet & Maxwell, 1970).
- Dunning, John H., *Multinationals, Technology and Competitiveness* (London, Unwin Hyman, 1988).
- Easton, Brian, *Pragmatism and Progress: Social Security in the Seventies* (Christchurch, University of Canterbury, 1981).
- Easton, Brian (ed.), *The Making of Rogernomics* (Auckland, Auckland University Press, 1989).
- Eckstein, H., *Pressure Group Politics: The Case of the British Medical Association* (London, Allen & Unwin, 1960).
- Evans, Robert G., *Strained Mercy: The Economics of Canadian Health Care* (Toronto, Butterworths, 1984).
- Franklin, S. Harvey, *Trade, Growth and Anxiety: New Zealand Beyond the Welfare State* (Wellington, Methuen, 1978).
- Galvin, Bernard, *Policy Co-ordination, Public Sector and Government* (Wellington, Victoria University Press for the Institute of Policy Studies, 1991).
- Gereffi, Gary, *The Pharmaceutical Industry and Dependency in the Third World*

- (Princeton, Princeton University Press, 1983).
- Gillespie, James A., *The Price of Health: Australian Governments and Medical Politics 1910-1960* (Cambridge, Cambridge University Press, 1991).
- Gordon, Myron J. and David J. Fowler, *The Drug Industry: A Case Study in Foreign Control* (Toronto, James Lorimer, 1981).
- Gould, John, *The Rake's Progress: The New Zealand Economy Since 1945* (Auckland, Hodder and Stoughton, 1982).
- Griffith, Ben, Steve Iliffe and Geof Raynor, *Banking on Sickness: Commercial Medicine in Britain and the USA* (London, Lawrence and Wishart, 1987).
- Gross, Paul F., *Compulsory Generic Prescribing: Its Likely Effects on Government Budgets, Consumer Costs, Safety and Professional Roles*, Health Economics Monograph No. 11 (Sydney, Institute of Health Economics and Technology Assessment, 1984).
- Gustafson, Barry, *From the Cradle to the Grave: A Biography of Michael Joseph Savage* (Auckland, Penguin Books, 1988).
- Gustafson, Barry, *The First 50 Years: A History of the New Zealand National Party* (Auckland, Reed Methuen, 1986).
- Ham, Christopher, *Health Policy in Britain: The Politics and Organisation of the National Health Service*, Third Edition (London, Macmillan, 1992).
- Ham, Christopher and Michael Hill, *The Policy Process in the Modern Capitalist State*, Second Edition (Hemel Hempstead, Harvester Wheatsheaf, 1993).
- Hancher, Leigh, *Regulating for Competition: Government, Law, and the Pharmaceutical Industry in the United Kingdom and France* (Oxford, Clarendon Press, 1990).
- Hanson, Elizabeth, *The Politics of Social Security: The 1938 Act and Some Later Developments* (Auckland, Auckland University Press/Oxford University Press, 1980).
- Harris, Richard, *The Real Voice* (New York, Macmillan, 1964).
- Hawke, G.R., *Between Governments and Banks: A History of the Reserve Bank of New Zealand* (Wellington, Government Printer, 1973).
- Hawke, G.R., *The Making of New Zealand: An Economic History* (Cambridge, Cambridge University Press, 1985).

- Hay, Iain, *The Caring Commodity: The Provision of Health Care in New Zealand* (Auckland, Oxford University Press, 1989).
- Heclo, Hugh and Aaron Wildavsky, *The Private Government of Public Money: Community and Policy Inside British Politics*, Second Edition (London, Macmillan, 1981).
- Holland, Martin and Jonathan Boston (eds.), *The Fourth Labour Government: Politics and Policy in New Zealand*, Second Edition (Auckland, Oxford University Press, 1990).
- Holloway, S.W.F., *Royal Pharmaceutical Society of Great Britain 1841-1991: A Political and Social History* (London, The Pharmaceutical Press, 1991).
- Hyslop, John, Jan Dowling and Janet Hickling, *Health Facts New Zealand* (Wellington, Department of Health, 1983).
- Jackson, Keith, *New Zealand Politics of Change* (Wellington, Reed, 1973).
- James, Barrie G., *The Marketing of Generic Drugs: A Guide to Counter-Strategies for the Technology Intensive Pharmaceutical Companies* (London, Associated Business Press, 1981).
- James, Colin, *New Territory: The Transformation of New Zealand 1984-92* (Wellington, Bridget Williams Books, 1992).
- Jones, Geoffrey (ed.), *British Multinationals: Origins, Management and Performance* (Aldershot, Gower, 1986).
- Jordan, A.G. and J.J. Richardson, *British Politics and the Policy Process: An Arena Approach* (London, Allen & Unwin, 1987).
- Jordan, A.G. and J.J. Richardson, *Government and Pressure Groups in Britain* (Oxford, Clarendon Press, 1987).
- Kelsey, Jane, *Rolling Back the State: Privatisation of Power in Aotearoa/New Zealand* (Wellington, Bridget Williams Books, 1993).
- Klein, Rudolf, *The Politics of the National Health Service* (London, Longman, 1983).
- Lang, Ronald W., *The Politics of Drugs: A Comparative Pressure-Group Study of the Canadian Pharmaceutical Manufacturers' Association and the Association of the British Pharmaceutical Industry, 1930-1970* (Farnborough, Saxon House, 1974).
- Lazell, H.G., *From Pills to Penicillin: The Beecham Story, A Personal Account*

- (London, Heinemann, 1975).
- Levine, Stephen (ed.), *Politics in New Zealand: A Reader* (Sydney, Allen & Unwin, 1978).
- Liebenau, Jonathan, *Medical Science and Medical Industry: The Formation of the American Pharmaceutical Industry* (London, Macmillan, 1987).
- Lovell-Smith, J.B., *The New Zealand Doctor and the Welfare State* (Auckland, Blackwood & Janet Paul, 1966).
- Lynn, Matthew, *The Billion-Dollar Battle: Merck v Glaxo* (London, Mandarin, 1992).
- Marion, John Francis, *The Fine Old House: Smith Kline Corporation's First 150 Years* (Philadelphia, Smith Kline, 1980).
- Marshall, John, *Memoirs Volume Two: 1960-1988* (Auckland and Sydney, Collins, 1989).
- Martin, John, *A Profession of Statecraft? Three Essays on Some Current Issues in the New Zealand Public Service* (Wellington, Victoria University Press for Institute of Policy Studies, 1988).
- Martin, John, *State Papers* (Palmerston North, Massey University, 1981).
- Melville, Arabella and Colin Johnson, *Cured to Death: The Effects of Prescription Drugs* (New York, Stein and Day, 1982).
- Millen, Julia, *Glaxo: From Bonnie Babies to Better Medicines* (Palmerston North, Glaxo New Zealand Limited, 1991).
- Mirow, Kurt Rudolf and Harry Maurer, *Webs of Power, International Cartels and the World Economy* (Boston, Houghton Mifflin, 1982).
- Mohan, John, *A National Health Service? The Restructuring of Health Care in Britain Since 1979* (London, Macmillan, 1995).
- Muldoon, Robert, *My Way* (Wellington, Reed, 1981).
- Palmer, Geoffrey (ed.), *The Welfare State Today* (Wellington, Fourth Estate Books, 1977).
- Palmer, George R. and Stephanie D. Short, *Health Care & Public Policy: An Australian Analysis*, Second Edition (Melbourne, Macmillan, 1994).
- Parker, John, *Pharmaceutical Patents in New Zealand* (Auckland, IMS, 1991).

- Polascheck, R.J., *Government Administration in New Zealand* (Wellington, Oxford University Press/Institute of Public Administration, 1958).
- Reader, W.J., *Imperial Chemical Industries: A History. Volume I The Forerunners 1870-1926* (London, Oxford University Press, 1970).
- Reader, W.J., *Imperial Chemical Industries: A History. Volume II The First Quarter-Century 1926-1952* (London, Oxford University Press, 1975).
- Reekie, W. Duncan and Michael H. Weber, *Profits, Politics and Drugs* (London, Macmillan, 1979).
- Richardson, J.J and A.G. Jordan, *Governing Under Pressure: The Policy Process in a Post-Parliamentary Democracy* (Oxford, Martin Robertson, 1979).
- Robb, Douglas, *Health Reform in New Zealand* (Christchurch, Whitcombe and Tombs, 1947).
- Roberts, John, *Politicians, Public Servants and Public Enterprise: Restructuring the New Zealand Government Executive* (Wellington, Victoria University Press for Institute of Policy Studies, 1987).
- Robock, Stefan H. and Kenneth Simmonds, *International Business and Multinational Enterprises* (Homewood, Ill., Irwin, 1989).
- Silverman, Milton and Philip R. Lee, *Pills, Profits, and Politics* (Berkeley, University of California Press, 1974).
- Silverman, Milton, Philip R. Lee and Mia Lydecker, *Pills & the Public Purse: The Routes to National Drug Insurance* (Berkeley and London, University of California Press, 1981).
- Sinclair, Keith, *Walter Nash* (Auckland, Auckland University Press/Oxford University Press, 1976).
- Skene, Geoff, *New Zealand Parliamentary Committees: An Analysis* (Wellington, Victoria University Press for the Institute of Policy Studies, 1990).
- Slatter, Stuart St. P., *Competition and Marketing Strategies in the Pharmaceutical Industry* (London, Croom Helm, 1977).
- Slinn, Judy, *A History of May & Baker 1834-1984* (Cambridge, Cambridge University Press, 1984).
- Smith, Hillas, *Antibiotics in Clinical Practice*, Third Edition (Tunbridge Wells, Pitman Medical, 1977).

- Starr, Paul, *The Social Transformation of American Medicine* (New York, Basic Books, 1982).
- Stokes, Raymond G., *Divide and Prosper: The Heirs of I.G. Farben under Allied Authority 1945-1951* (Berkeley, University of California Press, 1988).
- Sutch, W.B., *Colony or Nation? Economic Crises in New Zealand from the 1860s to the 1960s*, Second Edition (Sydney, Sydney University Press, 1968).
- Sutch, W.B., *The Quest for Security in New Zealand 1840 to 1966* (Wellington, Oxford University Press, 1966).
- Taggart, James, *The World Pharmaceutical Industry* (London and New York, Routledge, 1993).
- Tucker, David, *The World Health Market: The Future of the Pharmaceutical Industry* (London, Euromonitor Publications, 1984).
- van Roy, Yvonne, *Guidebook to New Zealand Competition Laws*, Second Edition (Auckland, CCH New Zealand, 1991).
- Wainwright, Milton, *Miracle Cure: The Story of Penicillin and the Golden Age of Antibiotics* (Oxford, Blackwell, 1990).
- Weatherall, M., *In Search of a Cure: A History of Pharmaceutical Discovery* (New York, Oxford University Press, 1990).
- Webb, Leicester, *Government in New Zealand* (Wellington, Department of Internal Affairs, 1940).
- Yoffie, David B. and Benjamin Gomes-Casseres, *International Trade and Competition, Cases and Notes in Strategy and Management*, Second Edition (New York, McGraw-Hill, 1994).

Articles

- Anon., 'Brand Names', *British Medical Journal* (30 March 1968), pp.781-782.
- Anon., 'The duckling has hatched', Special Report by a Senior Guild Administrator, *Pharmaceutical Journal of New Zealand* (January 1969), pp.11-12.
- Baker, Astrid, 'Paying the price: pharmaceutical benefits and government policy-making, 1938-1986', in *New Countries and Old Medicine: Proceedings of an International Conference on the History of Medicine and Health*, ed. Linda Bryder and Derek A. Dow (Auckland, Pyramid Press, 1995), pp.118-124.

- Baker, Astrid, 'Setting the rules: pharmaceutical benefits and the welfare state', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), pp.18-35.
- Bertram, Geoff, 'Keynesianism, neoclassicism, and the state', in *State & Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), pp.26-49.
- Bolitho, D.G., 'Some financial and medico-political aspects of the New Zealand medical profession's reaction to the introduction of social security', *New Zealand Journal of History*, 18:1 (1984), pp.34-49.
- Bollard, Alan, 'More market: the deregulation of industry', in *Economic Liberalisation in New Zealand*, ed. Alan Bollard and Robert Buckle (Wellington, Allen & Unwin/Port Nicholson Press, 1987), pp.25-45.
- Bollard, Alan, 'New Zealand: radical market-oriented reform', in *Pacific Basin Industries in Distress: Structural Adjustment and Trade Policy in the Nine Industrialized Economies*, ed. Hugh Patrick with Larry Meissner (New York, Columbia University Press, 1991), pp.129-182.
- Boston, Jonathan, 'Thatcherism and Rogernomics: changing the rules of the game - comparisons and contrasts', *Political Science*, 39:2 (1987), pp.74-86.
- Boston, Jonathan, 'The Treasury and the organisation of economic advice: some international comparisons', in *The Making of Rogernomics*, ed. Brian Easton (Auckland, Auckland University Press, 1989), pp.68-91.
- Boston, Jonathan, 'The Treasury: its role, philosophy and influence', in *New Zealand Politics in Perspective*, ed. Hyam Gold, Third Edition (Auckland, Longman Paul, 1992), pp.194-215.
- Chapman, Robert, 'From Labour to National', in *The Oxford History of New Zealand*, ed. Geoffrey W. Rice, Second Edition (Auckland, Oxford University Press, 1992), pp.351-384.
- Clark, Helen, 'Pharmaceutical costs and regulation: from the Minister's desk', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), pp.53-74.
- Collier, Joe, 'The Pharmaceutical Price Regulation Scheme: a time for change', *The Lancet* (13 April 1985), pp.862-863.
- Comanor, William S. 'The political economy of the pharmaceutical industry. *Journal of Economic Literature*, 24 (1986), pp.1178-1217.

- Cooper, Michael H. 'Substitute competition and the international pharmaceutical industry', *Australian Journal of Pharmaceutical Sciences*, 6:4 (1977), pp.113-118.
- Costello, Peter M., 'The tetracycline conspiracy: structure, conduct and performance in the drug industry', *Antitrust Law & Economics Review*, 1 (1968), pp.13-44.
- Davis, Peter, 'Pharmaceuticals and public policy', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), pp.1-17.
- Duncan, Ian, Ralph Lattimore and Alan Bollard, 'Historical perspectives', in *Dismantling the Barriers: Tariff Policy in New Zealand*, Research Monograph 57, New Zealand Institute of Economic Research (Wellington, NZ Institute of Economic Research, 1992).
- Elkan, P.G., 'The New Zealand economy in 1965', *The Economic Record*, 41:96 (1965), pp.481-493.
- Endres, A.M., 'The political economy of W.B. Sutch: toward a critical appreciation', *New Zealand Economic Papers*, 20 (1986), pp.17-39.
- Fisher, Karen, 'Politics and Health', *New Zealand Medical Journal*, 98:773 (1985), p.110.
- Fougere, Geoff, 'Struggling for control: the state and the medical profession in New Zealand', in *The Changing Medical Profession: An International Perspective*, ed. Frederic W. Hafferty and John B. McKinlay (New York and Oxford, Oxford University Press, 1993), pp.115-123.
- Fougere, Geoff, 'The state and health-care reform', in *Leap into the Dark: The Changing Role of the State in New Zealand since 1984*, ed. Andrew Sharp (Auckland, Auckland University Press, 1994), pp.107-124.
- Fox, T., 'The Antipodes: private practice publicly supported', *The Lancet*, 63 (20 April 1963), pp.875-879.
- Fulda, Thomas K. and Paul F. Dickens III, 'Controlling the cost of drugs: the Canadian experience', *Health Care Financing Review* (Fall 1979), pp.55-64.
- Gillespie, James A., 'Midlife crisis? The Pharmaceutical Benefits Scheme turns forty', *Current Affairs Bulletin*, 67:9 (1991), pp.4-11.
- Goldfinch, Shaun and Brian Roper, 'Treasury's role in state policy formulation during the post-war era', in *State & Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), pp.50-73.

- Grabowski, Henry G. and John M. Vernon, 'The pharmaceutical industry', in *Government and Technical Progress: A Cross-Industry Analysis*, ed. Richard R. Nelson (New York, Pergamon Press, 1982), pp.283-360.
- Greenwood, Justin, 'Producer interests in medicines policy: the role of the pharmaceutical industry', in *Social Pharmacy: Innovation and Development*, ed. G. Harding, S. Nettleton and K. Taylor (London, The Pharmaceutical Press, 1994), pp.144-158.
- Hawke, Gary, 'Economic trends and economic policy, 1938-1922', in *The Oxford History of New Zealand*, ed. Geoffrey W. Rice, Second Edition (Auckland, Oxford University Press, 1992), pp.412-450.
- Hayes, T.L., 'Drugs and the economy of the country', *New Zealand Medical Journal*, 67 (1968), pp.495-500.
- Heslop, L.H., 'The rehabilitation of pharmacy in N.Z.', *The Pharmaceutical Journal of New Zealand* (1 February 1937), pp.4-6.
- Hirsch, Paul M., 'Organizational effectiveness and the institutional environment', *Administrative Science Quarterly*, 20 (1975), pp.327-344.
- Hunter, Thelma, 'Medical politics: decline in the hegemony of the Australian Medical Association?', *Social Science and Medicine*, 18:11 (1984), pp.973-980.
- Hunter, Thelma, 'Pharmaceutical Benefits Legislation, 1944-1950', *The Economic Record*, 41 (1965), pp.412-425.
- Hunter, Thelma, 'Pressure groups and the Australian political process: the case of the Australian Medical Association', *Journal of Commonwealth and Comparative Politics*, 18:20 (1980), pp.190-206.
- Jadlow, Joseph M., 'A summary and critique of economic studies of the ethical drug industry: 1962-1968', in *Issues in Pharmaceutical Economics*, ed. Robert I. Chien (Lexington, Mass., Lexington Books, 1979), pp.13-28.
- Kellaway, Gavin S.M., 'Economic constraints and prescribing patterns in New Zealand', *PharmacoEconomics*, 2:3 (1992), pp.189-197.
- Klein, Rudolf, 'The state and the profession: the politics of the double bed', *British Medical Journal*, 301 (1990), pp.700-702.
- Lesser, Frank, 'Turning on the drug companies', *New Scientist*, 105:1438 (1985), pp.10-11.
- Lexchin, Joel, 'Drug makers and drug regulators: too close for comfort. A study of the Canadian situation', *Social Science and Medicine*, 31:11 (1990), pp.1257-

1263.

- Lexchin, Joel, 'Pharmaceutical promotion in New Zealand', *Community Health Studies*, 12:3 (1988), pp.264-272.
- Lexchin, Joel and Pauline Norris, 'Patents and generics: a campaign diary', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis (Auckland, Oxford University Press, 1992), pp.229-244.
- Liebenau, Jonathan, 'Marketing high technology: educating physicians to use innovative medicines', in *Markets and Bagmen: Studies in the History of Marketing and British Industrial Performance 1830-1939* (Aldershot, Gower, 1986), pp.82-101.
- McCraigne, Ned and Martin J. Murray, 'The pharmaceutical industry: a further study in corporate power', *International Journal of Health Services*, 8:4 (1978), pp.573-588.
- McGahan, Anita M., 'Industry structure and competitive advantage', *Harvard Business Review* (November-December 1994), pp.115-124.
- McKinlay, John B., 'Evaluating medical technology in the context of a fiscal crisis: the case of New Zealand', *Millbank Memorial Fund Quarterly/Health and Society*, 58:2 (1980), pp.217-267.
- McKinnon, Malcolm, *Independence and Foreign Policy: New Zealand in the World Since 1935* (Auckland, Auckland University Press, 1993).
- McRobie, Alan D., 'The New Zealand Public Expenditure Committee', *Political Science*, 26:1 (1974), pp.28-46.
- McRobie, Alan, 'The politics of volatility', in *The Oxford History of New Zealand* ed. Geoffrey W. Rice, Second Edition (Wellington, Oxford University Press 1991), pp.385-411.
- McTavish, Jan R., 'Aspirin in Germany: The pharmaceutical industry and the pharmaceutical profession', *Pharmacy in History*, 29:3 (1987), pp.103-115.
- Malcolm, L.A. and C.S. Higgins, 'General practitioner prescribing rates and costs', *New Zealand Medical Journal*, 93:683 (1981), pp.301-303.
- Malcolm, L.A. and A. Mehl, 'Recent trends in drug prescribing rates and costs in New Zealand', *New Zealand Medical Journal*, 101:845 (1988), pp.233-236.
- Maling, T.J.B., 'The prescribing process and options for modification', *New Zealand Medical Journal*, 102:861 (1989), pp.43-45.

- Miller, Richard, 'Price fixing, Price setting, and competition policy', in *The Economics of the Commerce Act*, ed. Alan Bollard (Wellington, 1989), pp.120-143.
- Moffett, Wendy, 'Pharmac's price cutting tactics unworkable say drug firms', *Pharmacy Today* (March 1994), pp.1-2.
- Moffett, Wendy, 'Substitution: name dropping can offend', *New Zealand Pharmacy*, 7:6 (1987), pp.6-15.
- Myers, E.R., 'Social security pharmaceutical benefits in New Zealand', *Australasian Journal of Pharmacy* (30 January 1945), pp.8-10.
- Nash, W. 'Building the future', in *Industrial Development Conference: Report* (Wellington, Department of Industries and Commerce, 1960), pp.13-26.
- Newell, K.W., D.M. Salter, W.G. Scott, and B.H. Wharton, 'The economics of the distribution of prescription medicines in New Zealand', *Community Health Studies*, IV:2 (1980), pp.94-103.
- Norris, Pauline, 'The changing role of pharmacists and the distribution of pharmaceuticals in New Zealand', in *For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand*, ed. Peter Davis, (Auckland, Oxford University Press, 1992), pp.36-52.
- Oliver, W. Hugh, 'The Labour caucus and economic policy formation, 1981 to 1984', in *The Making of Rogernomics*, ed. Brian Easton (Auckland, Auckland University Press, 1989), pp.11-52.
- Parker, John, 'The effective patent life of American originated drugs in New Zealand', *New Zealand Economic Papers*, 19 (1985), pp.61-68.
- Parliamentary Correspondent, 'Politics and health', *New Zealand Medical Journal*, 99:794 (1986), p.20.
- Picciotto, Sol, 'Slicing a shadow: business taxation in an international framework', in *Capitalism, Culture and Economic Regulation*, ed. Leigh Hancher and Michael Moran (Oxford, Clarendon Press, 1989), pp.11-47.
- Reekie, W. Duncan, 'Drug prices in the UK, USA, Europe and Australia', *Australian Economic Papers*, 23:42 (1984), pp.71-78.
- Royal Commission on Social Security, 'Proceedings', *New Zealand Medical Journal*, 71:452 (1970), pp.36-43.
- Rudd, Chris, 'The New Zealand welfare state: origins, development, and crisis', in *State and Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland,

Oxford University Press, 1993), pp.226-245.

- Ruderman, Peter A., 'The drug business in the context of Canadian health care programs', *International Journal of Health Care Services*, 4:4 (1974), pp.641-650.
- Sargent, Jane A., 'The politics of the pharmaceutical price regulation scheme' in *Private Interest Government: Beyond Market and State*, ed. Wolfgang Streeck and Philippe C. Schmitter (London, Sage Publications, 1985), pp.105-127.
- Schnee, Jerome E., 'Government control of therapeutic drugs: intent, impact, and issues', in *The Pharmaceutical Industry: Economics, Performance, and Government Regulation*, ed. Lindsay M. Cotton (New York, John Wiley, 1978), pp.9-21
- Sinclair, Barbara, 'Strategies for reducing the drug bill', *New Zealand Medical Journal*, 102:865 (1989), pp.165-167.
- Sinclair, Keith, 'The Lee-Sutch syndrome: New Zealand Labour Party policies and politics, 1930-40', *New Zealand Journal of History*, 8:2 (1974), pp.95-117.
- Smith, Tony, 'Limited lists of drugs: lessons from abroad', *British Medical Journal*, 290:16 (1985), pp.532-534.
- Sutch, W.B., 'Programme for growth', in *Industrial Development Conference: Report* (Wellington, Department of Industries and Commerce, 1960), pp.27-56.
- Temin, Peter, 'Technology, regulation, and market structure in the modern pharmaceutical industry', *Bell Journal of Economics*, 10 (Autumn 1979), pp.429-446.
- Thorner, C.W., 'The pharmaceutical industry' in *The Chemical Industry*, ed. C.A. Heaton (London, Blackie, 1986), pp.169-228.
- Vautier, Kerrin, 'Competition policy and competition law in New Zealand', in *Economic Liberalisation in New Zealand*, ed. Alan Bollard and Robert Buckle (Wellington, Allen & Unwin/Port Nicholson Press, 1987), pp.46-66.
- Wallace, Robert, 'The Industries Assistance Commission's Report on Pharmaceutical Products', in *Health Economics: Australian Readings*, ed. J.R.G. Butler and D.P. Doessel (Sydney, Australian Professional Publications, 1989), pp.348-362.
- Wardell, William M., 'Control of drug utilization in the context of a national health service: the New Zealand system', *Clinical Pharmacology and Therapeutics*, 16:3 (1974), pp.585-594.
- Wardell, William M., 'The history of drug discovery, development, and regulation',

- in *Issues in Pharmaceutical Economics*, ed. Robert I. Chien (Lexington, Mass., Lexington Books, 1979), pp.3-27.
- West-Walker, Gregory and Philip McCabe, 'Compulsory Licences in New Zealand', *Viewpoint New Zealand* (October 1991), p.3.
- Whitwell, Jan L., 'The Rogernomics monetarist experiment', in *The Fourth Labour Government: Politics and Policy in New Zealand*, Second Edition (Auckland, Oxford University Press, 1990), pp.101-122.
- Willis, Evan, 'The medical profession in Australia', in *The Changing Medical Profession: An International Perspective*, ed. Frederic W. Hafferty and John B. McKinlay (New York and Oxford, Oxford University Press, 1993), pp.107-108.
- Wooding, Paul, 'Liberalising the international trade regime', in *Economic Liberalisation in New Zealand*, ed. Alan Bollard and Robert Buckle (Wellington, Allen & Unwin/Port Nicholson Press, 1987), pp.86-101.
- Wooding, Paul, 'New Zealand in the international economy', in *State and Economy in New Zealand*, ed. Brian Roper and Chris Rudd (Auckland, Oxford University Press, 1993), pp.91-107.

Theses

- Belgrave, Michael Peter, '"Medical Men" and "Lady Doctors": The Making of a New Zealand Profession 1867-1941', PhD thesis (Victoria University of Wellington, 1985).
- Cullen, R., 'The Inter-Country Diffusion of Pharmaceutical Products', PhD thesis (University of Otago, 1981).
- Hunter, Thelma, 'The Politics of National Health', PhD thesis (Australian National University, 1969).
- Norris, Pauline Toni, 'The Negotiation and Re-negotiation of Occupational Control: A Study of Retail Pharmacy in New Zealand 1930-1990', PhD thesis (Victoria University of Wellington, 1993).
- Paterson, Jane C., 'The History of the New Zealand Drug Tariff', MBA project (University of Otago, 1989).
- Weisstein, Joshua, 'The Medical and Pharmaceutical Aspects of New Zealand's Social Security System: A Survey of their Development and Present Status and Some Discussion of Possible Improvements', MA thesis (Victoria University of Wellington, 1951).

