BRINGING ABOUT INDUSTRIAL DEMOCRACY WITHIN THE PUBLIC SERVICE — A RADICAL SOUTH AUSTRALIAN RESPONSE

By Philip Bentley* and Kenneth Wang*

1. INTRODUCTION.

Nearly six years have passed since the Premier of South Australia appointed a Committee to examine and outline proposals for Worker Participation in the Public Sector. This Committee's conclusions and recommendations were presented to the Government in February 1973. Since then there have been several policy changes at the political level; numerous ventures into participation schemes; research studies on Joint Consultative Councils; and varying degrees of reaction from managers, trade unionists and employees. These are, of course, too numerous to be covered completely in this paper.

The experiences gained within the South Australian Public Service have been invaluable from the point of view of developing new managerial modes. Although the findings and lessons learnt have similar parallels in developments overseas and elsewhere in Australia, the remedial solutions are and will be unique in comparison. This paper will attempt to cover specific areas where these thrusts will be most likely to occur and the possible course developments will take in the future.

II. THE SOUTH AUSTRALIAN PUBLIC SERVICE STRUCTURE:

The Public Service is governed by the South Australian Public Service Act. It excludes all Statutory Authorities and Commissions which have specific governing bodies operating under separate Acts of Parliament. However, there are a number of sections of the Public Service which have specific duties to perform and are subject to specific Acts of Parliament, for example, the State Industrial Commission, the Public Trustee, Consumer Affairs, etc.

At the latest count, there are 33 Departments operating under the Public Service Act. Departments vary in size from 3,300 to 18 employees. The departmental structures are generally hierarchical, divided into divisions and further sub-divided into sections, branches and units. Each Department, with the exception of the Auditor-General's Department, is accountable to a Minister for the execution of government policies.

The Public Service Board is charged with the overall administration of the Public Service Act and consequently, has a great deal of influence in the way Departments operate.

All workers employed under the Act are covered by the Public Service Association except for a small number covered by the Printing and Kindred Industries Union. Strictly speaking blue-collar workers are not employed under the Act but are employed through an instrument of Ministerial authority. In practice however, the blue-collar unions (approximately 25 in number) deal with the Public Service Board on all industrial relations and managerial prerogative matters.

III. THE PROPAGATION OF REPRESENTATIVE SYSTEMS OF INDUSTRIAL DEMOCRACY IN THE PUBLIC SERVICE:

The 1973 Committee on Worker Participation in Management (Public Sector) recommended that "Government Departments and Statutory Authorities be encouraged to establish Joint Consultative Councils on the pattern of the model presented (in the Report)".

^{1.} Worker Participation in Management — Report of Committee on Worker Participation in Management Public Sector, Adelaide, S.A. April 1973 (S.A. Government publication).

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Acceptance of the Report by the Government as policy did not initially trigger any mass movement towards Worker Participation. The subject was new on the scene and as such, was unknown and often confused by the wide ranging interpretations of the concept, ranging from suggestion boxes to worker directors. Managers were reluctant to move because of difficulties in reconciling Worker Participation with existing public service procedures. Employees were un-informed and could not take up the option of initiating developments in this area.

The Department of Labour and Industry, charged with the responsibility of implementing government policy on this matter, was first off the line with the establishment of a Joint Consultative Council. In the last five years the number of schemes has multiplied. This results from the effort of the Unit for Industrial Democracy, basically in generating interest through education, publicity and direct involvement. Currently about half of the public service departments in South Australia have some form of worker participation by way of Joint Consultative Councils and Committees operating in at least a part of the Department.

The Development of Industrial Democracy in the Public Sector has been a patchy one. Some Joint Consultative Councils are working well whilst others are floundering and some have fallen into disuse. The development created conflict of roles and interests within the managerial, trade union and employee groups. Some have found Joint Consultative Councils useful and fulfilling, others find them lacking and to a certain extent, creating more troubles than they are worth. However, through this maze of spectacular success stores and equally damning failures, lessons have been learnt and remedial solutions are being developed. From two surveys², ³, that were carried out on the activities of Joint Consultative Councils and the experiences gained by department officers in their active involvement in initiating, advising and monitoring of major projects, a number of areas have been identified for radical change so that industrial democracy can be effective in the long term in the Public Service.

IV. BREAKING THE "CONSULTATION" BARRIER:

The 1973 Worker Participation Report is encouched in the consultation framework. This early influence has been maintained despite a change in government policy to joint decision-making in 1975 which was subsequently backed up by the Public Service Board Policy of 1976. The Statement on Industrial Democracy by the Public Service Board was a major milestone in the overall development of industrial democracy in relation to the Public Service. The 1976 Policy Statement by the Board made it quite clear that the Board is in agreement with the establishment of joint decision-making in Departments wherever possible.

The two surveys on Joint Consultative Councils in the Public Service have indicated that while in a number of Councils some joint decision-making has occurred, by and large most of the Councils and Committees have remained consultative in nature. The surveys also showed that the majority of employees involved in industrial democracy programmes favoured a move to the boundary of joint decision-making and joint consultation. In the Unit's experience a factor which strongly influences whether a Joint Consultative Council is functioning to the satisfaction of the employees or not, rests on how much decision-making authority it is allowed to exercise.

The failure to move positively towards joint decision-making has created a degree of disquiet in many quarters, not the least within the Government and the Unit for Industrial Democracy. The reasons for the lack of push in this direction are not difficult to locate and isolate.

The most common reason is that employees by tradition, are conditioned to respect authority in the Public Service setting. This is often re-inforced by lack of information, knowledge, and confidence on the part of the average non-supervisory public servant in dealing with management. To make the matter worse the Public Service Act (the Bible of the Public Servant as interpreted by the Public Service Board) is founded on assumptions which lead many people to believe that all significant authority must be centralised. The way out of this "conservative mire" lies in the training and development of employees and in the provision of access of information to employees about the activities of the Departments. These processes constitute a long term exercise, and this has already been embarked on by both the Public Service Board and the Public Service Association. The latter

^{2.} An Analysis of Public Service Joint Consultative Councils' Minutes by Richard Gough and Lyndell Stevens. (U.I.D. Publication).

^{3.} Joint Consultative Councils - Analysis of Results from a survey by Lyndell Stevens, Ruth and Olle Hammarstrom and Richard Gough. (U.I.D. Publication).

^{4.} Bulletin of the Public Service Board, S.A. August 1976. (P.S.B. Publication).

organisation is more pressing and is seeking some fundamental re-thinking in information flow within the Public Service.

A lack of information sharing to date is not due to any conscious attempt by the managers to withhold information, but rather adherence to traditional practice. Managers do not see it as their duty or obligation to pass information downwards voluntarily unless it is asked for. On the other hand employees often are not aware of what information is available and hence do not known what to ask for.

The way to develop better access to information in the future will depend on how well industrial democracy is interwoven into the decision-making fabric of the department. It is not simply a question of circulation of newsletters or better communication channels. In our experience the information sharing is most intense and meaningful when employees are in a situation in which the information provided is used for decision-making e.g. budget formulation, and department re-organisation.

The second most common problem of spreading joint decision-making in the Public Service is in the question of how to re-distribute authority and responsibility within the Public Service Departments. The answers lie in two major areas. One deals with the question of delegation of authority within the Departments. The other area directs its attention to how industrial democracy could best be integrated into the normal decision-making process within the organisation. Both of these topics will be covered in more detail later.

A third reason for the slow movement towards joint decision-making lies in the imbalance between issues raised by employee representatives and managers. In our surveys it was found that employees raised almost twice as many issues for consideration as managers. This reflects the manager's view on what a joint consultative council is essentially for, i.e. it is a forum for employees to make their views known, or alternatively, it serves as a means of communication. Whatever the case there has been a degree of passivity on the part of managers. The outcome is that employees essentially play an inactive role on information received outside the joint consultative councils. Employee representatives seldom receive information about the Department's forward plans, about which they could make constructive contributions. The way out of this dilemma would very much lie in shifting the thrust of industrial democracy from employees to managers. In the long term it must ensure that managers within departments are obliged to share whatever decision-making authority they have with their staff. This matter will require some alteration to the Public Service Act and in particular it will require re-structuring of decision-making within a Department.

The fourth area which contributed towards this lack of movement to joint decision-making is in essence based on the fact that Joint Consultative Councils are operating at departmental level or branch levels. The principle of sharing in the making of decisions has not yet permeated down to the lower level of the hierarchy in day-to-day decision-making situations. The sharing of decisions between non-supervising employees and the first line supervisory employees is considered to be most relevant by the majority of employees. In the light of this, it is seriously being considered that establishment of autonomous work groups should be a priority in the development of industrial democracy in the South Australian Public Service. The question of semi-autonomous work groups in a public service context is complex in comparision with the private sector. The inflexibility of job categories based on fragmentation of tasks and strong promotional ladder type structures are major barriers to job sharing and multi-skilling. How semi-autonomous work groups can be established in the public service is a subject which is currently being investigated. Hopefully, within the next year solid proposals will be put forward for consideration.

V. MOVING FROM "CONCEPT" TO "ISSUE" BASED INDUSTRIAL DEMOCRACY PROGRAMME:

On the whole the evolution of industrial democracy to date has been a "concept" based movement, i.e. the introduction of industral democracy as a principle took precedence over considerations of what issues it should direct its attention to and to what degree employees should possess influence over decisions made within the organisation. The emphasis on philosophy resulted in a rapid developement of forms of industrial democracy which covered unspecified numbers of matters of interest to employees and management. As a result of this pre-occupation with forms it is not surprising that a great deal of energy was spent on debating the format of Councils and Committees. Issues such as membership composition, how they should be elected, the role of the union job representative and the number of managers in committees were, and are, common subjects of heated discussion. A by-product of this approach was that Departments developed many different

types of joint bodies with an equally divergent collection of operational characteristics. Joint Councils or Committees range in size from 30 members to 4 members and operate diversely from very

formal settings to informal settings.

There is certainly a great deal of merit in this type of development of industrial democracy. One advantage that immediately comes to mind is that industrial democracy could be tailored to local conditions. Both managers and employees who are operating in the local environment find their type of indigenous product of industrial democracy much better suited to their needs than any other externally implanted rigid formats. Unfortunately, the development of industrial democracy with the emphasis on concepts led a great majority of these schemes into an awkward trap of producing committees located away from the main stream of decision-making activities. The highly visible committees are often situated outside the line responsibilities of the decision-makers. This has assisted in pushing the operation of the Committees into a joint consultation frame of reference with limited decision-making authority.

It is not surprising that under this condition many Joint Consultative Councils fell into disrepute and disuse. The unattached nature of the forum and the frustration of trying to operate a de facto two channel system of decision-making are often sufficient to deter the most enthusiastic expo-

nent of industrial democracy on either side of the fence.

To overcome the problem of parallel decision-making structures, two strategies are being considered. The first is the shifting of the "concept" based industrial democracy approach of the past into an "issue" based initiative. "Issue" based industrial democracy initiatives mean that the identification of issues and the democratic means of handling those issues are given priority attention. In reality this could mean employees being given specific authority and responsibility for making decisions in relation to specific issues. The second alternative that is available for breaking the dual system of decision-making is primarily directed at integrating industrial democracy into the normal fabric of decision-making in the Public Service Departments.

On the question of an "issue" based industrial democracy initiative, the Unit's experience is that industrial democracy becomes active and dynamic only when issues of general pressing concern to management and staff are raised. For instance, in the Premier's Department, the appointment of a Deputy Director General became a major issue of concern to the staff. The Joint Consultative Council passed a number of resolutions dealing with employees. The staff of the Department pressed for involvement in the filling of the Deputy Director General's position. It was the first time such a senior post was considered as negotiable between management and employees in the Public Service. The intensity of the feelings of the staff of the department was unexpected and eventually led to the inclusion of two employee representatives on the interviewing panel. This created a precedent within the Public Service which had led to staff involvement in appointment and interviewing panels as a common practice among many departments.

This and other experiences have indicated that an "issue" based industrial democracy approach gains greater support from both management and employees. At the same time, this has the added advantage of being more readily adaptable to formalisation through legislation, regulation and rules. It has been found rather difficult to formalise and frame a concept in legal terms. This is largely due to the diversity of interpretations and definitions of industrial democracy. This is not so when dealing with specific issues when industrial democracy is built into the way and manner in which the

issues should be handled.

In the next few years, issues such as staff selection, introduction of work processors, movement of people from job to job, and job redesign will be subjects for democratic decision making. This, we believe, is a major leap forward in industrial democracy in our State.

The blending of industrial democracy into the normal decision-making structure of the Public Service Departments is perhaps the most challenging and most difficult task which lies ahead of the development of industrial democracy in South Australia. How this should be brought about is still in its embryonic stage. However, there are examples and experiments being conducted by a number of Departments which are trying to integrate industrial democracy into the day-to-day operations of the department. For instance, the Public and Consumer Affairs Department recently decided to set up Management Committees on which employee representatives are given the right to fully participate as members of the Committees. The purpose of this move is to bring industrial democracy into the decision-making process. There are many advantages in doing this; firstly it provides employees with the opportunity to be informed of decisions that are in the pipe line and, at the same time, be given the opportunity to share information which otherwise would not be brought to their attention. The most important factor involved here is that employees are now not overwhelmed with problem solving but are more and more being pushed into planning and creative thinking

areas. This will, in the long term, generate involvement and trust within the staff as far as industrial democracy is concerned.

VI. THE DE-CENTRALISATION AND DEMOCRATISATION OF DECISION-MAKING AUTHORITY IN THE PUBLIC SERVICE:

For a number of years the Public Service has consciously steered the course of decentralising decisions in the Public Service. Some of the powers and authorities that are vested in the Public Service Board are gradually being shifted to individual departments. In view of the fact that the Board has to operate under the constraints of the existing Public Service Act, decentralisation has been, although persistent, understandably slow.

Apart from the centralised power vested with the Public Service Board there are numerous tightly controlled centralised decision-making bodies in existence in the Public Service. This inevitably restricts the freedom of departments to act independently. For example, the Supply and Tender Board of the Public Service has the overall responsibility to ensure that purchases of equipment are carried out in the most economic manner. Hence the simple matter of individual work groups or departments having a choice of what kind of typewriter to be used is, generally speaking, not negotiable.

This perceived lack of freedom to act by individual departmental managers has often been exeggerated for various reasons. This is especially so when dealing with employees in the industrial democracy context. Comments such as "the decision is beyond my authority" or "the matter has been referred to the Public Service Board for deliberation" are quite often heard in meetings between management and staff. This act of referring matters to other departments and authorities inevitably takes up time and effort for a decision to be reached. There is nothing more frustrating to the employees than the long time delays between issues raised and issues being resolved. This singular factor has been the major source of dissatisfaction among employees involved in industrial democracy projects. On the other hand some managers are finding the situation worsened by their inability to share decisions with the staff. It is obvious that a manager cannot share decisions unless he has the decision-making authority in the first place.

The move to decentralise decisions will continue. However, it will be tackled more and more with the understanding that the delegation of authority and responsibility will go hand-in-hand with the sharing of decisions with the employees. Hence, the sharing of decisions will be firmly placed on the shoulders of the managers.

How best to ensure that the delegated authorities are being shared is still in the melting pot. In principle, the logical avenue to promote this would be the Public Service Act, dealing with the question of delegation and the responsibilities of the Permanent Heads of Departments. The latter could be couched in terms such as "it is the duty of permanent heads to ensure that the employees of the Department are provided with the rights and opportunities to influence decisions within the Department".

Another safeguard that is being considered in respect to delegation, which is in contrast to the top-down thrust, is to build into the Public Service a mechanism which will enable any person or group of employees to apply for specific decision-making powers to be delegated to the person or the group. The eventual package to satisfy this broad principle has yet to be worked out and put into practice.

The 1973 Inquiry into Worker Participation recommended that the application of Job Enrichment Schemes in the Public Sector be investigated. For a number of years the experimentation of semi-autonomous work groups was carried out in a number of departments. The steep hierarchal classification system in the Public Service and the difficulties that are created in paying people for skills that are not being utilised have, to a certain extent, made large scale implementation of semi-autonomous work groups difficult. Apart from the previously mentioned practical difficulties, one major problem has been identified in the experiments that have been carried out in South Australia. This deals with the problem of delegating authority to groups of employees. The Public Service Act (and standard practice within all Public Services) is to delegate authorities to individuals. In our experiments with semi-autonomous work groups the delegated authority vested in individuals has had to be surrendered to the group. The individual, at the same time, has had to take the responsibility of decisions made by the group. He or she may, under certain circumstances, disagree with the group decision. Naturally this situation was found to be unsatisfactory, especially when individuals who had been delegated the authority moved into other sections and a new personality emerged and the informal arrangement was often found unacceptable by the new incumbent. To

overcome this hurdle proposals are being put up to look at the feasibility of delegating authorities to a group of employees. This matter is of such importance that semi-autonomous work groups in the Public Service in the long term will only become wide spread and formalised if some means are found to ensure that it is legally possible for authority to be delegated to a small group of employees.

Generally speaking, one can say that decisions will be pushed further and further down in the bureaucracy of the Public Service. However, the ways and means in which the delegated authorities will be shared will be a major area for development in the future. How the mechanisms will eventually shape up and how they will work will be subject to a great deal of investigation and

possible revisions.

VII. THE "PUSH-PULL" APPROACH TO INDUSTRIAL DEMOCRACY:

A main stumbling block to the acceptance of industrial democracy lies in the diversity of definition and interpretation as to what this concept actually means. Some people see it as an improved communciation exercise and others see it as a total transfer of power from the manager to the currently managed. To overcome this difficulty the South Australian Government has officially adopted the following working definition for industrial democracy:

"Industrial Democracy is concerned primarily with providing employees with the opportunity and the right to influence deci-

sions within the work organisation".

This definition serves very much the "push-pull" strategy of achieving industrial democracy. On the one hand it emphasises the need to provide opportunity for employees to influence decisions, while stressing the role that current managers need to play in the industrial democracy "ball park". On the other hand, it stresses that the influencing of decisions in the work place is a right of the employees, which sets industrial democracy apart form any other type of worker involvement programmes and firmly embeds the government policy in the industrial democracy campus.

In the past, development in industrial democracy has depended heavily upon the style of management of senior public servants. Some employees are privileged to enjoy a democratic work life, while others have to tolerate authoritarianism and paternalism with little hope of changing the situation. This "attitude" based approach without "structural" support creates great inequalities

within a large corporation such as the Public Service.

To ensure that industrial democracy in the future is not a haphazard or individual cultist development, the current thinking is to provide some structural framework in which industrial democracy should proceed. This approach has wide support not only from employees but also from managers. In the current situation managers are placed in a most vulnerable position of operating in a grey area of sharing decisions with employees.

The formalisation of this will certainly not be in terms of parallel democratic decision-making structures. It would be mainly in two major forms. One area in which this can be injected is in the job specification of senior public servants. It is possible that in the duty statements of senior public servants, the need and the necessity to promote and enable employees of a department to share decisions could be included. A possible control mechanism to ensure that this happened would be to ask individual departments to report on an annual basis the progress they have made in achieving industrial democracy.

The other area of achieving some structural support is to spell out issues which should be handled in a democratic manner. Occupational health and safety, staff selection and promotion, budget information, equipment purchase, office layout and job redesign are just some of the issues currently being considered. These issues are already being shared informally in a number of government departments.

Positive moves have already been put into motion to ensure that the rights of staff to influence decisions are being achieved. For instance, in May of last year the Public Service Board and the Public Service Association agreed on certain rights, roles and responsibilities of job representatives. One of the roles which has been recognised by the Public Service is that the job representatives can raise matters with management which reflect the wishes of members who are employed in the department. The Administrative Instruction outlining the job representatives role in the public service has created an avenue for employees to seek greater involvement in the decisions made in the department.

5.

Another area which is currently being explored is an instrument which will provide employees with the right to influence decisions in creating mechanisms in which employees could apply for delegation of authority and for work methods to be investigated with regard to job content, psychological well-being and the way they are being managed.

One matter which has come to light recently is that some employee representatives feel that in fulfilling their roles by speaking out against some of the practices of the department, they have subsequently been victimized. The victimization is generally fairly difficult to track down and prove. Consequently, there needs to be built into the structure some safeguard so that employees who are outspoken and perhaps blunt in bringing to the attention of management various aspects of the departmental practice will not be discriminated against or victimised. How this will be achieved is still very much in the developmental stage. However, employee involvement in appointment panels and employee access to personnel records and files will go some way to counter the problem.

SUMMARY

This paper has attempted to outline some of the ways in which we believe that industrial democracy will take a new turn in the near future. As the theme of the Conference is directed at the future, some of the areas are, by necessity, vague. In South Australia we have not yet reached a stage whereby we can be certain that all the aspects of the problem have an acceptable solution. However, there is no doubt in our minds that the areas identified will be the main focus in developing industrial democracy in the future. As in the past, the march to industrial democracy will be evolutionary and by experimentation.

SOME OPTIONS FOR FUTURE WAGES POLICY IN NEW ZEALAND

M. R. Bradford.*

There are two basic aims in this paper: the first, to present the results of some research on a model describing the relationship between wage movements and a two sector New Zealand economy; and the second to set out the changes needed to the system of wage fixing in New Zealand if the country is to adjust to the economic realities of the 1980's.

A principal driving force in any economy is the competition between labour and capital for increased shares of national income. The forces behind each factor of production are powerful and conflict oriented. In a situation where neither side willingly acquiesces in a reduced share, the most common products are increased domestic inflation and/or a depreciating exchange rate. All western industrialised economies have to a greater or lesser extent suffered from these problems in the decade of the 1970's.

The most common response by governments has been to use incomes policy in conjunction with the more traditional monetary and fiscal policies. I do not propose to review the many types tried. Suffice to say that the record of success is, to be charitable, indifferent. Some have been quite successful in the short run, but ultimately most incomes policies have merely delayed the time that more fundamental fiscal, monetary and exchange rate policy changes have had to be implemented.

This is not to say that certain approaches to resolving the basic conflict between labour and capital cannot be useful. Obviously, where political differences exist as to the appropriateness of the particular economic system the labour market partners operate within, conflict is irresolvable. By and large, and this is certainly true in New Zealand's case, most of the economically harmful conflict boils down to issues over wages and conditions.

In the macro-economic sense then, it is important for labour and capital (via their surrogates, unions and employers) to have a clear appreciation of the important economic parameters.

The next part of this paper outlines a model to explain and quantify the more important wage parameters affecting the New Zealand economy. I will then describe very briefly the major

^{*}Mr. Bradford is Policy and Planning Co-ordinator for the New Zealand Employers Federation. This is the text of a paper he presented to Section 24, Economics, of the 49th ANZAAS Congress, Auckland, January 1979.

characteristics of the wage fixing system, especially as it affects the parameters in the model. After drawing some policy conclusions based on the results of early research, certain modifications to make the present wage fixing system more effective are outlined.

THE MODEL: THE THEORY'

Economic policy in an economy with a relatively large export and import competing sector (let us call it the "exposed" sector) obviously has to have due regard to external competitiveness. Declining external competitiveness, in its most simple form, will lead to depreciation of the exchange rate, declining profitability in the exposed sector, reduced investment and growth, and ultimately to a lower standard of living.

Where external competitiveness (assuming for the moment constant exchange rates) is threatened by an 'excessively' large wage share (i.e. where the distribution of income moves in favour of wage and salary earners), the capacity of industry in the exposed sector to finance investment is reduced, either from internally generated or loan funds. In the end this reacts against the wage earner: a lower rate of economic growth, falling productivity, a reduced ability to meet increased real (as opposed to money) wages, and reduced employment opportunities.

Conversely, where labour prices are too low and profits rise so that the income distribution moves in favour of capital, pressures are generated to take real wage increases in the form of wage drift, productivity schemes and the like.

In this situation both labour and capital have a vested interest in establishing, first, what the major "path" for wage increases can be, and secondly, how that available increase is to be distributed between industries or occupations. Amongst some of the important considerations are: whether particular industries should be phased out because they are no longer competitive, technologically or socially relevant, or whatever; or whether particular labour skills are needed but are in short supply.²

The model outlines a method for establishing the appropriate "wage path" the economy could follow. Assume the New Zealand economy is split into two sectors: an "exposed" sector, defined to include both exporting industries and import competitive industries; and a "sheltered" sector comprising industries or activities whose prices, productivity or output are not influenced in any way by competition from foreign countries.

To preserve international competitiveness at constant exchange rates, income growth in the exposed sector is determined by productivity growth in that sector, and the growth in trade weighted foreign prices facing industries in the exposed sector.

Furthermore, assuming constant income shares, the appropriate "wage path" for wage earners is the sum of these two factors. Wage movements above this path will ultimately result in a loss of international competitiveness; below this will result in either an increasing share of national income by capital, or increased competitiveness by the exposed sector (in the form of lower real prices and presumably increasing market shares).

Providing wage increases in the sheltered sector do not exceed the "wage path" determined in the exposed sector, reasonable external balance will be maintained. However, note that this will not necessarily be at zero or even constant domestic inflation rates; the measure of effect on domestic inflation is affected, inter alia, by productivity in the sheltered sector. The higher productivity is in this sector, the lower will be the impulse given to domestic inflation.

Now this model is not significantly different from the conventional exposition often presented in New Zealand. This exposition uses national productivity and external competitiveness. But more often than not the rhetoric used to implement one or other form of incomes policy revolves around the need to reduce the rate of inflation itself, without reference to what wage movements should be to preserve or enhance international competitiveness. Untimately, in macro-economic terms, this is more important.

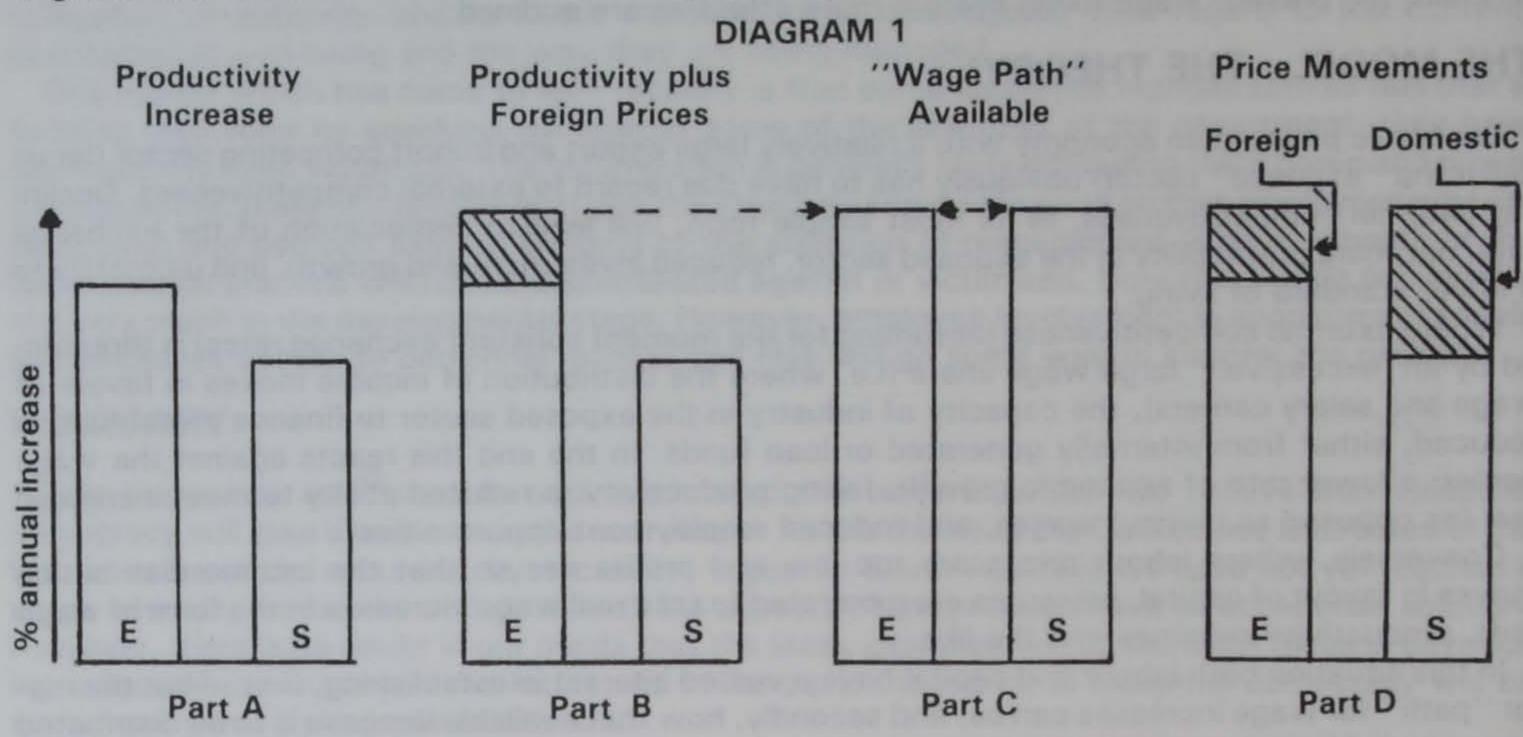
Lying behind the objectives to reduce the rate of inflation are implicit objectives to influence the

^{1.} The model set out in this paper draws heavily on the Aukrust Two-Sector model of "competing" and "sheltered" sectors. This model, and its derivatives, is used to describe the wage transmission/income distribution/international competition process in the Scandinavian economies. There are important differences between the way the model works in Scandinavia, and in New Zealand. Apart from the rather different economic structures of the "competing" (or export) sector, wages are determined in the competing sector in Scandinavia: in New Zealand the reverse is true.

Nevertheless, these differences in the transmission process of the model do not invalidate its basic structure.

It is unlikely that relative prices in the labour market are sufficient to get labour mobility in a restructuring economy. The wage system must be supplemented by labour market policies designed to identify labour bottlenecks, to retrain labour, to predict labour redundancy and so on. Labour market policies seem to be even more important where wage relativities are very rigid, as they are in New Zealand.

income distribution, not always between labour and capial, but between classes of income earners (e.g. low and middle income earners, old age pensioners, and wage earners).



The model can be represented diagramatically (see diagram 1). The height of the block represents the percentage increase applying to each component, of an exposed sector and a sheltered sector. Part A of the diagram shows the productivity increase in each sector in a given period. Add the foreign price component to the exposed sector in part A and under the assumptions regarding external competitiveness and income distribution, the appropriate "wage path" is given by the height (= a percentage wage increase) of that block. Providing the total wage increase in both sectors does not exceed this increase (part C) external balance will be preserved. The price increases applying in each sector are measured by the shaded sections of part D. Note that under this formula, it is quite possible for domestic prices to rise faster than prices received by the exposed sector, and preserve external balance.

Obviously, the model is highly simplified. Complicating features, such as import prices rising faster than domestic prices, introducing inter- and intra-industry rigidities with respect to resource transfers, the prevalence of productivity schemes in industry and rigid wage relativities or anomalies will enhance the realism and the dynamics of the model. It is the intention in this paper to only sketch in broad detail a possible method of defining some parameters to determine the rate at which wages (and profits) should rise.

I will now turn to examine some recent data, using the general approach set out in the model.

THE MODEL; EARLY RESULTS³

Data sources in New Zealand are not entirely adequate for testing the model.4

For the purposes of this analysis, the New Zealand economy has been "cut off at the knees" somewhat to accommodate the quality of data available.

The exposed sector is defined as the primary produce processing industries (meat, dairy and wool) and the pulp and paper industry. These industries exported 25 percent or more of their total sales. 5 Obviously, the large number of industries exporting less than 25 percent are included in the sheltered sector (most in fact exported less than 5-10 percent of sales), but as it was not possible to separate their activities into "exposed" and "sheltered", this rather arbitrary choice mechanism was adopted. In any event, the "exposed" sector includes nearly 85 percent of the gross domestic product contribution in 1965-66 terms, by the manufacturing sector.

The agriculture, hunting and fishing, mining and quarrying, and forestry and logging industries⁶ are excluded in the meantime because of the difficulty in obtaining adequate productivity and ex-

The author is indebted to Rodney Lewington of the Department of Statistics, and Peter Simons of the New Zealand Employers Federation for their help and guidance in deriving the results in this section of the paper.

Reasonable refinements, both with respect to method and coverage, should be possible with the full introduction of the new SNA National Accounts by the Department of Statistics, and the revision of certain labour force and salary and wage remuneration data by the Department of Labour.

In 1974/75 terms, from internal Department of Statistics worksheets.

^{16.5} percent of Gross Domestic Product in 1965-66 prices.

port data on a sectoral basis. Definitional difficulties precluded any possibility of including import competing industries.

The "sheltered" sector includes the remainder of the manufacturing sector; electricity, gas and water, construction, wholesale and retail trade, restaurants and hotels, and transport, storage and communication.⁷

The "sheltered" sector comprises about 55 percent of GDP in 1965-66 terms.8

Table 1 sets out the GDP, employment and productivity calculations for the exposed and sheltered sectors. The somewhat surprising result that productivity grew faster over the 1965-77 period in the sheltered sector is probably accounted for by the poor productivity record of the meat processing industry, and the high (and possibly spurious) productivity in some parts of the sheltered sector.

Tables 2A and 2B summarise the results for the exposed sector. Table 2A summarises period 1972-77°, for which better data is available than the period 1966-72. Figures are expressed in average annual growth rates, to avoid the year to year 'noise' which exists in the data. It seems that a "wage path" of approximately 13 percent per annum was available to meet wage increases between 1972 and 1977. Actual wages, however, grew at around 15½ percent per annum, suggesting that wages grew some 2½ percent a year more than a "preservation-of-international-competitiveness" condition would dictate. Although the evidence is scant, Table 4 suggests that income shares were reasonably constant over the period, so the pressure fell on the exchange rate and on increasing subsidies to the exposed sector in the form of export incentives.¹º. If the latter was a substantial factor, it would suggest that export incentives are effectively being drained off to subsidise wage increases in New Zealand's export industries, rather than improving their profitability, their productivity or their growth potential.¹¹. The worst performances, both with respect to productivity and wage growth, were recorded by the meat and dairy processing industries. For these industries profitability was probably maintained in part by reducing farm producer prices in real terms.

Similar, but statistically less reliable, results are evident for the 1966 to 1972 period.

Table 3 shows the influence of productivity and wage growth on the sheltered sector. The following results emerge.:

1972-77

- (a) productivity grew slightly faster than in the exposed sector (3½ as against 3 percent p.a.);
- (b) as one would expect with New Zealand's wage transmission process (see ahead), wages grew at about the same rate in the exposed and sheltered sector i.e. 15½ percent p.a.;
- (c) the impulse from wage growth to domestic inflation, at about 12 percent p.a., lines up remarkably closely with movements in the consumer price index (nearly 12 percent p.a.) and the appropriate component of the wholesale price index ¹² (over 13 percent p.a.).

THE WAGE DETERMINATION PROCESS IN NEW ZEALAND.

Partly for historical and partly for institutional reasons, wages are determined in New Zealand in the sheltered sector. ¹³ The high degree of horizontal (as between like skills and occupation) wage relativity ensures that the increases achieved in the sheltered sector flow through very quickly to the exposed sector. This is indicated by the similar wage income trends in both sectors.

The wage fixing system operates at three levels: national award negotiations which set minimum rates for the great bulk of skills; various above award or separately negotiated wage agreements which build on minimum award rates; and the general wage order system which is the only real element of the wage fixing system with macro-economic review responsibilities. The GWO system

^{7.} Financing, insurance, real estate and business services; and community, social and personal services are included.

Thus industries not accounted for in the analysis comprise about 40 percent in GDP.
 There is no particular virtue in the choice of this period, apart from the availability of data.

The impact of export incentives should not be over-emphasised however as only the woollen and pulp and paper industries qualified under existing rules. Is it therefore coincidental that the net effect of exchange rate changes over the 1972-77 period was a devaluation of nearly 2 percent per annum?

The implications for export incentive policy are serious indeed, unless wage growth can be brought closer into line with the appropriate "wage path".

Prices received for commodities produced in New Zealand, for sale in New Zealand, by "other manufacturing industries". Import prices grew at proximate rates for both periods under review.

^{13.} Unlike the Scandinavian economies where wage growth is determined in the exposed or "competing" sector, and the sheltered sector by and large moves pari passu with the competing sector.

Over the period 1969-77, GWO's have had somewhat of an "on again, off again" role. See 1978 N.Z. Year Book pp 789-790 for a full description of the GWO and its variants in recent years.

has, however, in recent years tended to provide an inflationary bias in the overall system, partly because of the protection the Arbitration Courts have given to low income, wage and salary earners and partly because the "industrial harmony" criterion has often led to higher than economically justifiable general wage increases.

Since the reintroduction of "free" wage bargaining in August 1977, there has been very little, if any, emphasis placed on the macro-economic considerations in negotiations between the trend-setting national awards. The experience of the 1977 and 1978 wage rounds clearly shows that the circular private-state-private sector¹⁶ tradesmen's ratchet, the rectification of anomalies and so-called "catch-up" arguments have had more impact on determining the quantum of wage increase than macro-economic related arguments.

When combined with rigid and historical margins for skill and horizontal wage relativities, these were the only dynamic explanatory factors in the setting of wage rate increases for those years. Employment (or unemployment) was the equilibrating macro-economic factor rather than the growth in real wage rates.

Notwithstanding the various sorts of incomes policies which have characterised the 1972-77 period, the wage transmission process from the sheltered to the exposed sector still operated. Although the effectiveness of those policies did wane significantly towards the end of the period, their virture was in relating wage increases at least to some macro-economic variables. Contrast the 2½ per cent annual "excess" wage movement between 1972 and 1977 with the estimated 6 percent annual movement between 1965 and 1972, when there were virtually no sustained incomes policies. It is appropriate to ask whether this would necessarily have been the case had unions and employers actually understood what the parameters for wage movements are. This question seems relevant right now.

POLICY CONCLUSIONS FROM THE MODEL

The model described above is obviously capable of specification improvement and statistical refinement. Nevertheless, the results are not inconsistent, and accord fairly well, with the facts and the interpretations put on the major macro-economic events in the 1970's by many official and unofficial commentators.

What tentative policy conclusions can then be drawn from the results?

It seems that the policy objectives of recent Governments in New Zealand to increase the profitability and productivity of exporting, have clearly been undermined by a growth in wage increase in excess of the appropriate "wage path". The excess seems to be in the region of some 2½ percent a year for the period 1972 to 1977. Much of this can be attributed to the less than adequate productivity performance of the meat processing industry, but all suffered to a greater or lesser extent.

It is unreasonable to expect that wage rates can be determined in the exposed sector, having regard to the institutional way in which wages are fixed. Nevertheless, it does seem that some recognition of these — and other — relevant macro-economic factors by both labour market partners and wage and salary earners at large is highly desirable.

The events over the last two years and some early indicators would suggest that the wage movement in excess of the "wage path" is not insubstantial — certainly in excess of the average 2½ percent p.a. recorded between 1972 and 1977.

A FUTURE WAGES POLICY OPTION

I do not, in spite of the title of the paper, intend to itemise the various wages policy options that might be available.

Before setting out some desirable modifications to the wage fixing system, there are some prerequisities which need to be mentioned.

given the record of success of wages policies, both in New Zealand and overseas, any wages policy must be an agreed one between employers and unions. A quid pro quo in the form of surveillance of income shares is probably necessary in this context. Government in-

Although it is often difficult to ascribe boundaries, the wage round is generally considered to start in September/October and continue through March/April of the following year. The more important awards influencing the size of trailer awards through wage relativities are: metal trades, electricians, drivers, and carpenters awards.

^{16.} To be described in a forthcoming publication of the N.Z. Employers Federation.

Where a skilled or unskilled group of employees uses a low wage argument to justify wage increases e.g. drivers in 1977 and 1978.

volvement could be limited to setting out the main economic parameters within which the labour market partners need to operate in a period ahead; obviously though, where wage increases clearly exceed its economic policy parameters, the Government needs reserve powers to rectify the situation perhaps even to the extent of direct or partial regulation of wages and profits.

- (b) wages policy, in the context in which I am discussing it, does not imply holding down wages for its own sake, or even necessarily to force the rate of inflation down. Wages policy, essentially operated within known guidelines, means ensuring that real wages grow as fast as the exposed sector allows in the long run;
- wages policy needs to be co-ordinated closely with monetary and fiscal policy, and not, as it has in the recent past, be used a a "last resort" stabilisation measure when monetary and fiscal policies have been less than successful. To this end the community, and particularly the union and employer parties before major award negotiations need to know clearly the economic policy objectives of the government and the path of its monetary and fiscal policies;
- (d) the built in rigidities on both union and employer sides will not accommodate drastic overnight changes. Any suggested modifications to the wage fixing system need to recognise and accept this reality;
- (e) like most economies, the relativity bias in wage and salary structures is very stong in New Zealand. Consequently, it is very difficult to implement changes involving more reliance on industry or company ability-to-pay (implicitly involving a breakdown in existing relativities), or on industry productivity. Wage fixing, at least from the unions' point of view, depends very heavily on creating precedents for particular skills or industries and transporting these across other related awards. It has been a successful ploy in the recent past, and will be difficult to counteract in the market place of some 300 wage negotiations a year;
- (f) restructuring the economy implies that labour, as well as capital, will have to move out of dying into growing sectors. As mentioned elsewhere, it is unrealistic to expect that market prices for labour can be relied upon to do this, except possibly in the very long term. Labour mobility must therefore rely on other mechanisms than labour prices. For example, on much more active and tripartite¹⁸ labour market policies designed to overcome the understandable resistance to economic change.

With these points in mind, it is suggested that a "new" wage fixing policy for New Zealand include the following components:

General Principles

- (a) A continuation of "free" wage bargaining between unions and employers, but within generally understood and acceptable wage guidelines;19
- (b) the Government retains the right to influence or control wage movements where they clearly exceed the general guideline. The sorts of action the Government would take in this event should be known to the parties;
- the parties themselves, perhaps via their central organisations²⁰ would be responsible for ensuring that individual wage negotiations fell within the general guidelines. Particular policies could be agreed between the central organisations. For example on longer term agreements, or on policies of increasing lower wage rates relatively more rapidly. The existing Industrial Relations Council is perhaps one forum where these policies could be discussed with the Government;
- (d) A more formalised use of the central organisations could be made for the resolution of individual conflicts, especially where they are wage related. This would provide an alternative, or complementary, channel of conflict resolution to the arbitral and mediation functions of the Arbitration Court and Mediation Service;
- (e) amalgamation of unions and their employer counterpart organisations is desirable. A reduction in the number of national awards, and more reliance on industry-wide agreements, preferably with few unions based on industry rather than craft definition, is needed.²¹

^{18.} employers, unions, and government.

^{19.} Whether the guidelines should be quantified or not is a moot point. On balance, it is probably undesirable, but the broad parameters (e.g. a band) must be known to the parties.

^{20.} FOL and NZEF

^{21.} N.Z. Forest Products for example negotiates with 14 unions for one of its composite agreements.

WAGE FIXING SYSTEM

I do not intend to go into the details as this paper does not permit such a lengthy exposition. The main features are:

(a) Before each Wage Round

- (i) in April/May there would be a tripartite conference of the labour market partners and the Government, during which the Government outlines the forecast economic outlook over the next 12-18 months. This would give the negotiating parties a framework within which to judge their own forecasts and wage growth expectations. The intention would be to define the parameters of an appropriate "wage path" which the economy can sustain, perhaps based on a model similar to that outlined earlier in this paper;
- (ii) hopefully, both unions and employers would agree on the "wage path". If not, they would be aware of the Government's intentions with respect to economic policy given the available forecasts;
- (iii) it would be the responsibility of the central organisations to communicate the "wage path" to their individual negotiators, as important background for their separate award negotiations;
- (iv) there should be a high degree of public awareness of the "wage path" and the supporting economic argument for many reasons.²³

(b) During each Wage Round

- Obviously a key to the success of such a wages policy is in closely monitoring individual settlements. Each of the tripartite members needs to have his information quickly as the round progresses, as negotiations traditionally proceed in a decentralised manner;
- (ii) so far as the mechanism of wage negotiation is concerned, the present conciliation and negotiation system is adequate to build on. Closer monitoring of house agreements, particularly those with flow on implications will be necessary.
- the first few major awards (drivers', electricians', and metal trades') have almost overwhelming importance in setting the pattern for subsequent negotiations. This implies that both the union and employer sides have to exercise sufficient responsibility to ensure that these settlements are along the "wage path" which results from the tripartitie conference.

Behind this wages policy structure lies some quite significant changes to the modus operandi of the labour market partners. They have to do with unity, coping with "wildcat" employees and employers, proper research backup, and information flows to members, the structure of awards, representation from industry and employees, to name but a few. A paper such as this one is not the appropriate place to discuss these problems or possible solutions.

Furthermore, the future role of general wage orders, the minimum wage act, and the pernicious effect of the private/state sector tradesman's ratchet will have to be critically examined in the context of such a new wage fixing system. Certainly the usefulness of general wage orders is highly questionable under our present system. It seems even less useful under the wage policy outlined above. In its place, both employees and employers have to be satisfied that the unrepresented wage and salary earner, and those on low incomes, are adequately protected.

^{22.} Perhaps with representation from the Manufacturers Federation and Federated Farmers.

^{23.} For one, to prevent accusations of closed door "deals"; for another, to protect unions from clearly excessive demands from militant members.

TABLE 1

PRODUCTION, EMPLOYMENT AND PRODUCTIVITY IN THE "EXPOSED" AND "SHELTERED" SECTORS 1965-77 (INDEX BASE: MARCH YEAR 1965-66 = 1000)

EXPOSED SECTOR 1 3

SHELTERED SECTOR 2

SHEET TEN	Real GDP		Index of Employment ⁴		Real GDP per Labour Force Member		Real GDP		Index of Employment ⁴		Real GDP per Labour Force Member	
	Index	% Change	Index	% Change	Index	% Change	Index	% Change	Index	% Change	Index	% Change
March	I I I I I I I		THE REAL PROPERTY.		Export M	MARCH STATE	DIP HE	Day Address	1000	DE SAPOR	Trace Spirit	
Year			112222						10-25			
1965-66	1000		1000	9 10 10	1000	**	1000	40 411	1000	**	1000	
66-67	1064	6.4	1070	7.0	994	-0.6	1042	4.2	1020	2.0	1022	2.2
67-68	1130	-2.9	1093	2.1	1034	4.0	1004	-3.6	983	3.6	1021	-0.1
68-69	1181	4.5	1124	2.8	1051	1.6	1020	1.6	1009	2.6	1011	-1.0
69-70	1232	4.3	1172	4.3	1051	0.0	1118	9.6	1042	3.3	1073	6.1
70-71	1259	2.2	1239	5.7	1016	-3.3	1164	4.1	987	-5.3	1179	9.9
71-72	1293	2.7	1224	-1.2	1056	3.9	1208	3.38	986	-0.1	1225	3.9
72-73	1325	2.5	1304	6.5	1016	-3.8	1332	10.3	1011	2.5	1318	7.6
73-74	1332	0.5	1269	-2.7	1050	3.4	1465	10.0	1047	3.6	1399	6.1
74-75	1478	11.0	1291	1.7	1145	9.1	1504	2.7	1047	0.0	1436	2.6
75-76	1633	10.5	1335	3.4	1223	6.8	1546	2.8	1046	-0.1	1478	2.9
76-77	1637	0.2	13575	1.6	1206	-1.4	1543	-0.2	1053	0.7	1465	-0.9

NOTES:

SOURCE: extracted from Department of Statistics worksheets; Department of Labour worksheets; the Half Yearly Survey; SNA National Accounts.

^{1.} the exposed sector is defined as those NZSIC industry groups which exported more than 25% of their total sales in 1974-75. The principal industries included were: meat export works (NZSIC 31111), meat packers and canners (31113), game packers (31116), co-op dairy factories (31121), wool scouring and spinning (32111, 32112), and pulp and paper (34110). These industries covered nearly 85 percent of manufactured exports in that year.

^{2.} the sheltered sector takes in those manufacturing industry groups not included in the exposed sector; electricity, gas and water; construction, wholesale and retail trade, restaurants and hotels; and transport, storage and communication. The other remaining sectors (finance etc., and community etc. services) were not included in this analysis because of difficulties with the real GDP figures and interpretation, (25 percent of GDP in 1965-66 prices).

^{3.} this does not include the agriculture, hunting and fishing, or forestry and logging sectors at this stage (about 16 percent of GDP at 1965-66 prices). Later refinements will include these sectors, once certain technical difficulties with the data are overcome.

^{4.} full time employees only, not including part time workers or working proprietors.

^{5.} adjusted for the extended killing season.

TABLE 2A "EXPOSED" SECTOR: WAGE PATH FOR THE SECTOR AND ACTUAL MOVEMENTS (PERIOD ANALYSED: MARCH YEARS 1972 TO 1977)

NZSIC Sector	Industry Weight	Real GDP per Labour Force Member (A)	Export Prices Received by Sector (B)	"Path" for Wage Growth (A + B)1	Actual Wage Growth (C)	Wage Movement in Excess of "Path" (C - (A + B)	
3 8 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(% average annual growth)	(% average annual growth)	(% average annual growth)	% average annual growth)	(% average annual growth)	
Meat Processing	(0.54)	. 1	10	11	15	+4	
Dairy Processing	(0.15)	3	6	9	14	+5	
Woollen Industry	(0.10)	3	10 ²	13 ²	13	0	
Pulp and Paper	(0.21)	4	15	19	21	+ 2	
'Exposed'' Secto	r	3	10	13	151/2	+ 2 1/2	

NOTE: 1. assuming constant income shares between labour and capital, at internationally competitive prices.

2. estimate.

SOURCE: calculated from tables in this paper using Department of Statistics, Department of Labour, and Reserve Bank of New Zealand data.

TABLE 2B "EXPOSED" SECTOR: WAGE PATH FOR THE SECTOR AND ACTUAL MOVEMENTS (PERIOD ANALYSED: MARCH YEARS 1966 TO 1972)

NZSIC Sector	Industry Real GDP per Weight Labour Force Member (A)		Export Prices Received by Sector (B)	"Path" for Wage Growth (A + B)	Actual Wage Growth (C)	Wage Movement in Excess of "Path" (C - (A + B)	
		(% average annual growth)	(% average annual growth)	(% average annual growth)	% average annual growth)	(% average annual growth)	
Meat Processing	(0.54)	-1	5 1/2	4 1/2	151/2	11	
Dairy Processing	(0.15)	1/2	8	8 1/2	161/2	8	
Voollen Industry	(0.10)	9	n.a.	SR 1969/66 - 36	181/2		
Pulp and Paper	(0.21)	3 .	n.a.		3		
'Exposed'' Secto	r	1	72	83	14	6 ³	

NOTE: 1. assuming constant income shares between labour and capital, at internationally competitive prices.

2. estimate.

3. derived estimate

SOURCE: calculated from tables in this paper using Department of Statistics, Department of Labour, and Reserve Bank of New Zealand data.

TABLE 3

"SHELTERED" SECTOR: WAGE AND PRODUCTIVITY MOVEMENTS AND THE EFFECT ON DOMESTIC INFLATION

Period Analysed (March Years)	Real GDP per Labour Force Member (A)	Actual Wage Growth (B)	Wage Growth in Excess of Pro- ductivity (A-B) = Domestic Impulse to Inflation ¹	Actual Movement in Consumer Price Index	Actual Movement in Wholesale Price Index ²	
	(% average annual growth)	(% average annual growth)	(% average annual growth)	(% average annual growth)	(% average annual growth)	
1965-72	3 1/2	8 1/2	5	6.0	5.6	
1972-77	3 1/2	. 151/2	12	11.8	13.4	
1965-77	3 1/2	111/2	8	8.6	9.1	

NOTES: 1. assuming constant income shares between labour and capital, at constant exchange rates. Where, for example, profits fall, the impulse to domestic price inflation would be reduced.

2. prices received for commodities produced in N.Z. by "other Manufacturing Industries" i.e. industry excluding public utilities, farming, primary processing and primary industry.

SOURCE: tables elsewhere in this paper; Department of Statistics; and calculations by the author.

INDICATORS OF PROFITABILITY OF THE "EXPOSED" AND "SHELTERED" SECTORS IN NEW ZEALAND 1965-1977

	WHOLE ECONOMY						
Meat Pr	ocessing	Woollen Industry		Forestry, P	ulp and Paper	All Companies	
Return on SH Funds1	Return on Total Resources ²	Return on SH Funds	Return on Total Resources	Return on SH Funds	Return on Total Resources	Return on SH Funds	Return on Total Resources
	,,,	70	70	70	%	%	%
10		7		10		0.1/	
7		7 1/2					**
8					**		**
3	G. SECTOR				**		**
11		- 2	**		**		**
14							**
7				11	**	10	**
5		9 1/2		10%	**	0.1/	**
			EXTRES 65	1072		3 /2	
4	2 1/2	11	6	10	5	9	4 1/2
121/2	7	1 2 1/2		11	5	111/2	5 1/2
4	2	9		13	6	14	6
10	5	10	4	11	0	111/	4
13	6	111/2	5	10	5	12	5
	Return on SH Funds 1 %	SH Funds 1 Total Resources 2 % % % 10 7 8 3 11 14 7 5 5 2½ 11 6	Meat Processing Woollen Return on SH Funds1 Return on SH Funds Resources² % % % 10 7 8 3 11 7 8 11 8 9½ 3 11 7 9½ 9½ 11 6 12½ 1 12½ 7 16 9 10 5	Return on SH Funds 1 Return on Total Resources² Return on SH Funds Return on Total Resources % % % %	Meat Processing Woollen Industry Forestry, P Return on SH Funds 1 Return on Total Resources 2 Return on SH Funds Resources 3 Return on SH Funds Resources 3 Return on SH Funds Resources 3 SH Funds Return on SH Funds Return on SH Funds Resources 3 SH Funds Return on SH Funds Return on SH Funds Resources 3 SH Funds Return on SH Funds Return on SH Funds Resources 3 SH Funds Return on SH Funds Return on SH Funds Return on SH Funds Resources 3 SH Funds Return on SH Funds Return on SH Funds Return on SH Funds Resources 3 SH Funds Return on SH Funds	Meat Processing Woollen Industry Forestry, Pulp and Paper Return on SH Funds1 Return on Total Resources² Return on SH Funds Resources² % % % % % % 10 7 10 7 7½ 10 8 8½ 10 11 8 10 11 8 10½ 14 10 11½ 7 9½ 11 5 9½ 10½ 11 6 12½ 6½ 11 5 12½ 7 16 7½ 13 6 4 2 9	Meat Processing Woollen Industry Forestry, Pulp and Paper All Construction Return on SH Funds 1 Return on SH Funds 1 <td< td=""></td<>

NOTES: 1. defined as net profit (after tax) as percentage of shareholders' funds.
2. defined as net profit (after tax) as percentage of total tangible assets.

SOURCE: Reserve Bank of New Zealand Corporate Financial Statistics, adjusted by the author for discontinuous series. Some care should be taken in using these figures as the survey coverage alters from year to year.