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WHO BENEFITS ? : THE AUSTRALIAN WELFARE STATE AND REDISTRIBUTION

by

Ann Harding



Social Welfare Research Centre

THE UNIVERSITY OF NEW SOUTH WALES

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FOREWORD

Income distribution is a key element in any approach to social policy, and as such is an important subject for consideration within the Social Welfare Research Centre. Ann Harding addresses issues in income distribution by pointing out that many branches of economic and social theory stress the supposedly distributive character as a key component of the rationale for government intervention in the economy. In Australia, both major political parties express commitment to redistribution in favour of low income and other disadvantaged groups. There are however, two bodies of opinion on this issue: one, which attempts to demonstrate that such distribution does, in fact, take place; the other, that the redistributive effects of government policies are negligible and, as far as taxation is concerned, the system actually redistributes in favour of the rich.

As a test of these divergent views, Harding compares the data from the Household Expenditure Survey carried out by the Australian Bureau of Statistics in 1975-76 with the Commonwealth Government's taxation review and social expenditure for the same year. She also refers to the changes that took place in government policy from 1975-76 to 1981-82. An important feature of the study is Harding's methodology. She points out the distinction between distribution in absolute terms and incidence of expenditure related to each group of recipients' original share of income, and demonstrates through systematic comparison of data that each approach leads to different interpretations and conclusions.

Harding's analysis shows that, if measured as incidence, the overall effect of government policy in 1975-76 was a redistribution in favour of low income groups, but redistribution was not equal in all areas. The most pronounced effect was in pensions and benefits and in public housing; the lowest was in education and health. The distributive effect of taxation was negligible, because the progressive effect of income tax was reduced by the regressive nature of indirect taxes, rebates and concessions.

Ann Harding has worked as a researcher in income security and also as a financial journalist. In her work in general, and in the monograph in particular, she demonstrates her detailed knowledge of the complex issues involved — issues which would elude identification in any less systematic or rigorous an analysis. This monograph was adapted from a thesis submitted in 1983, to the Department of Government and Public Administration, University of Sydney.

Adam Graycar
Director
Social Welfare Research Centre

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Many thanks also to numerous officers of the Departments of Social Security, Health, Education, Housing, Veterans' Affairs, the Parliamentary Library, and the Australian Bureau of Statistics for their consistently efficient and friendly assistance and, in particular, to David Ingles and David Peetz.

Additional thanks to my typist, Ms Dianne Manning of Canberra, who did a superb job on the numerous tables and cheerfully met almost impossible deadlines.

As with all issues in the Reports and Proceedings series, the views expressed in this number do not necessarily represent any official position on the part of the Centre. The Reports and Proceedings are produced to make available the research findings of the individual authors, and to promote the development of ideas and discussion about major areas of concern in the field of Social Welfare.

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1. INTRODUCTION

Scope of the Study

The influence of the federal government on income distribution in Australia is pervasive. An extensive web of regulatory and non-budgetary policies shape economic and social activity and indirectly affect incomes, while the federal government more directly alters income distribution via its budgetary actions. Each year billions of dollars of tax revenue are collected, and then redistributed through government outlays on an exhaustive range of activities.

While Butlin et al point out that almost all budgetary and non-budgetary actions alter the distribution of income and wealth (1982:3), two major areas explicitly intended to do so are taxation and 'social' expenditures (principally on social security and welfare, education, health and housing).

Thus, while the primary purpose of taxation is to raise the revenue necessary to finance government activities, one of the three major functions of taxation systems is the redistribution of income and wealth (Musgrave, 1959). Similarly, 'social' expenditures are supposed to affect income distribution, either directly, through the provision of cash transfers such as age pensions and unemployment benefits, or indirectly, through the provision of public services such as education, health and housing (Head, 1982:112). Such services effectively add to the real incomes of those using them, and are intended to redistribute incomes via the promotion of more equal access, greater equality of opportunity and greater equity.¹

In 1982-83 the federal government collected more than \$40 billion through taxation revenue, and spent just under half of this on social security and welfare, education, health and housing; about one-fifth of the nation's total economic resources are now devoted to such social expenditures (OECD, 1983:8). Yet, despite the enormous sums involved, there is almost no information about who the bearers and beneficiaries of these taxes and social outlays actually are. As a result, there is an astonishing lack of data about who are the net winners and net losers from the activities of

¹ Equality and equity are used in their general sense in this study, but can be interpreted in a number of ways, and have different meanings in various branches of policy, e.g. see Troy, 1981; Le Grand, 1982:14-17; and Jones et al, 1978:8-23.

the Australian 'welfare state'.² This study represents an exploratory attempt to fill this gap in the literature.

The following part of Section 1 seeks to demonstrate that, while the welfare state obviously also has many other objectives and functions, a wide range of literature suggests that one of its primary functions is to redistribute income from the better-off to the less well-off. According to the traditional rationale for government intervention in the economy embodied in much social and economic theory, the welfare state is supposed to redistribute income towards the poorer. In addition, a survey of available literature also suggests that redistribution has been widely accepted as a major goal of taxation and social policy by political parties, policy makers, Commissions of Inquiry, governments and academics.

Taken together, these two factors suggest that the welfare state should redistribute resources to the poor, and many people believe that it actually does so. However, many critics now allege that the principal beneficiaries of the welfare state are the middle and upper classes rather than the poor.

This dichotomy has been impossible to resolve in Australia - despite its critical implications for many aspects of political and social theory, public policy and industrial relations - principally because of the dearth of comprehensive information about who actually benefits from social outlays. Part of the explanation for this lack of data probably lies in the daunting problems raised by any attempt to measure the benefits and losses accruing to different income groups from government taxation and social expenditure; the problems involved in any such 'incidence' analysis are the subject of the first part of Section 2.

² As Offe observes, the concept of the welfare state is vague enough to allow everyone his own definition of it (1972:479). Definitions do vary widely (e.g. see Marsh, 1980:20; Ryan, 1982:272 and Higgins, 1978:136), and many writers of books on the welfare state fail to provide an explicit definition (e.g. Jones, 1980). Without entering in any way the debate about exactly what a welfare state is, or whether Australia actually has a welfare state (Roe, 1975:219), this study has used the term the 'welfare state' as a convenient shorthand expression to describe federal taxation and social expenditures. 'Social expenditures' are defined as federal outlays on social security and welfare, education, health and housing, while the term 'social services' is used to encompass the latter three.

The second part of Section 2 outlines the methodology and assumptions used in this study; it explains that, because incidence analysis requires extremely detailed information about the income, expenditure and other characteristics of different households, this analysis has necessarily relied upon the 1975-76 Household Expenditure Survey conducted by the Australian Bureau of Statistics. Finally the third part points to some limitations upon the comprehensiveness of the study - such as the exclusion of state and local governments from the analysis - and assesses their likely effect upon the results.

The tax side of the welfare state equation is the subject of Section 3. The first part describes the types of federal taxes levied in 1975-76, while the second shows how much tax different income groups actually paid in 1975-76. Likely changes in the composition of the tax burden since 1975-76 are then assessed.

Section 4 analyses the expenditure arm of the welfare state and examines, in turn, the four major areas of federal social spending - social security and welfare, education, health and housing. For each of these, expenditure in 1975-76 is briefly described, and then the estimated distribution and incidence of the resulting benefits is shown. The likely redistributive effect of expenditure changes since 1975-76 is also briefly canvassed.

Section 5 assesses the net impact of the Australian welfare state, and examines first, the combined effect of all four areas of social spending, and second, the impact of the social services of education, health and housing only. The second part brings together the tax and expenditure branches of the welfare state and shows which income groups gain and lose from its activities. The remaining, non-welfare expenditures of the state (e.g. on defence) are then arbitrarily allocated to the different income groups in part three, to give a very rough indication of the net effect of all federal budgetary activities upon income distribution.

The concluding section briefly summarises the major results of the study, and explores some of their implications.

Appendix One describes each single item of social expenditure, and explains how the benefits of each were distributed between the different income groups. It also contains the numerous statistical calculations which underly the analysis.

Finally, Appendix Two contains some of the less essential statistical tables. Unfortunately, the nature of the analysis means that the main text is still packed with tables, but, to assist with interpretation, the results have also been presented in graphic form wherever possible.

The Welfare State, Social Policy and Redistribution

Who actually benefits from the activities of the welfare state? Much of the existing literature would indicate that the poorer are supposed to be the major beneficiaries. For example, many branches of economic and social theory stress that a key component of the rationale for government intervention in the economy lies in its supposedly redistributive character.

In public finance theory, for example, distribution is regarded as one of the three main functions of public budgetary policy. Groenewegen writes that: 'In most democracies, Australia included, the government accepts some responsibility for the degree of inequality in wealth and income distribution and it attempts to alter this distribution by means of budgetary and other policies' (1979:29). Similarly, Alchin observes that because of 'the inability of the market to achieve economically and effectively desired goals ... there is fairly wide agreement on the need to modify the market's distribution of income in the direction of greater equality' (1983:136).

Alchin has identified the nub of the problem, which is that although the free functioning of the market is considered by some to produce the most efficient economic results, it also produces a highly unequal distribution of income and wealth. Because receipt of income is primarily tied to the production process, differences in marginal productivity and market power mean that returns to factors of production such as labour vary widely, and many people who are unable to work or to earn sufficient to support themselves and any dependants live in poverty.

Consequently, the distribution of income and wealth in Australia, as in many other industrialised countries, is highly skewed (Stark, 1977). In 1978-79, for example, the top 10 percent of all income units in Australia received more than one-quarter of all income, while the bottom 10 percent received only 1.7 percent of total income. More than half of all income was received by the top 30 percent of income units (Ingles, 1981:30). The

distribution of wealth was even more unequal. Estimates of its distribution differ according to methods of measurement, but Raskall's study of estate duty data found that the top one percent of the population owned 22 percent of all personal wealth, and the top 5 percent owned more than the bottom 90 percent put together (1978:7).

Income disparities do not reveal the whole story, for they both exist alongside and exacerbate further inequalities 'in power, political influence, occupational status and privilege' (Edwards, 1978:295). As Henderson notes, 'poverty in Australia is inseparable from inequalities firmly entrenched in our social structure. Inequalities of income and wealth reinforce and are reinforced by inequalities of educational provision, health standards and care, housing conditions and employment conditions and prospects' (quoted in Stilwell, 1980:116).

Like public finance theory, much social policy theory argues that government action should reduce such inequalities. While Graycar explains that the precise boundaries of social policy are elusive, for many the definitional key lies in its redistributive nature (1978:1-7). Mathews and Mendelsohn, for example, argue that whatever the case propounded by economists, 'the dominating argument for government involvement is based on equity and the need to ensure equal access to services' (1983:14). The proposition is reiterated by Jamrozik who submits that 'it is generally accepted ... that market forces create economic and social inequalities that have to be alleviated, if not overcome, by [redistributive] measures of social policy' (1983:3).

The belief that the welfare state should direct resources to the poorer is also now well accepted by the major political parties. Both the Labor and Liberal 1982 Platforms endorsed the redistribution of resources to those in greatest need and equality of opportunity as key policy objectives (ALP, 1982; Liberal Party, 1982:15,19,22-23); Ryan has similarly emphasised the traditional concern of the ALP with the promotion of greater equality (1983:95), while Fraser's 1980 election policy speech identified 'the provision of assistance to those in need' as one of the five major challenges facing the Liberal Party (1980a:8).

In addition to the political parties, the redistribution of income, goods and services towards the less well-off has also been accepted as a major

objective by Australian policy makers, governments, Commissions of Inquiry and academics. Thus, both the taxation and social security systems have income redistribution as their prime objective, according to Podger et al (1982:37). Similarly, Mendelsohn writes that 'both the Australian taxation and social security systems are measures of redistribution; they are supposed to take from the rich and give to the poor' (1982b:29).

Redistribution has also long been an established goal of the Australian social services of education, health and housing, despite the minimal attention paid to distributional issues during the affluent 50s and 60s (Gruen, 1982b:3). Redistribution via equality of educational opportunity is a widely accepted goal in educational policy and planning (Hancock, 1983:196; Davey, 1978:39; Schools Commission, 1973:16; Dawkins and Costello, 1983:71; White, 1978:82).

In the health arena too, according to Scotton, redistribution is the key rationale for public expenditure; he points out that 'the most important purpose of public involvement in the health system is to improve equity, that is, to reduce financial and other barriers to access experienced by people in low income and in other vulnerable groups' (1978b:87). Both the belief that access should not be dependent on ability to pay, and the principle of redistribution to the poor through the provision of more equal access, are well established in health policy (see Sax, 1982:4; Duckett, 1981:101; Mackellar, 1980; Hunt, 1978:4).

Finally, many housing policies are also concerned with equity and redistribution (Jones, 1983:248-49; Neutze, 1981:119), and two of the five stated objectives of federal government housing policy are to 'ensure that every family in Australia is able to obtain adequate housing within its capacity to pay', and to 'encourage home ownership across the widest possible range of income groups, concentrating federal assistance in areas of greatest need' (Department of Social Security, 1982:60).

Overall, if judged by the rationale for government intervention embodied in much economic and social theory and by repeatedly stated policy objectives, the effect of the welfare state in Australia should be to redistribute income towards the poorer. Indeed, many assert that this either is its actual effect or is popularly believed to be the result.

Stilwell, for example, observes that the 'conventional wisdom' in Australia stresses 'the role of the government as a body for alleviating inequalities', and its 'potential and actual effectiveness as an agent of significant redistribution' (1976:96). He argues that this view is not confined to narrow sections of the public, but 'is widely shared by both major political groupings within the community'. From the opposite end of the political spectrum this assertion is endorsed by Kemp, who believes that 'government in Australia has long been seen as a mechanism for compensating for the unequal distribution of power, especially as a helper of the weak' (1980:282).

On the expenditure side, Head assumes that public services such as housing, health and education 'usually benefit the poorer groups' (1983:221), while Alchin asserts that 'public education is primarily a redistribution of incomes from the wealthy to the poor' (1983:137). On the taxation side, Brennan asserts that taxes are progressive (1982:7), and Graycar believes that 'there is no doubt that the Australian personal income tax system is reasonably progressive' (1979:24).

Similar assumptions are made about the impact of the welfare state in other countries. Webb and Sieve suggest that 'the concept of redistribution immediately suggests movements of resources from the richer to the poorer members of the society and the welfare state is widely believed to be redistributive in this sense'; they also point out that the post war development of the welfare state has been based on the 'expectation that social welfare programmes will naturally and effectively reduce inequality' (1971:8 and 10). Titmuss also believes it has been assumed that 'the aggregate redistributive effects of social service activity since 1948 have wholly or largely represented a transfer of resources from rich to poor' (1958:38). This refrain is echoed in Canada, where it is 'commonly ... believed that income distribution has become more equitable due to massive government spending on social programs' and that 'the tax system is a major force in redistributing income' (Ross, 1980:vii and 4).

There is thus a pervasive belief that the welfare state principally channels resources to the poorer members of society. But does it actually do so? In recent years, a growing number of critics, both in Australia and overseas, have questioned the cosy consensus about the welfare state's redistributive effects.

Mathews, who chaired one of the two major inquiries into the Australian taxation system in the 1970s, has termed as 'myths' the beliefs 'that the rich pay more tax than the poor [and] that the income tax system is effectively as well as nominally progressive' (1980:101). He suggests that 'it is plausible to argue that the taxation system has become a major instrument for redistributing incomes and wealth in favour of the rich' (1980:100). Similarly, Collins believes that 'very frequently the more affluent receive more favourable tax treatment than the less affluent' and 'that fairness in the distribution of the tax burden has largely disappeared' (1983:1), while Warren argues that 'in many cases taxation appears to worsen the income distribution or cause minimal change' (1982:46).

Doubts have also cropped up on the expenditure side. Higgins denigrates the 'redistribution myth' of the welfare state, and argues that 'redistribution of wealth and income from the rich to the poor simply does not occur' (1978:137, 142). Stretton points out that 'it has become increasingly clear that many welfare provisions transfer resources 'upwards' from poorer to richer' (1980a:28), while Wilenski suggests that many of the benefits of Labor's social programs flowed towards middle rather than lower income earners (1980:43). Mendelsohn also submits that 'there are significant services or parts of services in which the beneficiaries are the better-off, rather than the poor' (1983b:24).

The same concerns have been aired overseas. Brennan writes that some overseas theorists 'argue that though particular programs are presented as redistributive they are in fact not redistributive at all in the way described, but have the effect of supporting the rich at the expense of the poor; i.e., the opposite effect to what ought to be their 'proper' purpose' (1982:3). Jones et al claim that 'some publicly provided services appear to have benefited middle and upper income groups as much, if not more than, the poor' (1978:20), while McGranahan observes that sometimes 'social benefits, including especially benefits in the form of public services, have a limited impact on income equality or even a negative impact' (1979:36).

A less equivocal view is delivered by Le Grand, who asserts that 'almost all public expenditure on the social services in Britain benefits the

better off to a greater extent than the poor', and that 'the strategy of equality through public provision has failed' (1982:3, 151). Tullock deplores the 'deception' of societies which set up a welfare structure whose real purpose is to make government transfers to 'small politically influential groups like the farmers, the civil servants, [and] people who want to send their children to college and university, ... while purporting to do something else' (1981:15). Such judgements echo Abel-Smith's famous dictum that 'the main effect of the post-war development of the social services, the creation of the 'Welfare State', has been to provide free social services to the middle classes' (1958:57).

One reason for the dichotomy between those who believe the welfare state successfully redistributes to the poor and those who assert that most benefits actually flow to the middle and upper classes lies in the astonishing lack of detailed information about the beneficiaries of government actions. Simeon explains that 'despite the fact that "who gets what" is at the heart of politics, we have very little information about the distributional impact of government programs' (1976:562). Bonnen is similarly 'impressed by the lack of knowledge or even raw data on program impact including the distribution of program benefits. It is as if these were impolite if not impolitic questions to raise' (quoted in Ibid:562).

More information is available overseas than in Australia. Studies to determine the distributional effects of government include those conducted in the United States (Reynolds and Smolensky, 1977; Gillespie, 1965), in Canada (Dodge, 1975; Ross 1980), and in Great Britain (Barna, 1945; Cartter, 1955; Webb and Sieve, 1971; Le Grand, 1982). In the latter country, the Central Statistical Office actually publishes an annual analysis (1981), but its results and methodology have been extensively criticised (Field et al, 1977:184-200; Le Grand, 1982; Peacock and Shannon, 1969).

There are, however, no Australian studies of the combined distributional impact of government taxation and social spending. Available studies consider either the distribution of all types of taxes, but not expenditure (Warren, 1979; Bentley et al, 1974b); the distribution of only welfare cash transfers, such as pensions (Collins and Drane, 1981; 1982); or the

combined redistributive effect of cash transfers and personal income taxes, but not other taxes or social services (Saunders, 1982; Kakwani, 1983a; Podder and Kakwani, 1975). There have thus been no attempts to measure the combined redistributive impact of all taxes and all welfare spending (i.e. of the welfare state as a whole).

This represents a substantial gap in the literature, for the redistributive effect of the welfare state is a critical question in many areas of politics, economics and industrial relations. In public policy, for example, although redistribution of income or access is a key objective of most social policies, there is little information about whether this goal is actually achieved. This is illustrated by the lack of adequate social policy evaluation in Australia; as the Senate Standing Committee on Social Welfare noted in a scathing report, 'we have little idea of whether our health and welfare efforts are appropriate, effective, efficient or equitable' (1979:1). 'Without evaluation', they added, 'there is no way of knowing who gets what from any program or whether the benefit of a program is equitably or efficiently distributed; consequently inadequacies and inequalities in the health and welfare system will be perpetuated' (1979:14).

Lack of distributional data has not only bedevilled policy formulation and evaluation; as Collins and Drane point out, the current pressures to cut back the welfare state make it more important than ever to determine who actually benefits from welfare expenditure (1982:1). Amid growing anxiety about the 'crisis' of the welfare state (OECD, 1981), and doubts about the ability to maintain welfare services (Economist, 1982), the need for accurate information about which sections of society gain from the welfare state has become more urgent.

In Australia, concern about the combined effects of government taxation and expenditure has also grown as the concept of the 'social wage' has acquired new prominence. The possibility of exchanging private money wage increases for growth in government social spending has been floated (Harding, 1982b), and at the April 1983 National Economic Summit all participants signed a Communique, which included the statement that 'the unions recognise that urgently required improvements in the social wage can be achieved through

government expenditure on essential services. To this end the union movement will pay regard to such expenditure in determining any claims' (1983:12). Unions are unlikely to want to exchange private wage increases for government social spending which principally benefits the better off, and the actual redistributive effect of the Australian welfare state therefore has the potential to become an issue of major political and industrial significance.

Finally, the impact of the welfare state on redistribution has important implications for many areas of political theory, implications which have been eloquently summarised by Simeon:

'Fundamentally this emphasis on distribution links up with some of the basic questions of democratic theory. In whose interests does government work? Does it operate to maximize the interests of the economically dominant? Or of some middle majority? Or of the working class? Does it, as the pluralists suggest, reinforce the status quo by giving all groups a hearing and distributing benefits according to the resources they can bring to bear, or is it rather an instrument through which equality is promoted or the balance between interests altered? The distributive question also confronts us with the question of social conflict, since it assumes that most of the time all cannot benefit equally, and that policy-making is competition over scarce resources. Finally it poses the fundamental question: What is the role of the state in advanced industrial society?' (1976:566)

Overall, therefore, a wide range of literature suggests that the effect of the welfare state should be to redistribute resources to the poor, and many people believe that it actually does this. Yet a growing number of critics have branded this belief a myth, and argued that the principal beneficiaries of the welfare state are the middle and upper classes rather than the poor.

The debate has been impossible to resolve in Australia because of the lack of comprehensive information about the bearers and beneficiaries of taxes and social expenditures. The following study attempts to shed some light on the issue, and the methodology and limitations involved in any such venture are the subject of the following section.

2. METHODOLOGY AND LIMITATIONS OF THE STUDY

Problems of Incidence Analysis

The basic steps involved in incidence analysis are deceptively simple. First, the population is divided into different income groups, and the total amount of original or 'pre-government action' income received by each of these groups is calculated. Second, the value of the taxes paid by each of these groups is subtracted from their income. Finally, the value of the cash transfers and social services received by each is added onto their post-tax income. The results therefore show the gains or losses experienced by each of the income groups, and demonstrate whether the net effect of the welfare state is to make income distribution more or less equal.

Unfortunately, this apparently simple procedure poses extraordinarily difficult theoretical and methodological problems (see Le Grand, 1982; Webb and Sieve, 1971; Harding, 1983). The following very brief examination of some of the key problems involved makes it clear that the results of this and other incidence studies must be treated with some caution.

First, studies of the impact of governments on income redistribution attempt to compare the distribution of income before specified government actions with the distribution after such actions. This immediately raises the problem of what the most appropriate 'before' benchmark (or counterfactual) is. There are a range of such possible counterfactuals, but the most commonly used reference point is the 'zero government counterfactual' (Reynolds and Smolensky, 1977:11-26). In this case the redistributive impact of government taxation and expenditure is generally measured against the original distribution of pre-tax and pre-transfer factor income, and this implicitly assumes that the original distribution of income would have been the same if no public sector existed. In reality, such an assumption is clearly invalid. There is no doubt that many government actions which are not primarily redistributive in intent actually do have the effect of altering the distribution of original factor incomes (e.g. monetary policy and higher interest rates, the setting of minimum wage levels, salaries paid to public servants, and industry regulation). However, incidence studies are forced to adopt this

assumption, because no one knows what income distribution would actually have been if the public sector had not existed.

Second, even given the assumption that the original income distribution would have remained the same if government disappeared, a decision must be made about what particular forms of income are to be counted as income for the purposes of estimating income distribution. Wages, salaries, interest and profits, for example, are normally regarded as income; it is more difficult to measure imputed income, i.e. the monetary value imputed to income received in the form of services rather than cash. In theory, income should include the value of all free or subsidized goods and services where these may be considered substitutes for money income (such as use of a company car or the services of an unpaid housewife). While it is difficult to include many of these items in the income base, it must be recognised, as Ingles points out, that 'the inclusion of some or all could significantly affect the shape of the measured income distribution, as well as any assessment of the redistributive impact of government policies' (1981:5).

Related problems include decisions about the income unit (individual, family or household), and the time period over which receipt of income is to be measured. Many families, for example, may be only temporarily poor (or well off), and income distribution over, say, a five year period may be very different from that shown by a two week survey. A more basic problem is presented by life cycle effects, for at any one moment a significant proportion of the poor will be young income earners on their way up the income scale, and older, often retired people on their way down. The pattern of income redistribution measured over the life cycle may thus be markedly different from the 'snapshot' captured by a survey conducted over a short time period. According to Reynolds and Smolensky 'a single year accounting period exaggerates the size of government redistribution by almost any definition of redistribution' (1977:24 - my emphasis). Yet, as Webb and Sieve explain, while 'the precise effects of income redistribution can only be studied in relation to lifetime experiences ... the complexity of the research method removes its adoption from the realms of possibility' (1971:25). Overall, therefore, varying definitions of income, the income unit and the time period will all produce a different picture of original income distribution.

Third, after the definition of the income base and measurement of the resulting income distribution, taxes and benefits must be allocated to different income groups. Yet estimating their distribution is troublesome, with one of the most insuperable difficulties being presented by the problem of 'shifting'. Thus, personal income taxes levied upon a self-employed high income earner may appear to be paid by him/her, but actually be passed on to customers in the form of higher prices.

Similarly, age pensioners living in nursing homes might appear to receive the benefit of increases in the age pension, although benefits may actually be shifted to their nursing home proprietors who may be able to raise fees by the amount of the pension increase.

Extensive empirical research designed to find out how taxes are shifted has proved inconclusive (Mathews, 1980:92), and even less is known about the shifting of government benefits. In practice, therefore, incidence studies make assumptions about who the eventual bearers and beneficiaries of taxes and government outlays are. Government outlays can be usefully divided into three categories, and different incidence assumptions made about each. In the case of cash transfers, such as unemployment benefits, the benefits are assumed to be unshifted and are attributed to their actual recipients. For divisible public goods and services, such as education, the benefits of such expenditures are usually distributed in accord with actual usage of the relevant service by income group. Outlays on defence and environmental protection, on the other hand, are regarded as indivisible public services because they provide a collective benefit to all members of society. The benefits of such indivisible outlays are generally distributed equally between all income units or in accord with income shares.

These assumptions about the distribution of the benefits of government expenditure may be criticised on a number of grounds. One major problem concerns the allocation of benefits to the consumers of a service rather than the producers. Many would consider the real beneficiaries of higher health or defence spending to be doctors or military hardware producers, rather than patients or the whole society.

Another difficulty is presented by externalities, which should in theory be included in the assessment of benefits. While the incidence assumptions outlined above attribute all the benefits of education expenditure to the

actual users of education facilities, this ignores the social benefits of education and its possible contribution to economic growth. Similarly, benefits from smallpox vaccinations accrue not only to those vaccinated but to the whole population via the reduced risk of catching smallpox.

After the allocation of taxes and benefits to different income groups, the fourth problem is to place a monetary value upon them. This is more difficult than it first appears for the real worth of free education, for example, depends upon its value to the individual receiving it. Thus, one child may loathe primary school and value it at zero dollars, while another may enjoy it immensely and value the education received at one thousand dollars. It is clearly impractical to measure the costs and benefits of government actions in this way, so incidence studies use the monetary value of taxes and cash transfers as a proxy for their real value to individuals, and value the benefits of government goods and services by the costs of their provision. For example, to the income of a household containing one tertiary student is added the average cost to the government of the educational inputs used to educate a tertiary student. This may or may not approximate what the tertiary education is really worth to that household.

Using the cost of providing public services to determine their value to households suffers from a number of serious deficiencies. Cost is unlikely to approximate the real worth of services, is not based on market values, and also takes no account of the quality or efficiency of the goods and services delivered. With regard to the latter point, McGranahan notes that 'for the same level of service delivery, the income of the beneficiaries will be given a higher monetary imputation, the more inefficient or corrupt the service' (1979:40).

In addition, Groenewegen has identified a further difficulty when using cost of provision to value the benefits of education outlays. He writes that:

'it can be argued that the real benefits of education only accrue to its recipients through the higher future income which they can reasonably expect to earn and which therefore does not accrue as additional income to their current households. In this case, it is not the cost of the education but the future additions to income resulting from it (discounted to their present value) which should be allocated to household income' (1979:51).

However, as Groenewegen observes, 'this is a very difficult procedure'.

Even this brief discussion should make it clear that attempts to measure the total redistributive impact of the welfare state by distributing taxes and outlays between different income groups rest upon a large number of assumptions and suffer from conceptual difficulties. Each reader must make an individual judgement about the degree of reliability to be accorded to the results of such incidence studies. Nonetheless, given the dearth of information about the redistributive effects of the Australian welfare state, many would consider an incidence study a worthwhile endeavour.

Assumptions of the Study

An incidence study requires extremely detailed information about income and expenditure patterns and a wide range of other characteristics for different income groups. The only recent possible source of such information is the Household Expenditure Survey (HES), conducted by the Australian Bureau of Statistics in 1975-76.

The HES collected detailed records from just under 6000 households, with a household being defined as a group of people who lived together as a single unit, in the sense that they shared common housekeeping arrangements. The HES defined income as gross weekly income from all sources (before deductions for tax, superannuation, etc) current at the time of interview (ABS, 1977:14). The main components of income were:

- * wages and salaries (including income-in-kind; e.g. use of a company car);
- * income from self employment;
- * government cash transfers (e.g. family allowances and pensions);
- * income from investments (e.g. interest and dividends);
- * other regular income (e.g. alimony, superannuation, workers' compensation and educational grants and scholarships).

This unfortunately means that the income base already includes government payments (such as social security cash transfers and TEAS allowances), but it is not possible to remove these from the income base. However, this is also a deficiency encountered in other incidence studies (Collins and Drane, 1981; Warren, 1979; Ross, 1980).

Another problem, also encountered in almost all incidence studies, is that the data is only available on a total household income basis. This takes

no account of the number of household members, and a per capita household income distribution would be a significant improvement. The HES data base used here was not sufficiently detailed to allow this refinement. However, (Kakwani (1982) has reworked the 1975-76 HES data, for personal income taxes and government cash transfers only, to show the effect of moving from total to per capita income, and his results are assessed in later sections.

The published HES data was originally divided into only six income groups, but in this study a more detailed breakdown of unpublished data by 12 income groups has been used. Table 2.1 indicates the number of households in each of these income groups, and their share of total income. It shows, for example, that the 11 percent of households in the top income group received almost 25 percent of total income, while the poorest 4 percent of households gained only 0.6 percent of all income.

For the estimated distribution of taxes, on the revenue side of the welfare state, this study relies upon Warren (1979). His results were calculated from the same 1975-76 HES data base, and the host of shifting assumptions underlying them are fully explained within his study.

On the expenditure side, a wide range of sources were used to calculate the distribution of government benefits, although the study relied overwhelmingly on the HES data base.

Government cash transfers were assumed to be incident on their direct recipients and not shifted to others. For each individual cash transfer, information was directly available from the HES on the amount received by each income group. It showed, for example, the value of age pensions and the amount of unemployment benefits gained by each household income group.

The benefits of other government outlays on goods and services (rather than cash transfers) were allocated according to utilisation of these services by each income group. The HES collected data, for example, on the number of primary, secondary and tertiary students, the number of visits to medical practitioners, the number of nights spent in hospital, and the nature of housing occupancy, and these results were used to calculate the distribution of most outlays on education, health and housing.

TABLE 2.1 Distribution of Households and Original, "Pre-Government" Household Income, 1975-76 *

HOUSEHOLD INCOME GROUP \$	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
Number of Households - '000	176.4	475.2	277.8	321.6	415.6	395.2	343.6	330.3	412.7	273.5	295.9	441.8	4159.5
Percent of Households - %	4.24	11.42	6.68	7.73	9.99	9.50	8.26	7.94	9.92	6.58	7.11	10.62	100
Total Household Income - \$m	353	2528	2063	2570	3924	4307	4483	4684	6758	5072	6393	13804	56937
Percent of Total Income -%	0.62	4.44	3.62	4.51	6.89	7.56	7.87	8.23	11.87	8.91	11.23	24.24	100

* Note: One of the classic problems of income surveys is that people understate their incomes. When compared to the more reliable National Accounts figures, for example, reported income from rent in the HES was 82 percent too low, while business income was understated by 22.7 percent (Warren, personal communication). Thus, the reported income figures have been inflated by Warren to make them comparable with the National Accounts, and this is the income base used in the above table. These results therefore differ slightly from those in Collins and Drane (1981), who used a different inflation procedure, and from those in Kakwari (1983) who does not appear to have inflated the HES figures.

Source: HES data base, and Warren, 1979.

For some social service spending, information about its likely distribution was not available from the HES. In such cases, distribution was calculated from other surveys of usage, or simply estimated in accord with assumptions that appeared reasonable. (Appendix 1 explains in detail how each of the dozens of items of expenditure were distributed.) While this clearly affects the reliability of the results, for almost all of the 'big ticket' expenditure items (such as pensions and tertiary education) relatively reliable information about receipts or utilisation was available from the HES; the actual distribution of the other expenditure items would therefore have to be very radically different from that assumed here in order to substantially affect the results.

Finally, some items of social service expenditure were 'indivisible', e.g. public health campaigns. These items were distributed in accord with household income shares. For all social services, their value to households was assumed to be their cost of provision to the government.

For both taxes and each of the social services, the following results show both the distribution and the incidence of expenditure. Understanding of the difference between these two concepts is absolutely essential for correct interpretation of the results. The difference is demonstrated in the following hypothetical example, which assumes that all households in the nation are divided into three income groups - A, B, and C. The table shows that Group A receives only 10 percent of all income while Group C gains 60 percent.

	INCOME GROUP			TOTAL
	A	B	C	
Percent of Households	33%	33%	33%	100%
Income Share - \$m	\$100	\$300	\$600	\$1000
% of total	10%	30%	60%	100%
<u>Distribution</u> of Education				
Spending - \$m	\$45	\$105	\$150	\$300
% of total	15%	35%	50%	100%
<u>Incidence</u> of Education				
Spending % of income	45%	35%	25%	30%

The nation spends \$300 million on education, of which, (based on actual utilisation of educational facilities), half is allocated to Group C, 35 percent to Group B and 15 percent to Group A. This appears to be a very biased distribution, and one might conclude that the rich derive most benefit from education spending.

However, the incidence of education spending is the measure which shows whether the post-education distribution of income is more equal than the pre-education distribution of income. Incidence is defined here as the value of the spending as a percent of each group's original income share. Group A, for example, receives \$45 million worth of education spending, which amounts to 45 percent of the group's \$100 million income. Because in this model education benefits as a percent of income decline as income increases - accounting for only 25 percent of the income of Group C - education spending makes the income distribution more equal.

This may appear contrary to intuition. It seems natural to assume that if the higher income groups receive the largest dollar benefits then they benefit most from government spending. This is, in fact, the assumption made by Le Grand in his recent study of the distribution of the benefits from social service spending in Britain (1982). He argues that the public services in Britain have failed, because groups of lower socio-economic status or income receive less in absolute benefits than groups of higher socio-economic status. However, if one wants to discover whether government action has made the distribution of income more equal, the important question is not so much the relative share of spending on a particular item accruing to different income groups, but rather the share of spending relative to each group's share of original income. Thus, even though the highest income group gained 50 percent of education spending in the earlier hypothetical example, this was less than their 60 percent share of original income; the effect of education spending was therefore to make the post-education distribution of income more equal.

While it is not possible to recalculate all Le Grand's figures, it appears from his study that the top 20 percent of income units received under 30 percent of total education spending in Great Britain, while the bottom 20 percent of income units gained some 10 percent of education spending (1982:57). In his final chapter, Le Grand mentions that the top 20 percent of the population received 42 percent of total national income while the

bottom 20 percent of the population gained 6 percent (1982:141). The share of education spending received by the top 20 percent was less than their share of income, and education spending therefore made income distribution more equal. Thus, if the success of education spending in Great Britain is judged by its incidence rather than by its distribution, one might arrive at opposite conclusions - and very different policy prescriptions - to those reached by Le Grand. This emphasises the critical importance of the distinction between distribution and incidence.

In the following sections, the distribution of taxes and federal outlays on welfare, education, health and housing are shown, and this distribution is of interest in its own right. However, as noted earlier, the key measure for assessing the impact of taxes and expenditure on income distribution is their incidence.

For taxes, if the percent of income paid in tax increases as income increases, the tax is progressive, i.e. it makes the post tax distribution of income more equal. If the percent of income paid in taxes decreases as income increases, the tax is regressive, and makes the post-tax distribution of income more unequal than the pre-tax distribution.

For expenditure the opposite applies. If the value of expenditure as a percent of income increases as income increases, it is regressive. If the value of expenditure as a percent of income decreases as income increases the expenditure is progressive - i.e. it gives proportionately more benefits to the poor and makes the post-expenditure distribution of income more equal.

For both taxes and expenditure, therefore, a progressive incidence is pro-poor and a regressive incidence is pro-rich. If the value of taxes or expenditure remains the same as income rises or falls, the incidence is proportional, and the distribution of income remains unchanged.

A final important point is the distinction between the progressivity of taxes or expenditures and their redistributive impact. Kakwani has observed that a tax may be highly progressive and yet have little redistributive effect if it is levied at low rates and collections are small (1983:20). The same point is illustrated in the following hypothetical example of education and health spending.

HOUSEHOLD INCOME GROUP	A	B	C	D	E
Percent of Households	20	20	20	20	20
Incidence of Education Spending - % of income	90	80	70	60	50
Incidence of Health Spending - % of income	0.9	0.8	0.7	0.6	0.5

In the model, the progressivity of expenditure on these two items is exactly the same, because spending as a percent of income declines at the same rate in both cases. However, education spending is much more redistributive because it amounts to a much greater proportion of income. Thus, if expenditure on a particular item is progressive, this indicates that it makes income distribution more equal, but it does not show how much more equal. Its actual redistributive impact is a function of both the degree of progressivity and the amount of expenditure.

Limitations of the Study

Quite apart from the internal conceptual difficulties analysed earlier, there are a number of other limitations to this study. First, although government macro-economic management has a major effect on the distribution of income and welfare, its effects are difficult to trace and cannot be analysed in this study. Its impact can, however, be crucial. For example, if the government follows a restrictive monetary policy and thereby greatly increases the level of unemployment, the distribution of original incomes may become much more unequal.

Second, an analysis of the redistributive effects of only the budgetary activities of government completely ignores the distributional impact of government regulatory and pricing policies. Pincus and Withers point to the exponential growth of regulatory boards and acts (1983:13), and suggest that the real impact of regulation is not well captured by an analysis of government expenditure 'because the real focus of regulation consists of direct controls which often involve little in the way of explicit expenditure or taxation by the government' (1983:12). Butler also analyses

the crucial role of non-budgetary and regulatory activities, such as tariffs, import quotas and licensing arrangements (1980:27), and research by Peetz suggests that some of these have a regressive impact (1982).

Similarly, Scotton suggests that 'changes in legislation governing the status of consumers, tenants, women, minors, Aborigines and employees ... may be of considerable significance in terms of social policy', cross-subsidisation mechanisms and differential pricing (e.g. concessional transport fares for pensioners) are also 'capable of exerting a significant redistributive effect' (1978:8). However, almost nothing is known about the distributive impact of non-budgetary government activities, and 'the practicability of such a holistic analysis, is, to say the least, doubtful' (ibid:1).

A third problem is that the redistributive impact of only social security, health, education and housing outlays are considered in this study. Some outlays (or receipts) in other budgetary categories may be specifically designed to meet equity objectives but not embraced by this analysis, with one of the most obvious 1975-76 examples being expenditure on legal aid. However, as expenditure on the four areas considered accounted for about half of total federal outlays in 1975-76, the welfare impact of these smaller welfare expenditure items would be unlikely to materially affect the results.

This, however, raises the fourth problem, which is that the benefits of the remaining 50 percent of budget outlays have not been allocated to the income groups. These outlays include defence, industry assistance, transport and communication, general public services (e.g. law and order and foreign affairs) and other payments to the States.

These outlays are very difficult to distribute. Spending on transport and communication, for example, could in theory be distributed according to actual usage, in the same way as the social service outlays were. Yet sufficiently detailed information is not available on the distribution between commercial, public and private usage, or on the distribution of usage within each of these categories by income group (although see Morris and Wigan, 1977, and Bentley et al, 1974a). It is also difficult to decide how to allocate the benefits of 'indivisibles', such as defence or foreign

affairs spending, which are supposed to confer a collective benefit on the whole society.

Despite the magnitude of these problems, overseas incidence studies which have not allocated the benefits of all budgetary outlays have been soundly criticised (Peacock, 1979; Field et al, 1977:190); on the other hand, it is also clear that attempts to arbitrarily allocate the remaining budget outlays will also be attacked. It is, therefore, a case of 'being damned if one does, and damned if one doesn't'.

As a compromise, this study has focused in detail on the redistributive impact of taxes and social expenditures only, but, in Section 5, the remaining budget outlays have been arbitrarily allocated to income groups (although in accord with the assumptions used in overseas incidence studies). These results, however, can only be regarded as very broadly indicative rather than definitive.

A fifth limitation to this study is that only federal government social outlays and taxes were considered. State governments have traditionally been the main providers of social services such as education, while local governments also play some role in the provision of welfare. About 75 percent of state expenditure is devoted to social services (Scott et al, 1983:51); as a result many would intuitively feel that state outlays are more pro-poor than federal, and that their exclusion from the study may therefore understate the redistributive effect of the welfare state.

However, the issue is not this clear-cut. The massive expansion of specific purpose grants to the States under the Whitlam government (which are within the ambit of this study) meant that by 1975-76 the federal government was funding a significant proportion of social outlays. For example, the federal government contributed 70 percent of total current public health funding in 1975-76 (Department of Health, 1978:11). In addition, a substantial proportion of the remaining state and local government outlays were financed from state and local taxes, which fell much more heavily upon the poor than federal taxes (Warren, 1979). We can therefore only speculate about the effect that the inclusion of state and local governments would have upon the aggregate results.

A sixth issue is the exclusion of the non-government voluntary sector, which plays a significant role in welfare provision (Shaver, 1982; Hardwick et al, 1982). While federal government grants and subsidies to these organisations are incorporated in the analysis, they also receive substantial funding from other sources. Although these agencies probably should not be considered part of the 'public' welfare state, their inclusion in a broader study of welfare provision might affect the results.

A seventh problem is posed by 'tax expenditures'. The federal government provides assistance on the outlay side of the budget through direct expenditures and on the revenue side through remissions of tax known as tax expenditures. The latter may represent as much of a call on the budget as do the former - e.g. equivalent amounts of assistance for children may be provided through outlays on family allowances, or through the foregone tax revenue resulting from tax rebates for children.

Information about the volume of tax expenditures has only really emerged during the 1980s, and it is still not known how much all tax expenditures cost or how the benefits of the vast majority are distributed between different income groups. The taxation section of this study does implicitly include the effects of tax expenditures, since their hidden effect is captured in the lower tax rates applying to those who reap their benefits. However, more explicit information about their likely distribution is also included in Section 3 wherever it is available.

Notwithstanding the various limitations outlined above, this study still provides a good guide to the explicitly redistributive effects of the welfare state and the social services which lie at its heart. As Scotton observes, 'despite all the foregoing reservations and qualifications, it remains a fact that public expenditure for social purposes is the most important single instrument of social policy' (1978:8).

3. DISTRIBUTION AND INCIDENCE OF AUSTRALIAN FEDERAL TAXES

The first step in an incidence analysis is to take the total amount of taxes paid and determine how much each of the different income groups contributed in relation to their share of total income. Following a brief introduction to taxation principles, the second part of this section describes the types of taxes levied in 1975-76 and explains why the personal income tax system is a less effective redistributive device than is often assumed. The third part analyses the distribution and incidence of the tax burden in 1975-76, while the fourth traces the likely redistributive impact of changes to the tax system since then.

Equity and Taxation

Three general principles normally used to evaluate tax systems are equity, efficiency and simplicity, with the most important of these being equity (Taxation Review Committee, 1975:12-17¹). The modern principle of equity holds that taxes should be levied fairly, in line with 'ability-to-pay' (Groenewegen, 1979:75). Ability to pay is designed according to the two criteria of horizontal equity and vertical equity.

The former criterion suggests that people with equal capacities to pay should be treated equally, and attempts to take account of the differing needs of taxpayers. For example, the principle implies a lower tax liability for a taxpayer with three dependants than for a single taxpayer earning the same income. The second concept, of vertical equity, embodies the idea that those with different capacities to pay taxes should be treated differently. This is the principle which sanctions progressive taxes, for it suggests that those with higher incomes (after adjustment for

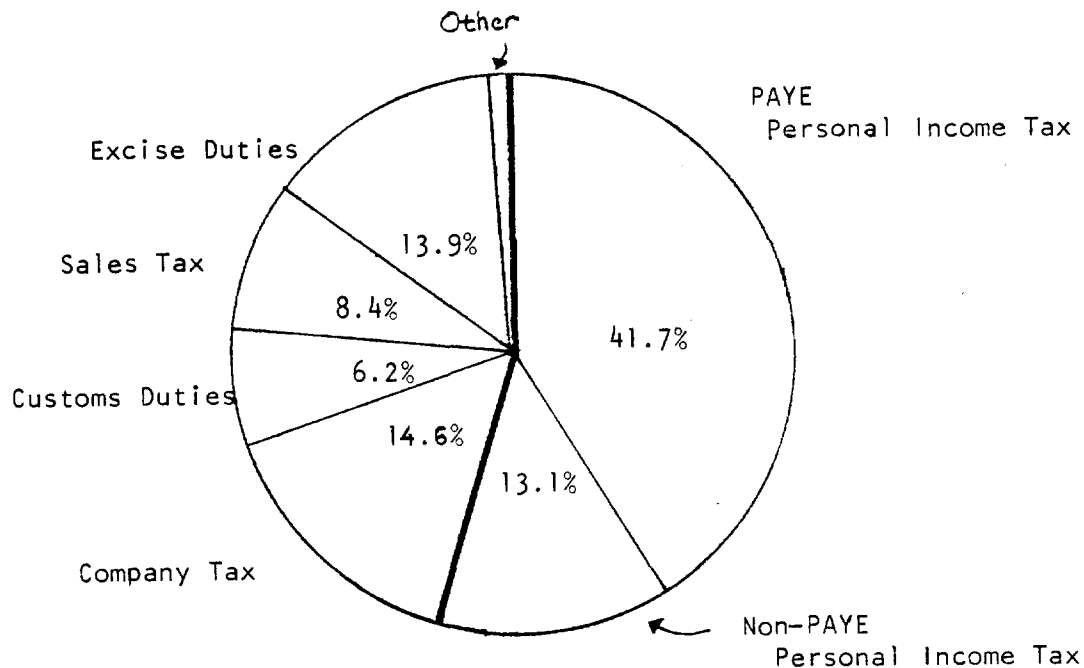
-
1. The definition of progressivity can be controversial. Horn outlines four possible ways of measuring progressivity (1981:57) and prefers a different measure to that used here. However, his definition appears to measure the rate of change of progressivity rather than the degree of progressivity itself, and the definition adopted here is that used by most writers in the field (e.g. Keens and Cass 1982:14; Kakwani, 1983:18; Saunders, 1982:15). Some tax theorists also add a fourth category of taxes to those outlined above. These are taxes with 'linear' rate structure, in which the average tax rate rises but the marginal tax rate remains constant (Groenewegen, 1981:58), but for our purposes these can be termed progressive.
-

horizontal equity considerations) should pay a larger proportion of their incomes in taxes than those with lower incomes.

The effect of taxes on the distribution of income depends upon the impact of their rate structure on different income groups. As established earlier, taxes are progressive if the proportion of income paid in tax increases with income, proportional if the tax rate remains the same across income groups, and regressive if the proportion of income paid in tax declines as income rises¹. The degree of progressivity or regressivity should not be confused with the absolute amounts of tax paid. Thus, if a tax results in a person earning \$30,000 a year paying \$3000 in tax and a person earning \$10,000 paying \$1000, the tax is not progressive: while the higher income earner has paid more tax, tax as a proportion of income has remained constant. It is also important to note that a tax levied at a constant rate on expenditure, such as sales tax, may be considered regressive if it absorbs a higher proportion of the income of the poor than of the rich (Mathews, 1980:87). If a tax is to conform to notions of vertical equity, and make the distribution of post-tax income more equal, it must be progressive.

Description of Federal Taxes, 1975-76

A wide range of federal taxes were levied in 1975-76. The most important was personal income tax, which accounted for just under 55 percent of total tax revenue (Figure 3.1). Personal income tax may be divided into two components. Pay-as-you-earn (PAYE) income tax is deducted directly from the pay of wage and salary earners, while non-PAYE or provisional tax is levied on the incomes of the self employed (such as doctors, farmers and shopkeepers) and on those who receive significant amounts of income in non-wage forms such as royalties, interest, rent and dividends. While business income from partnerships, sole traders and professional services is taxed under the provisional tax system, the remaining 60 percent of business income, which accrues to the corporate sector, is taxed through company tax. Company tax receipts contributed almost 15 percent of total federal revenue in 1975-76.

FIGURE 3.1: Composition of Australian Federal Taxation Revenue, 1975-76

Source: Treasurer, (1976a).

The second major category of taxes, often termed indirect taxes, together accounted for 28.5 percent of total revenues in that year. These taxes are imposed on sales of or expenditures on goods and services. Sales tax is levied on the wholesale value of specified goods (but not services), such as motor cars and furniture. Tax rates are 'ad valorem' i.e. are a percentage of the value of the commodity in question. Rates of tax vary between different commodities, and a large range of necessities such as specified foods remain untaxed. Excise duties are levied on particular commodities, overwhelmingly tobacco and petroleum products and alcoholic beverages. Unlike sales taxes, excise duties are levied according to quantity rather than value. Thus, tax rates are 'specific' i.e. are a fixed money sum per unit of volume or weight. Finally, customs duties are levied on imports.

The remaining miscellaneous taxes, which contributed less than two percent of tax revenues in 1975-76 (Figure 3.1), included those levied upon wealth transfers. These have now been abolished, but then comprised estate or death duties, levied upon the value of deceased estates, and gift duty, levied upon particular types of gifts and principally designed to reduce avoidance of death duties via gifts prior to death.

Following the abolition of these duties, the only Australian federal tax now explicitly concerned with redistribution is personal income tax. At first glance income tax appears highly progressive. The 1975-76 personal income tax scales are shown in Table 3.1. Their progressivity is caused by the interaction of the brackets of taxable income and the marginal tax rates applicable within each of those brackets. For example, excluding any rebates, a single person with a taxable income of \$9000 in 1975-76 would have paid only 20 cents tax on each of the first \$2000 of this income, 27 percent tax on the next \$3000 and 35 cents in the dollar on the final \$4000. The system was progressive because any additional income attracted the top marginal rate of tax applicable at that income level. A rise in income therefore resulted in an increase in the average tax rate, because a greater percentage of total income was subject to the highest appropriate marginal tax rate.

TABLE 3.1 1975-76 Personal Income Tax Scales

Taxable Income			Tax Payable	
\$				
0	-	2000		20c for each \$ over \$0
2000	-	5000	\$400	+ 27c for each \$ over \$2000
5000	-	10000	\$1210	+ 35c for each \$ over \$5000
10000	-	15000	\$2960	+ 45c for each \$ over \$10000
15000	-	20000	\$5210	+ 55c for each \$ over \$15000
20000	-	25000	\$7960	+ 60c for each \$ over \$20000
25000	+		\$10960	+ 65c for each \$ over \$25000
(Tax brackets)			(Marginal tax rates)	

Source: Treasurer (1975a).

If judged on the basis of these tax scales, the personal income tax system looks highly progressive, and this apparent progressivity lies at the heart

of the belief that the tax system takes more from the rich than the poor. Yet, as a growing number of critics point out, 'it is incorrect to infer that the nominal impact of the system is the same as its real impact' (Keens and Cass, 1982:16). Three reasons for doubting the efficiency of personal income tax as a redistributive device lie in the deficiencies of its income base, tax avoidance and evasion, and the prevalence of tax expenditures.

1. The Definition of Income

As noted earlier, tax is ideally levied in accord with 'ability to pay'. In Australia, money income - from wages and salaries, interest, rent, dividends, etc - has been the yardstick used to determine ability to pay. Yet many forms of real income are not defined as assessable (or potentially taxable) income. Some of the more important items excluded from the assessable income tax base are:

- * unrealised capital gains, which result when the price of an asset increases, but it has not been sold;
- * realised capital gains, which result when the asset is actually sold for a profit. This profit is only taxable if the asset concerned had been acquired for the purpose of selling it at a profit, rather than as an investment, (which is difficult for the Tax Office to prove), or if it is sold within 12 months of purchase;
- * inheritances or bequests;
- * gifts not connected with employment;
- * imputed income from assets, in particular, from the owner occupied home²;
- * until 1983, 95 percent of superannuation lump sums;
- * lottery and gambling winnings.

-
2. Imputed rent is the rent that the homeowner would otherwise have to pay to live in an equivalent standard of accommodation (and net imputed rent is this amount minus costs, such as repairs and mortgage repayments). In measuring poverty, for example, the concept is important, because a renter on a low income is actually poorer than a home owner on the same low income, because the latter does not have to pay for accommodation. The economic argument for taxing imputed rent is somewhat different, and rests upon the inequities produced by the differential treatment accorded to different types of assets. For example, if a person invests \$50,000 in a savings account, the resulting income (in the form of interest) is taxable. If the same person invests \$50,000 in a house, the resulting imputed income (in the form of the value of the rent which no longer has to be paid) is untaxed.
-

The extent of these exclusions shows that income tax in Australia is not really levied in accord with ability to pay, but in accord with an imperfect proxy, which partially ignores wealth holdings.

To these deficiencies in the definition of the income base must be added the practical problems associated with types of income which, whilst theoretically taxable, are often subject to much less than full taxation. For example, while fringe benefits provided by employers are defined as income and thus are legally taxable, in practice tax is often partially or fully escaped because of the administrative and political difficulties involved in assessment (Groenewegen, 1979:98)³. Fringe benefits create enormous headaches for the Tax Office, for they are difficult to define and measure precisely and their value to the employee is hard to calculate.

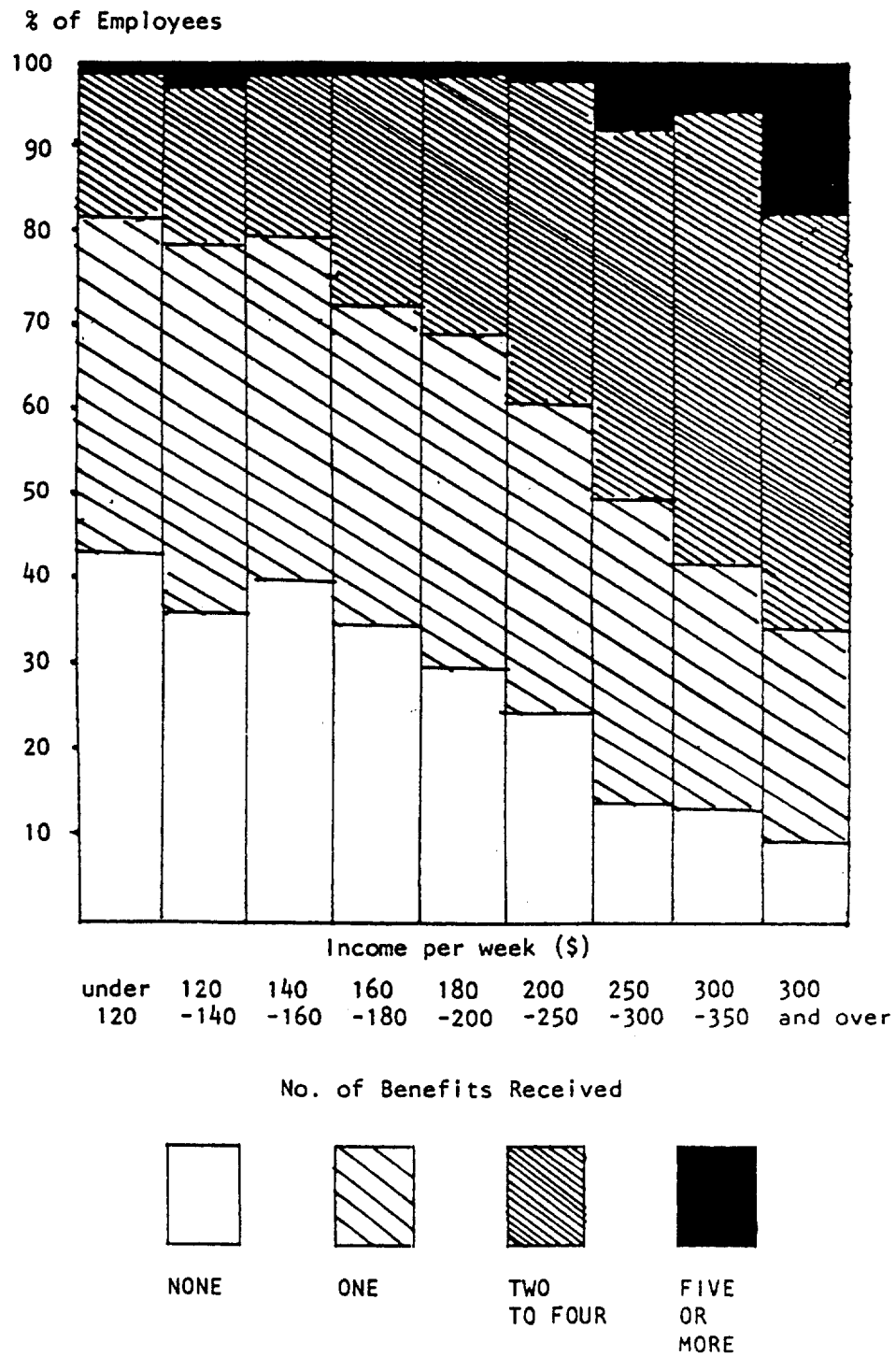
The full or partial failure to tax occupational welfare reduces the redistributive potential of the tax system, for fringe benefits are primarily enjoyed by upper income groups. For example, a 1979 survey by the Australian Bureau of Statistics of employees working 20 or more hours a week found that the number of employment benefits received rose steadily with income (Jamrozik et al, 1981:112). As Figure 3.2 demonstrates, while less than five percent of employees earning less than \$250 a week received five types of fringe benefits, more than 15 percent of top income earners did so. Other surveys suggest that the value of fringe benefits as a percentage of income increases sharply as one moves up the income scale (Coombes, 1983:20), and that fringe benefits add 35-40 percent to the basic salary of top executives (Jay, 1981).

2. Tax Evasion and Avoidance

A second factor reducing the redistributive potential of the personal income tax system is tax evasion and avoidance, which involves attempts to reduce the amount of income tax payable.

Tax evasion involves the non-payment of tax through the failure to disclose assessable (i.e. potentially taxable) income, and is an illegal form of

³ Fringe benefits can be generally defined as benefits in cash or kind received by workers in addition to their wages and salaries, and are sometimes also known as occupational welfare, remuneration packages, or employment benefits (Jamrozik et al, 1983:55). Examples include the provision of free or discounted goods and services, company cars, entertainment allowances, club fees etc.

FIGURE 3.2 Number of Employment Benefits Received by Income

Source: Jamrozik et al (1981:40).

reducing income tax liability. Not all sections of the community have the same ability to engage in tax evasion. As Lawry and Holgate note, 'salary and wage earners who have pay-as-you-earn tax instalments deducted from their earnings are virtually unable to evade tax in this way. Major groups of evaders are cash traders and tradesmen, and part-time employees receiving cash payments which are not disclosed as income' (1982:1). This practice appears to be increasingly prevalent among professionals as well as tradespeople, as recent newspaper reports about the apparent existence of untaxed cash-in-hand payments to barristers indicate (Sydney Morning Herald, 1983).

Tax avoidance, on the other hand, is a way of reducing the level of taxable income while technically remaining within the letter of the law, and takes two general forms. The first involves a range of strategies for reducing assessable income. One method is to receive income in a form other than money, through employer provision of housing, cars, and 'scholarships' which pay the private school fees of the employee's children (Horin, 1981). As noted above, although technically taxable, many of these benefits escape the Taxation Commissioner's net. This practice is primarily available to higher income wage and salary earners, and the self employed and employers. The amount of revenue lost is substantial, with one estimate of revenue foregone in 1980-81 through the non-taxation of the fringe benefits received by wage and salary earners alone being \$5000 million (Jamrozik et al, 1983:69).

Another method of reducing assessable income is to use partnerships, private companies, and trusts so as to take advantage of different marginal rates of tax (Lawry et al, 1982:1). The structure of the personal income tax system provides a strong incentive for taxpayers to split earned income with their spouses or children ⁴, and, as the Treasury notes, 'the evidence of increased splitting of property and business income in Australia is fairly conclusive' (1974:13). One indicator, for example, is the growth of family partnerships as a proportion of all partnerships, from

⁴ For example, if a taxpayer with a dependent spouse earns \$40,000 in 1983-84, s/he should pay \$13,660 in tax. However, if s/he is able to split this income with the spouse, each will pay \$4702 tax on their income of \$20,000. The total tax saving is almost \$4300. If the income can be split through a family partnership with two children as well, each of the four taxpayers pays tax of \$1600 on their income of \$10,000, resulting in a total tax saving of around \$7,200.

81.5 percent in 1970-71 to 89.2 percent in 1975-76 and 91.5 percent in 1979-80 (Groenewegen, 1981:62; Commissioner of Taxation, 1981a:94). A further method of reducing assessable income is to convert income into a non-taxable form such as capital gains - a practice which can most effectively be utilised by those on very high incomes.

The second type of tax avoidance involves increasing the level of allowable deductions. Taxable income (which determines tax liability) is equal to assessable income minus allowable deductions, and any increase in allowable deductions consequently reduces the amount of tax to be paid. Allowable deductions are primarily expenses necessarily incurred while earning income.

One form of tax avoidance is to convert non-deductible private expenditure into deductible business expenditure (e.g. by stating that some work is necessarily done at home, and claiming telephone, electricity and other bills). This strategy is particularly easy for the self employed to use, because all business costs are deductible for them, and the line between business and private expenditure is a difficult one for the Tax Office to draw with precision.

A second form of tax avoidance in the allowable deductions arena is to enter into schemes which take advantage of accounting transactions, and loopholes in the tax legislation, in order to produce tax deductible losses which are, at least in part, artificial (Lawry et al 1982:1). Tax avoidance schemes such as negative gearing⁵ are primarily used by upper income groups and the self employed, and have severely undermined the equity of the tax system (Mathews, 1980:106).

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5. Negative gearing is a scheme in which a loan is taken out to buy, say, a flat, and the rent is equal to or lower than the interest repayments. Because the interest repayments are expenses necessarily incurred in earning income (rent), they are fully deductible and thus produce either no addition to income or can be used to reduce tax on income gained from other sources. After 12 months or more, the flat can be sold and any resulting capital gain is usually tax free (Hickie, 1983:28).
-

Not surprisingly, comprehensive evidence about the volume and distribution of tax evasion and avoidance is not available, although Grbich points out that many experts estimate tax loss from these two factors at \$7,000 million a year (1983:413).

Tax evasion appears likely to have introduced or exacerbated inequities between PAYE and non-PAYE taxpayers, but has not necessarily undermined vertical equity overall. Tax avoidance, on the other hand, appears to be particularly available to higher income groups and may therefore have markedly reduced the redistributive effect of the income tax system. Indeed, Mathews believes that 'tax authorities, governments and the courts have allowed tax avoidance to flourish on such a scale as to make personal income tax a voluntary tax for the rich non-salary earner, and despite the emphasis which has been given to vertical equity in the design of the Australian income tax system, the essential problem is not to make the rich pay higher rates of tax, or even more tax, than the poor: it is to make the rich pay any income tax at all' (1980:106).

3. Taxation Expenditures

A third factor which affects the degree of progressivity of the personal income tax system is the extensive use by governments of tax concessions designed to reward or encourage particular types of activities. Conceptually, such 'tax expenditures' are closely equivalent to direct expenditures, since in many areas the government can provide equivalent assistance indirectly through the taxation side of the budget or directly through the outlay side of the budget. While the precise definition and identification of tax expenditures is not easy, they basically involve concessional departures from some ideal or 'normal' tax structure, thereby resulting in foregone tax revenue (Treasury, 1982:2-6).

One of the most striking characteristics of tax expenditures is how little is known about their real cost in foregone tax revenue, or about the distribution of their benefits. When asked 49 questions on notice about the cost of various tax expenditures, for example, the Treasurer was able to provide precise estimates of cost in only 15 cases, and incomplete estimates in a further 8 cases (J. Howard, 1982:95-105).

The 'hidden' fiscal welfare provided via tax expenditures is, however, very substantial. For example, the indicative value of only the two-thirds of

tax expenditures which the House of Representatives Standing Committee on Expenditure could cost was over \$6 billion dollars - or more than 15 percent of all federal budget outlays in 1981-82 (1982:1).

The most important tax expenditures in the income tax system are tax rebates, which are limited deductions from tax liability given to taxpayers who meet specified conditions. Tax rebates were introduced in 1975-76 when the tax system was radically restructured and concessional deductions were abolished. Concessional deductions, like the allowable deductions discussed earlier, were subtractions from assessable income, and, consequently, were worth more to those on higher marginal tax rates. To improve equity, concessional deductions were replaced by tax rebates, which were worth the same in absolute dollar values to taxpayers who received them. (However, rebates were worth more to a low than a high income earner as a percentage of income. For example, a \$800 rebate amounted to 10 percent of the income of a person earning \$8000 but only 5 percent of a person earning \$16000.)

Rebates can be divided into three categories - expenses based, dependant, and miscellaneous rebates. Expenses rebates bestow preferential treatment upon certain types of expenditures traditionally regarded as essential or socially desirable, such as medical and hospital expenses, superannuation, life insurance, and rates. For some types of expenditure there is a limit to the amount which can be claimed, and total expenditure must exceed a certain sum before a rebate can be claimed. In 1975-76 a rebate of 40 cents was given for every dollar of concessional expenditure above \$1350⁶.

The second category, dependant rebates, is designed to recognise the additional costs involved in maintaining dependants, and is thus justified on the grounds of horizontal equity. Perhaps the best known is the dependent spouse rebate, which accounted for 40 percent of the value of all dependant rebates in 1975-76 (Commissioner of Taxation, 1978:24). Rebates were also given for dependent children in 1975-76, but these were abolished in 1976 and replaced by expanded child endowment payments (renamed family allowances).

6. All taxpayers received a general concessional rebate of \$540. In this paper, concessional rebate is used to refer to that given to taxpayers with expenditure above the \$1350 threshold.

The remaining 'miscellaneous' rebates include the sole parent rebate, the zone and overseas forces rebate (which is designed to compensate those living in remote areas who consequently face higher living costs), and other rebates introduced at various times by the government.

In theory, rebates appear to be progressive, because they are flat rate and therefore amount to a higher proportion of the income of the poor than the rich. In reality, upper income taxpayers appear to monopolise the benefits. Table 3.2 shows that more than two fifths of all expenditure on the dependent spouse rebate, for example, benefited the one fifth of taxpayers with taxable incomes above \$10,000. For all rebates, 60 percent were appropriated by this top income group.

The distribution of rebates is not merely unequal in absolute terms. Estimates of the incidence of rebates have not previously been available but can be calculated from the annual taxation statistics; the results, as Figure 3.3 demonstrates, show that rebates comprised a higher proportion of the income of the richer than of the poorer in 1975-76. Thus, while rebates amounted to only 0.4 percent of the taxable income of the lowest income group, they reached 7.3 percent for the highest. The poorest families received only partial rebates (or no rebates at all), for they did not pay enough tax to claim the entire value of rebates.

Apart from tax rebates, another important tax expenditure given through the personal income tax system was the exemption from tax, until July 1983, of 95 percent of superannuation payments taken in the form of a lump sum⁷. Despite the 1983 changes, generous exemption levels still exist and the other tax concessions which subsidise superannuation provision remain untouched (Eberhardt, 1983:11-14). The Treasurer recently estimated that

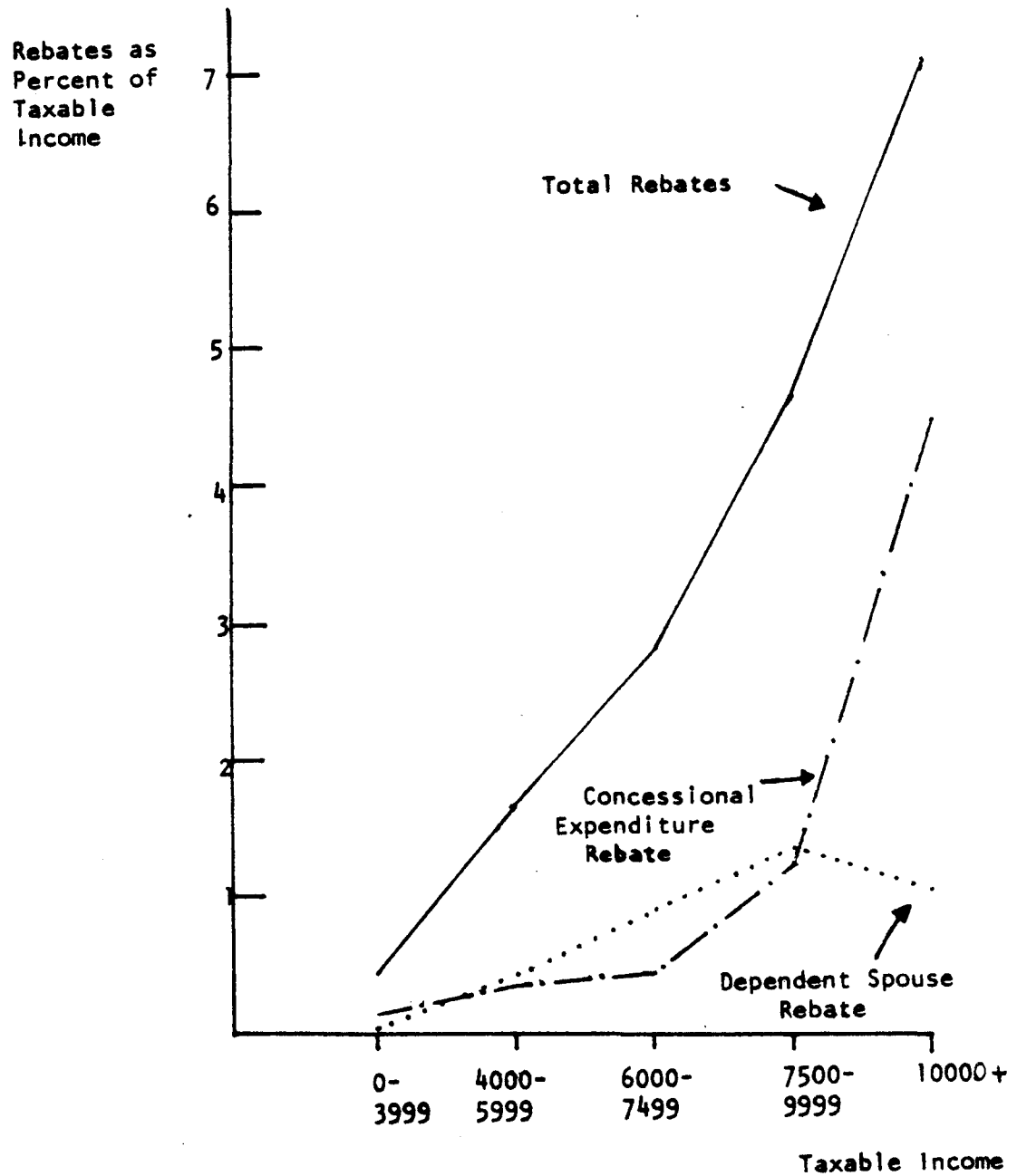
7. The Hawke government announced in the 1983 Budget that that component of superannuation accumulated after 30 June 1983, and subsequently taken as a lump sum, would be taxed at a new and higher rate. In terms of equity, this is an improvement upon the existing provisions, but it should be noted that it will make little difference to most of those retiring in the next five or ten years, because superannuation accumulated before June will still be subject to the old taxation provisions (Treasurer, 1983a:297-98). In addition, the government has subsequently raised the exemption limits (below which the new tax rates will not be payable), and has thereby attenuated the redistributive potential of the changes.

TABLE 3.2: Incidence and Distribution of Tax Rebates 1975-76

Taxable Income \$	0-3999	4000-5999	6000-7499	7500-9999	10000+	TOTAL
<u>Dependant Spouse</u>						
- dollars	892	20882	60977	149021	177984	409,757
- % of rebate	0.2	5.1	14.9	36.4	43.4	100%
- % of taxable income		0.04	0.42	0.92	1.37	1.07
						0.99%
<u>Sole Parent</u>						
- dollars	43	1356	2438	2118	1348	7,303
- % of rebate	0.6	18.6	33.4	29.0	18.5	100%
- % of taxable income	-		0.03	0.04	0.02	0.01
						0.02%
<u>Concessional Expenditure</u>						
- dollars	2564	17225	29767	137605	746156	933,317
- % of rebate	0.3	1.8	3.2	14.7	79.9	100%
- % of taxable income		0.12	0.35	0.45	1.26	4.48
						2.26%
<u>All Rebates *</u>						
- dollars	9182	83550	186268	506073	1206840	1,991,913
- % of rebate	0.5	4.2	9.4	25.4	60.6	100%
- % of taxable income		0.42	1.68	2.81	4.64	7.25
						4.82%

* Comprising above rebates, plus dependent student, other dependent child, other dependents, and zone or overseas forces. Excluding general rebate.

Source: Commissioner of Taxation (1978: 24 and 96).

FIGURE 3.3 Incidence of Tax Rebates, 1975-76

Source: Table 3.2.

these concessions would cost \$2.5 billion in lost tax revenue in 1983-84 (1983a:295), and Manning observes that such concessions constitute 'roughly 46 percent of the amount spent on age pensions' (1983:24).

Superannuation tax expenditures appear to be highly regressive; some 60 percent of employees do not receive any superannuation benefits (ABS, 1979) and for those that do, the incidence of benefits appears to increase with income. Thus, recent work by Warren shows that the distribution of superannuation contributions in 1975-76 was more unequal than the distribution of income, with the top 20 percent of households paying 50 percent of all superannuation contributions (1983). As Ingles et al have noted: 'In short, superannuation tax concessions appear to disproportionately benefit higher income earners, perhaps to a degree which would be unacceptable if they were made in the form of cash payments' (1982:24).

Professor Head puts the issue even more strongly: 'nothing could possibly justify the outrageous discrimination and the resulting distortions in financial markets and wholesale tax avoidance by high income earners which have characterised the Australian treatment of pension rights. Few if any countries overseas can match our long standing failure to adequately tax lump sum payments' (1983b:4).

For all of the above reasons - the deficient definition of income, tax evasion and avoidance, and tax expenditures - the actual progressivity of the income tax system can be expected to diverge significantly from the nominal progressivity apparently embodied in the personal income tax scales. While it is not certain that all of the above factors disproportionately benefit the better-off, it seems highly probable that tax avoidance and some tax expenditures do.

The direction of any such biases will be captured to some extent in the tax incidence results presented in the following section. For example, if tax avoidance is more prevalent among higher income households it may be reflected in lower income taxes paid by those households, and thus in lower progressivity of income taxes (although tax avoiders might have been somewhat hesitant about declaring their real income levels).

However, the definition of income used in the Household Expenditure Survey also mirrors many of the defects of the income tax base outlined earlier. Thus, imputed income from assets and from capital gains were not counted as income by the Household Expenditure Survey for the purposes of calculating household incomes, and, while the value of fringe benefits was supposed to be included as income, it was without doubt drastically under-reported. This will have affected the results. For example, if fringe benefits were concentrated among higher income households, as seems likely, their full or partial exclusion would have resulted in understatement of the real incomes accruing to higher income households; because the incidence of taxation is measured by tax paid as a percent of income, the real progressivity of taxes would therefore appear likely to have been overstated.

When evaluating the following results it should also be kept in mind that tax incidence is assessed against household incomes, whereas in the income tax system the individual's income is the relevant measure. It is not entirely certain whether gauging incidence against the household rather than the individual will make personal income and other taxes appear more or less progressive.

Distribution and Incidence of Taxation, 1975-76

There have been two major studies of the incidence of taxation in Australia, one for 1966-67 (Bentley et al, 1982) and one for 1975-76 based on the Household Expenditure Survey data (Warren, 1979). This section relies on Warren's results, which, because they rely on the same data base, can be later directly compared to the expenditure results. The assumptions made about tax shifting and the data sources employed are fully explained in Warren's study (1979).

Considering, first, personal income taxes, Warren found that households with an annual income below \$2080 paid only 0.3 percent of all personal income tax, while those earning more than \$20800 contributed almost one third of the total (Table 3.3). This, however, only recorded the distribution of income taxes (see Section 2). When the incidence of tax was considered - i.e. the amount of tax paid by each group expressed as a percentage of their income - a rather different picture emerged; thus, the poorest households with income below \$2080 paid 6.9 percent of their income in personal income tax, compared to 21.7 percent for the richest households

with incomes above \$20800 (Table 3.4). As Figure 3.4 demonstrates, while personal income tax was progressive, the degree of progressivity was very low across most of the mid-section of the income range⁸.

Personal income tax was the only progressive tax in 1975-76, as Table 3.4 shows. Company tax appeared regressive, declining from 6.7 percent of the income of the poorest households to 4.2 percent for the richest. Indirect taxes, as explained earlier, were levied at constant rates which did not increase as income rose; their impact was regressive, with petrol excise, for example, accounting for 3.4 percent of the income of the poorest group but only 1.2 percent of that of the top income bracket (Table 3.4).

The regressivity of these other taxes substantially offset the progressivity of personal income taxes, so that, overall, the federal tax system was barely redistributive. As the bottom line of Table 3.4 showed (represented graphically in Figure 3.5), taxes as a percent of income hovered at about 27 percent for all household income groups. Because tax as a percent of income did not increase significantly as income rose, the tax system failed to make the post-tax income distribution much more equal than the pre-tax distribution.

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8. Warren's study measured the incidence of personal income taxes as a percent of total household income. Because household units vary widely in size, it has been suggested that a more accurate measure may be achieved if total household income is divided by the number of members in the household, thereby giving per capita household income. It is important to know whether the pattern of tax incidence changes when measured against per capita rather than total household income, because it sheds light on the possible distortions introduced into an analysis based solely on total household incomes. Kakwani has reworked the 1975-76 data, and argues that when one measures personal income tax incidence against per capita rather than total household income, the regressivity evident at the lower end of the income scale disappears, and 'that the overall progressiveness of taxes increases somewhat, when the size of households is taken into account' (1983:27 - tables reproduced in Appendix 2: Tables 1 and 2). This conclusion may, however, be misleading. In one case the top 10 percent of income units are compressed into the highest income bracket, whereas in the second case they have been spread over the top seven income brackets. When Kakwani's figures are recalculated to distribute income units more equally (Appendix 2: Table 3) the results proffer no support for the propositions that regressivity at the bottom end of the income scale is reduced or that personal income tax becomes more progressive once household size is taken into account.
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TABLE 3.3 Distribution of Australian Federal Taxes, 1975-76 (Percent)

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
Personal income	0.3	1.0	1.6	3.0	5.7	6.7	7.4	8.1	12.5	9.1	12.2	32.6	100
Other	1.2	4.6	5.1	5.6	8.7	7.8	7.6	7.6	11.2	8.2	10.5	21.8	100
Total	0.7	2.5	3.0	4.0	6.9	7.2	7.5	7.9	12.0	8.7	11.5	28.2	100

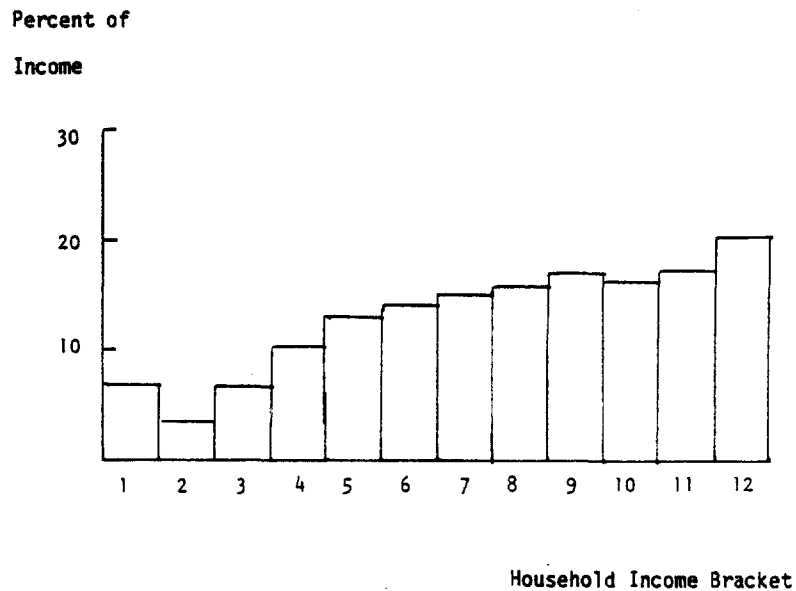
TABLE 3.4 Incidence of Australian Federal Taxes, 1975-76 (Tax as percent of income)(a)

Tax	Household money income bracket (\$)												Total
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 and over	
Corporation	6.7	4.5	7.1	5.0	4.4	3.2	3.0	2.8	2.9	2.5	3.6	4.2	3.7
Motor vehicle sales	1.4	0.2	1.4	1.3	1.6	1.2	1.1	0.9	1.3	1.0	1.0	0.9	1.1
Liquor sales and excise	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other sales	2.5	1.4	1.5	1.4	1.4	1.3	1.4	1.4	1.2	1.3	1.2	1.1	1.3
Petrol excise	3.4	1.7	2.0	1.9	2.0	1.8	1.6	1.5	1.6	1.5	1.4	1.2	1.6
Tobacco excise	2.4	1.0	1.4	1.4	1.5	1.2	1.0	1.0	0.9	1.0	0.8	0.6	1.0
Beer excise	2.0	0.9	1.2	1.5	1.7	1.5	1.3	1.3	1.2	1.5	1.1	1.0	1.2
Primary production	-0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2
Customs duties	2.9	1.7	2.2	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.5
Personal income	6.9	3.7	6.9	10.6	13.3	14.4	15.1	16.0	17.1	16.5	17.6	21.7	16.2
Subsidies	0.2	-0.5	-1.0	-0.6	-0.5	-0.3	-0.3	-0.2	-0.3	-0.3	-0.4	-0.8	-0.5
Other indirect	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total :	28.6	15.4	22.9	24.6	27.6	26.0	26.1	26.4	27.7	26.9	28.1	31.9	27.5

(a) Estate and gift duties not modelled because of inadequate data on their distribution by income group. Warren has included subsidies (e.g., for superphosphate) as negative taxes.

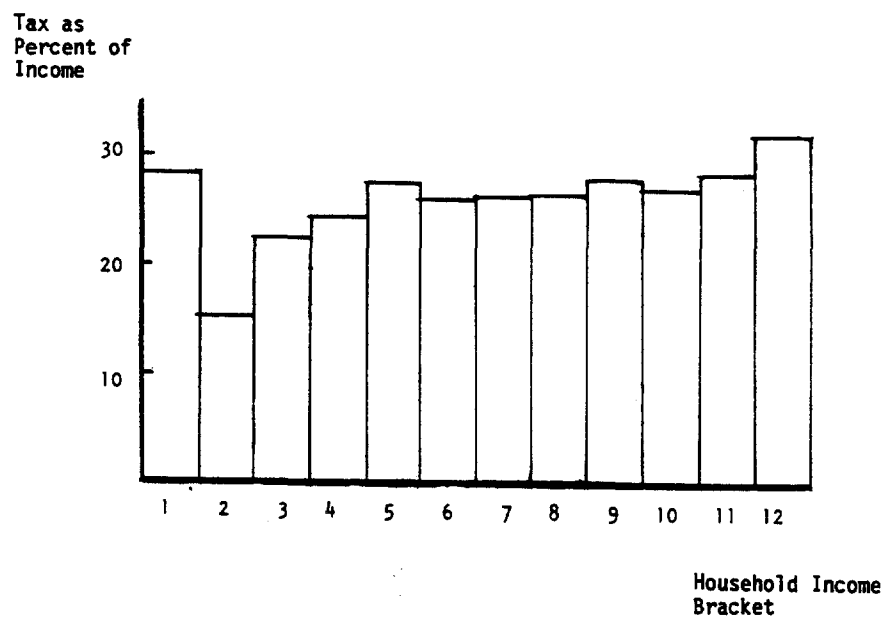
Source: Warren (1979:23) and unpublished data supplied by Warren.

FIGURE 3.4 Incidence of Personal Income Tax, 1975-76



Source: Warren (1979:23).

FIGURE 3.5 Incidence of all Australian Federal Taxes, 1975-76



Source: Warren (1979:23).

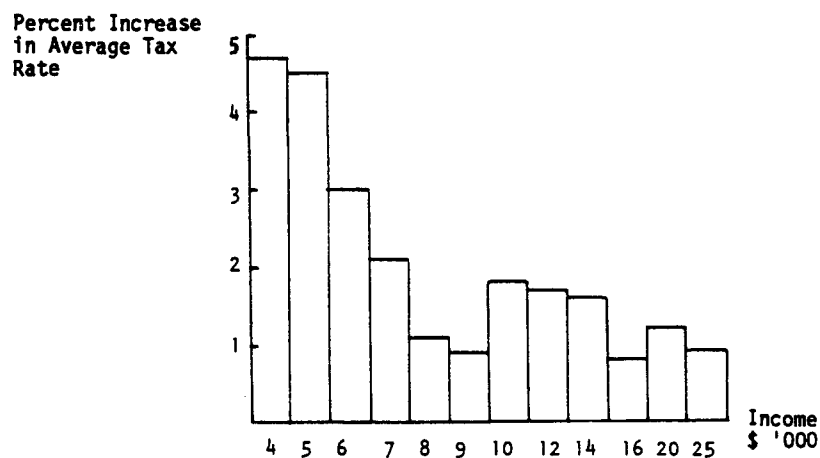
All of these results, of course, are based on 1975-76. The tax system and tax composition have changed markedly since then and the following section traces the likely redistributive impact of these shifts.

CHANGES SINCE 1975-76

Firm evidence about the direction of changes since 1975-76 must await the results of the 1984 Household Expenditure Survey, but there are some indications that the personal income tax system in 1982-83 may be significantly less progressive than in 1975-76. Alterations made to the nominal personal income tax scales since 1975-76 include five years of partial indexation of tax bracket thresholds, and two major pre-election changes to the tax scales, with the first of these reducing the number of tax brackets from seven to three (described in detail in Harding, 1982a, and Australian Economic Review (AER), 1982:15-20).

The total impact of these numerous adjustments to the tax scales has been recently calculated by the Melbourne Institute, who found that the average tax rate for a single person earning \$4000 in 1975-76 soared by 4.7 percent during the next eight years, while that for a \$25,000 income earner rose by only 0.9 percent (Figure 3.6). They concluded that 'the degree of progressivity in the personal income tax system was significantly reduced' between 1975-76 and 1982-83, and that 'the net result of the changes to the

FIGURE 3.6 Percent Increase in Average Tax Rates for Various Income Levels, 1975-76 to 1982-83



Source: AER, (1982:16).

income tax structure . . . has been to shift the incidence of the personal income tax system substantially away from higher income groups' (AER, 1982:16 and 17). These findings mirrored those of an earlier study conducted before the 1982-83 budget, which found that the changes to the income tax scales since 1975-76 had 'produced a pronounced shift in the tax burden, first, from higher to lower income earners, and second, from single taxpayers to two income families and taxpayers with dependent children' (Harding, 1982a:14)⁹.

The changes outlined above, however, only took account of movements in nominal tax incidence, i.e. they only showed changes in formal tax liability. There is considerable evidence that actual tax incidence has become much more unequal than the analysis of nominal incidence suggests. Tax evasion is believed to have increased steadily during the past decade, and, according to the latest report by the Commissioner of Taxation, is still growing (1981a:15). Estimates of the size of the 'underground' or 'black' economy in which tax evasion flourishes are necessarily uncertain, but there are suggestions that it now accounts for some 10 percent of the nation's economy (Lawry et al, 1982:3).

If tax evasion is relatively evenly spread across income groups, its growth since 1975-76 will not have increased the degree of vertical inequity in the income tax system. However, to the extent that it is concentrated amongst the self employed it will have introduced substantial horizontal inequities between PAYE and non-PAYE taxpayers.

Tax avoidance, on the other hand, is believed to have begun its rapid growth in 1974 (J. Howard 1981a:134) following favourable High Court decisions, and failure by the government to act promptly and effectively against tax avoidance schemes (Hickie, 1983). In 1979-80 the amount of tax outstanding as a result of taxpayers participating in tax avoidance schemes was \$711 million - more than four times the amount recorded only two years

9. It is difficult to gauge the redistributive impact of changes made to tax rebates since 1975-76. The distribution and incidence of rebates in 1980-81 is shown in Appendix 2: Tables 4 and 5 and Figure 1. Analysis of the incidence of the dependent spouse, sole parent and selected other rebates shows that they were apparently less regressive in 1980-81 than in 1975-76 (see Appendix 2:Table 6). The redistributive impact of the subsequent decline in the real value of family allowances is more difficult to evaluate. More information is also needed on the distribution by income of the dividend, health insurance and housing interest rebates.

earlier (Howard 1981c:2587). Similarly, the number of identified participants in tax avoidance schemes in 1979-80 was 20 times higher than in the last year of the Labor Government (Willis, 1981:775).

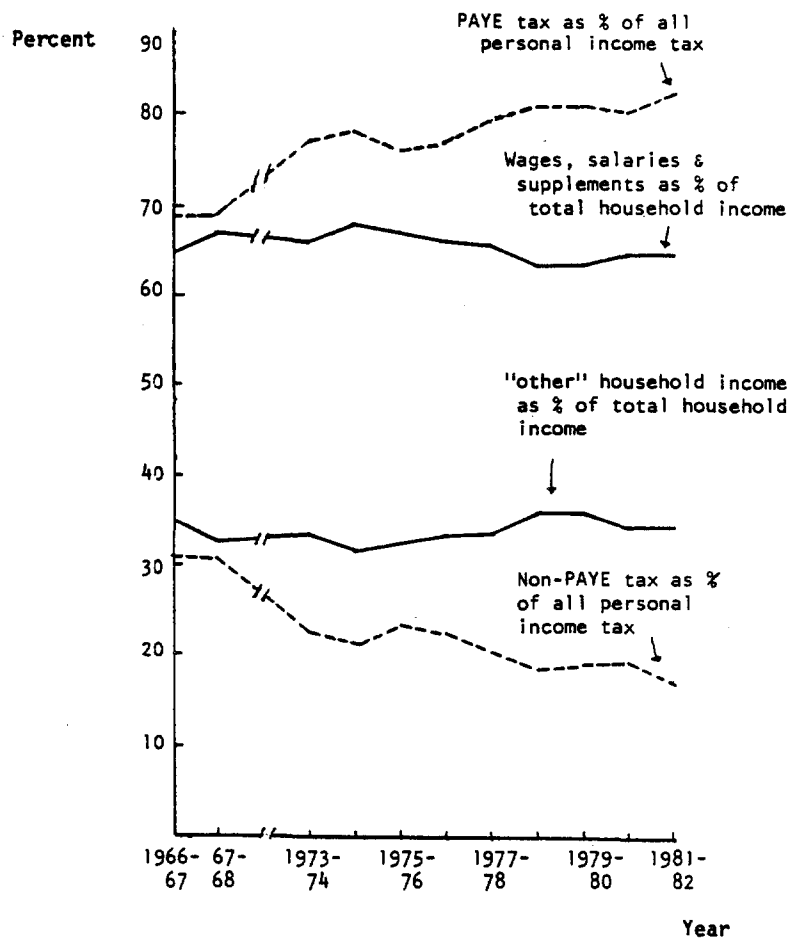
Tax avoidance through provision of employee fringe benefits is also believed to have grown substantially since 1975-76, due apparently to the movement of many employees and executives into the two higher marginal tax brackets (Coombes, 1982), and the desire by companies to evade the restrictions on wage increases imposed during the six years of wage indexation. Coombes has noted the 'big swing to non-cash executive benefits' (1982:18) and the growth in both the incidence and value of fringe benefits. Rath has similarly observed the spreading in the past few years of new types of fringe benefits, such as entertainment allowances for certain employee's wives, and predicts continued strong growth in the 1980s (1983:82-83).

One method of identifying the horizontal inequities produced between PAYE and non-PAYE taxpayers as a result of tax avoidance and evasion by the latter has been identified by Mathews. He compares the share of personal income taxes paid by non-PAYE taxpayers with their share of household income as shown in the national accounts. As Figure 3.7 shows, in 1975-76 non-PAYE taxpayers paid 23.9 percent of all personal income taxes and received 33 percent of all household income; by 1981-82 they had increased their share of household income to 35 percent and yet their share of personal income taxes had declined to 17 percent. In other words, the non-PAYE sector received proportionately more income yet paid proportionately less tax. While it is unlikely that these shifts are solely due to tax avoidance and evasion, it is worth noting that if non-PAYE tax collections had increased at the same rate as PAYE tax since 1975-76, an additional \$1800 million would have been paid in tax by non-PAYE taxpayers in 1982-83.

In the case of the vertical inequities produced by tax avoidance, the Melbourne Institute has argued that the reductions in tax produced by the mushrooming of tax avoidance since 1975-76 are 'likely to have been concentrated at the upper end of the income scale' (AER, 1982:20). This is echoed by Mathews, who asserts that tax avoidance 'heavily favours upper income groups who have the greatest opportunity to participate in (and who gain the greatest benefit from) tax avoidance schemes' (1980:106).

In total, the changes to the nominal tax system and the boom in avoidance, evasion and fringe benefits occurring during the past seven years seem likely to have further reduced the fairly moderate degree of income tax progressivity evident in 1975-76. In fact, Gray and Derody argue that 'there can be no doubt that ... the one progressive tax in the taxation system was decidedly less progressive in 1982-83 than in 1975-76'

FIGURE 3.7: Comparison of Taxation and Household Income Trends for PAYE and Non-PAYE Taxpayers - 1966-67 to 1981-82



Sources: Methodology, and figures for 1966-67 and 1967-68, derived from Mathews (1980:122); Household income shares derived from figures in AER, (1983:47), Taxation shares derived from Budget papers, various years.

(1983:15). It is difficult to be certain about the impact on households of the changes to the income tax scales facing individuals, and firm conclusions will only be possible after the next household expenditure survey has been conducted. However, it appears probable that the income tax system is no longer progressive at all for certain categories of taxpayers, and is only mildly progressive for taxpayers as a whole. This possibility raises disturbing questions about the current redistributive impact of the tax system, since personal income tax was the only progressive tax in 1975-76¹⁰.

Shifts in the composition of taxes since 1975-76 do not seem likely to have enhanced the mild degree of progressivity evident in 1975-76¹¹. Company tax has declined from 15 to 12 percent of federal tax revenue since 1975-76 (Table 3.5), while indirect taxes have increased their share. Warren's analysis showed that petrol excise was a particularly regressive tax, so its rapid growth from 1.6 to 8.5 percent of total receipts in the seven years to 1982-83 could be expected to have contributed to regressivity. The contribution of sales taxes remained constant during the seven years. Customs duties, which Table 3.4 showed to be similarly regressive, declined marginally as a proportion of total federal receipts. It is difficult to

10. Warren has since disaggregated the 1975-76 data to measure the progressivity of taxes for four different categories of taxpayers - employees, the self employed, retired and non-retired pensioners - and for a range of different family sizes and compositions. He has found that 'in many cases taxation appears to worsen the income distribution or cause minimal change . . . it appears that the tax system is only significantly progressive for single adults and pensioner couples' (1982:46). Unfortunately, these results are for all Australian taxes (not just federal taxes), and it is impossible to separately calculate the position for only federal taxes from his tables. Although the degree of correlation between the impact of all taxes and federal taxes is uncertain, the results appear to suggest that federal taxes may not be progressive for some categories of taxpayers.

11. One significant change during this period was the final abolition of estate and gift duties from 30 June 1979. Previous research by Kakwani has shown that these duties were the most progressive tax (although their redistributive effect was small because collections were small) (1976:76). While their abolition would have contributed to a decline in progressivity, they were excluded from Warren's 1979 study, and one cannot therefore argue that their demise has reduced the moderate degree of progressivity evident in Warren's model.

TABLE 3.5: Commonwealth Government Taxation Revenue
(\$ million)

YEAR	PERSONAL INCOME		COMPANY	CUSTOMS DUTIES	SALES TAX	EXCISE DUTIES		OTHER TAXES ^a	TOTAL
	PAYE	OTHER				CRUDE OIL & LPG	OTHER		
1970-71	2432	746	1395	466	633	-	1053	496	7221
1975-76	7020	2200	2523	1044	1408	264	2068	316	16843
1982-83	18840	4126	4768	2102	3490	3486	3320	701	40834
Percent Total Revenue									
1970-71	32.1	10.3	19.3	6.5	8.8	-	14.6	2.2	100 ^b
1975-76	41.7	13.1	14.6	6.2	8.4	1.6	12.3	1.9	100 ^b
1982-83	46.1	10.1	11.7	5.1	8.5	8.5	8.1	1.7	100 ^b
Percent Increase from 1975-76-1982-83									
	168	88	89	101	148	1220	41	122	142

(a) Payroll tax, stamp duty, estate and gift duty, departure tax, bank accounts debit tax etc.

(b) Totals may not equal 100 percent due to rounding

Source: Budget Paper No 1, various years.

be certain about the combined effect of these various shifts in the tax mix, although the Melbourne Institute argues that the 'changing composition of expenditure taxes and the slight increase in their share of total budget receipts does suggest some increase in regressivity of the overall tax system since 1975-76' (AER, 1982:19).

What is clear, however, is that the impact of all federal taxes is most unlikely to be more progressive today than it was eight years ago. Although there is no absolutely conclusive data, the magnitude of the shift in nominal income tax incidence towards lower income groups and the strong growth of tax avoidance and evasion indicate that 'the pattern of tax incidence in 1982-83 is more regressive over much of the income range than it was in 1975-76' (AER, 1982:20). As federal taxes were only very mildly progressive in 1975-76, this raises the distinct possibility that federal tax system is no longer progressive at all. In fact, the impact of federal taxes may now be regressive in that they result in a post-tax distribution of income which is more unequal than the pre-tax distribution of income. As Mathews states, 'it is plausible to argue that the taxation system has become a major instrument for redistributing incomes and wealth in favour of the rich' (1980:10)

It appears, therefore, that if the Australian welfare state functions to redistribute resources to the poor, that redistribution must be achieved through the expenditure side of the budget - the area to which we now turn.

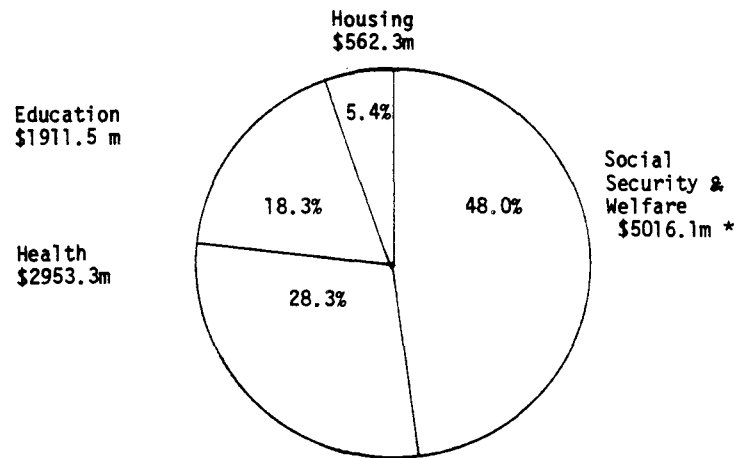
4. DISTRIBUTION AND INCIDENCE OF FEDERAL SOCIAL SECURITY, EDUCATION, HEALTH AND HOUSING OUTLAYS, 1975-76

After the amount of tax paid by each income group has been calculated, the next step in an incidence analysis is to determine the value of the benefits provided to each group through government spending. The major source of information used in this chapter to allocate the benefits of federal social outlays was unpublished data from the 1975-76 Household Expenditure Survey (HES).

In general, two approaches were used to allocate benefits. Where receipt of particular expenditures such as age pensions was separately identified by the HES, their value was simply totalled for each income group, after grossing up for undeclared income. Where expenditures were not explicitly identified, they were allocated in accord with indicative data (principally from the HES), such as usage of health and educational facilities. The following sections describe in detail the approaches and assumptions used to allocate outlays on social security and welfare, education, health and housing.¹

Figure 4.1 shows how this social spending was divided between these four categories in 1975-76. Social security and welfare expenditure was the clear leader, absorbing almost half of all federal social outlays. Health outlays ranked second at 28 percent, followed by education at 18 percent and housing at just over 5 percent. This section discusses each of these four categories in turn, first briefly describing for each the type of expenditure, and then its estimated distribution and incidence. The final part analyses the likely redistributive impact of changes since 1975-76.

¹ Sections A to D in Appendix 1 explain each of the 100-odd budget items within the social security and welfare, education, health and housing categories, and describe how expenditure on each was distributed between the different income groups. Section E presents the actual statistical calculations; each budget line item is separately numbered for ready identification.

FIGURE 4.1: Composition of Federal Social Outlays, 1975-76

* Adjusted for apparent errors in budget estimates (see Appendix 2:B)

Source: Treasurer (1976a:142).

Social Security and Welfare

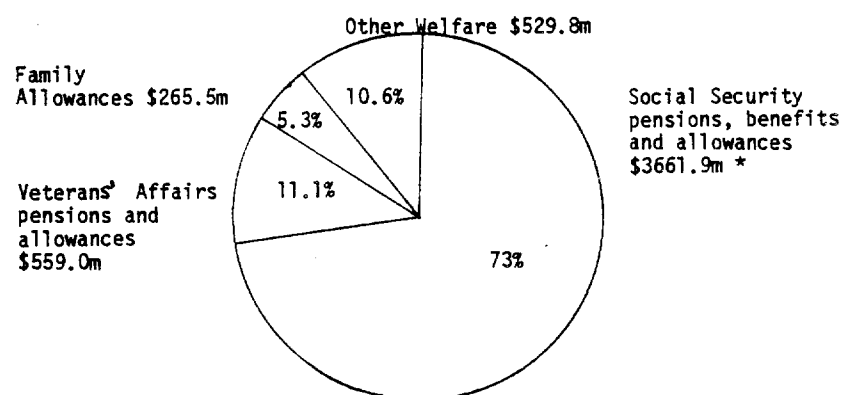
Federal spending on social security and welfare increased dramatically in the early 1970s, with nominal outlays tripling in the five years to 1975-76. By the final year of the Whitlam government, social security and welfare outlays were the single largest component of the budget, accounting for 22.9 percent of all federal outlays (Treasurer, 1976a:132).

This welfare spending took two main forms. First, a wide range of cash transfers, such as pensions, benefits and family allowances (then termed child endowment), were paid directly to individuals. A significant proportion of the population benefited from these transfers, with pensions and benefits paid by the Department of Social Security alone then reaching 1.8 million recipients (D.S.S., 1982:93). Second, outlays were used to provide a range of welfare services, either directly, as in the case of the Commonwealth Rehabilitation Service, or indirectly, through an extensive range of subsidies to state and local governments, voluntary non-profit organisations or religious bodies (Stanton, 1982:3).

Figure 4.2 provides a breakdown of federal social security and welfare outlays for 1975-76. They were dominated by expenditure on pensions, benefits and allowances administered by the Department of Social Security, which absorbed a massive 73 percent of the total. Pensions and benefits for eligible veterans administered by the Department of Veterans' Affairs

gained an 11.1 percent slice of federal outlays, while family allowances took a further 5.3 percent, and spending on welfare services and general administration the remainder. (Excellent summaries of the existing and previous provisions of the social security system are provided in Bancroft et al (1983), Department of the Parliamentary Library (1982) and Department of Social Security Annual Reports.)

FIGURE 4.2: Composition of Federal Social Security and Welfare Outlays, 1975-76



* Distribution of these cash transfers shown in following figure.

Source: Treasurer (1976a:47-48).

For the 90 percent of all federal social welfare expenditure which took the form of cash transfers paid to individuals, the 1975-76 Household Expenditure Survey (HES) recorded, for each of these, how much each of the 12 household income groups received (see Appendix 1: A and E30-42). It revealed, for example, that 5.9 percent of total expenditure on age pensions was received by all those households in the \$7280-8839 annual income bracket (Ibid:E30). The distribution and incidence of welfare cash transfers can thus be calculated directly from the HES data, and the results are shown in Table 4.1.

Taking the distribution of social security cash transfers first,¹ the table demonstrates that the three lowest income groups (which contained 22

¹ As noted earlier in Section 2, the distribution of an item shows how much of total spending each income group received. The incidence of an item shows the value of spending received as a percent of each group's income, and is the measure which shows whether the expenditure made income distribution more equal.

TABLE 4.1: Distribution and Incidence of Federal Social Security and Welfare Outlays, -1975-76.

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
Social Security Pensions, Benefits and Allowances - \$m	261.5	1192.5	625.0	267.8	284.8	220.0	201.6	94.4	121.4	98.2	106.3	188.3	\$3661.9m
- % of total	7.1%	32.6%	17.1%	7.3%	7.8%	6.0%	5.5%	2.6%	3.3%	2.7%	2.9%	5.1%	100%
- % of income	74.1%	47.2%	30.3%	10.4%	7.3%	5.1%	4.5%	2.0%	1.8%	1.9%	1.7%	1.5%	6.4%
Veterans Pensions - \$m	7.3	141.2	120.7	52.1	76.6	38.8	16.4	16.6	33.8	13.9	12.6	29.0	\$559.0m
- % of total	1.3%	25.3%	21.6%	9.3%	13.7%	7.0%	2.9%	3.0%	6.0%	2.5%	2.3%	5.2%	100%
- % of income	2.1%	5.6%	5.9%	2.0%	2.0%	0.9%	0.4%	0.4%	0.5%	0.3%	0.2%	0.2%	1.0%
Family Allowances - \$m	3.9	8.0	15.5	20.4	29.7	32.6	27.1	25.0	30.5	20.2	23.8	28.9	\$265.5m
- % of total	1.5%	3.0%	5.8%	7.7%	11.2%	12.3%	10.2%	9.4%	11.5%	7.6%	9.0%	10.9%	100%
- % of income	1.1%	0.3%	0.8%	0.8%	0.8%	0.8%	0.6%	0.5%	0.5%	0.4%	0.4%	0.2%	0.5%
Other Welfare -\$m	28.0	128.3	103.8	39.3	46.7	33.7	33.2	22.1	20.7	21.4	18.5	34.1	\$529.8m
- % of total	5.3%	24.2%	19.6%	7.4%	8.8%	6.4%	6.3%	4.2%	3.9%	4.0%	3.5%	6.4%	100%
- % of income	7.9%	5.1%	5.0%	1.5%	1.2%	0.8%	0.7%	0.5%	0.3%	0.4%	0.3%	0.2%	0.9%
TOTAL SOCIAL SECURITY -\$m	300.7	1470.0	865.0	379.7	437.8	325.0	278.2	158.1	206.4	153.8	161.2	280.2	\$5016.1m
- % of total	6.0%	29.3%	17.2%	7.6%	8.7%	6.5%	5.6%	3.2%	4.1%	3.1%	3.2%	5.6%	100%
- % of income	85.2%	58.2%	41.9%	14.8%	11.2%	7.6%	6.2%	3.4%	3.1%	3.0%	2.5%	2.2%	8.8%

Source: Derived from Appendix 1:E37, 41, 42, 57 and 58.

percent of all households) acquired \$2079 million, or about 57 percent of total spending on social security cash transfers in 1975-76. The top six income brackets, which contained half of all households, gained only 22 percent of spending. Even this fairly low rate of leakage of assistance to upper income groups might be considered surprising, given the means-tested nature and anti-poverty objective of these cash transfers. However, there are at least four explanations for the spillover of benefits to the better-off.

First, some categories of cash transfer recipients received non-means-tested benefits, including over 70 year old age pensioners and permanently blind invalid pensioners, and some of these may have lived in upper income households. Second, some cash transfers were never subject to a means test, such as handicapped child's allowance, maternity allowance and double orphan's pension. Third, while most households participating in the survey were allocated to an income group on the basis of their income during the last pay period, this was usually not possible for the self employed and those with substantial income from investment (ABS, 1977:14). In such cases income during the preceding financial year was recorded; it is thus possible that some self-employed households, while eligible for pensions or benefits on the basis of their 1975-76 income, were actually classified into a higher income bracket on the basis of their 1974-75 income.

Finally, and probably most importantly, cash transfers are only means-tested against the means of the recipient (and spouse), not the household. Many pensioners or beneficiaries might quite legitimately live in higher income households - e.g. an age pensioner might live with his grown-up children, or a supporting mother might share accommodation with two other unrelated individuals who are both earning reasonable incomes.

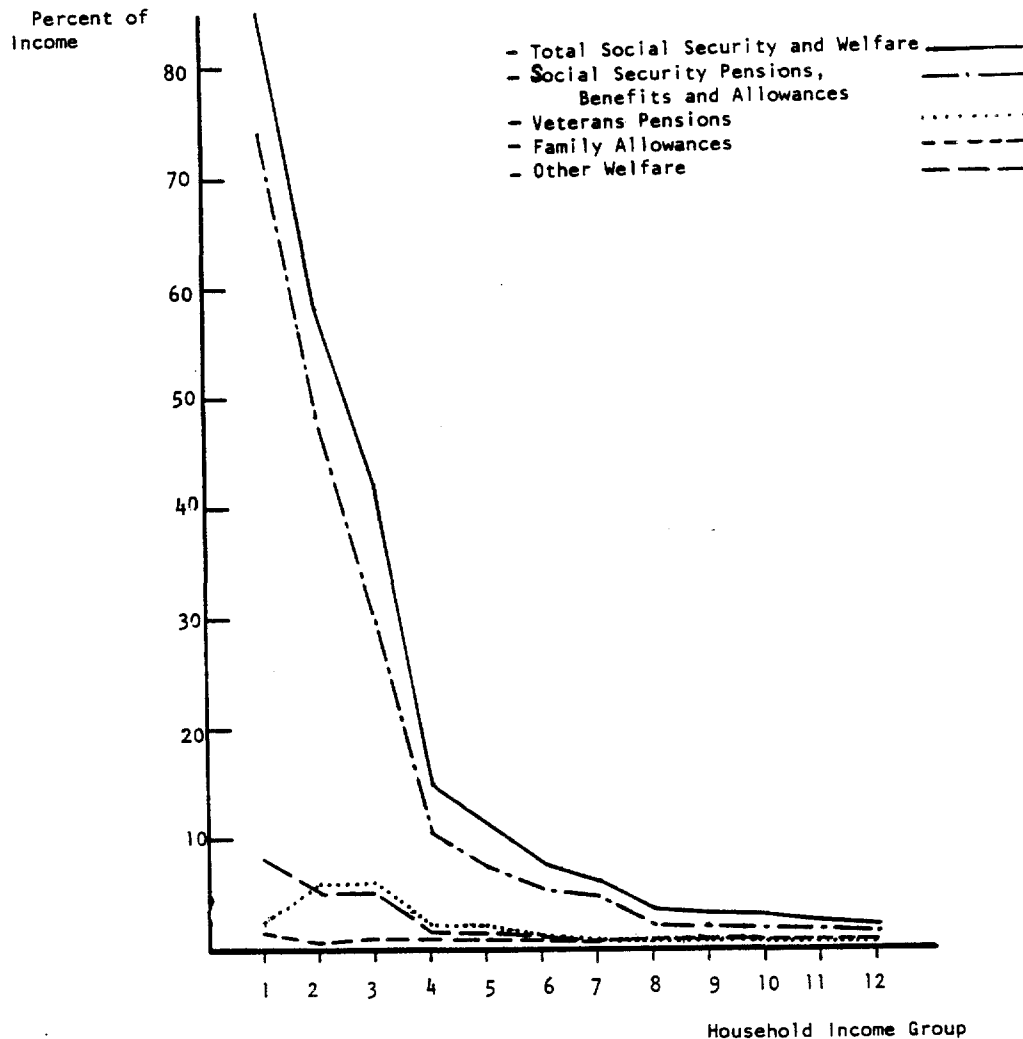
Notwithstanding the substantial flow of assistance to higher income groups, social security cash transfers were highly progressive in 1975-76. Table 4.1 indicates that spending as a percent of income declined sharply from 74.1 percent for the lowest income group to only 1.5 percent for the richest households in the twelfth income group. These results are demonstrated graphically in Figure 4.3 where the downward sloping curve as one moves from left to right shows that expenditure on social security cash transfers was progressive.

The pattern was, however, very different for veterans' pensions. As Table 4.1 established, the incidence of veterans' pensions was less progressive than for social security cash transfers, although benefits as a percent of income did decline from 5.9 percent for households in the \$4160-5719 bracket to 0.2 percent of income for the richest category of households. This showed that despite the non-means-tested nature of disability pensions, incapacitated war pensioners or their widows still tended to be clustered at the lower end of the income range. (For those requiring more detail, the individual incidence patterns for each social security and veteran's cash transfer payment are presented in Appendix 2: Table 7).

The idea that family allowances are regressive because they are not means-tested was also refuted by Table 4.1. The top 50 percent of households who were in the six brackets with annual incomes above \$10,400 received 58.6 percent of all family allowances. However, this was because higher income households had more children. i.e., the top 50 percent of households had about 59 percent of the children. The concentration of poor aged households meant that the four lowest income categories contained a below average number of children per household, while the top six income groups recorded above average numbers (Appendix 1: E5). Yet, despite this skewed distribution, family allowances were generally progressive, declining from 1.1 percent of income for the first group to 0.2 percent for the twelfth group - although progressivity was limited across much of the income range (Table 4.1).

This effect on distribution of different numbers of children returns us indirectly to a problem raised in Section 2. This was that, due to data deficiencies, this study could only measure progressivity against the total income of households. This procedure took no account of the number of household members and it was pointed out that it would be preferable to measure expenditure against per capita household income, rather than total household income. It is interesting, therefore, to note that Kakwani has reworked the 1975-76 HES data, for welfare cash transfers only, and has shown that their redistributive effect declines sharply when measured against per capita rather than total household income. He argues that 'total household income unadjusted for the household size and composition tends to exaggerate the extent of progressivity of government cash benefits' (1983:32). Although no reasons for the differences are advanced, the findings suggest that pensioners and beneficiaries live in smaller than average households.

FIGURE 4.3: Incidence of Federal Social Security and Welfare Outlays, 1975-76



Source: Table 4.1.

Unfortunately, similar per capita data is not available for the remaining 10 percent of federal welfare outlays, which were channelled through grants to state and local governments and other organisations, rather than through cash transfers to individuals. In fact, there is almost no information at all about the income of the beneficiaries of such expenditure. For this reason, the benefits of these two dozen or so separate programs have been individually and arbitrarily estimated, although in accord with assumptions that appear reasonable (Appendix 1:A). For example, those who gained employment as a result of the Regional Employment Development Scheme and

unemployment relief grants to the states would presumably have remained unemployed in the absence of such expenditure; the \$153 million spent on this area in 1975-76 has therefore been distributed in line with the receipts pattern for unemployment benefits, for which reliable HES data was available.²

The results for these multitudinous programs were aggregated, and are shown in the 'other welfare' category of Table 4.1. The distribution of benefits was strongly pro-poor, with the lower half of all households drawing well over two-thirds of expenditure. Spending was consequently progressive, accounting for 7.9 percent of the income of households with annual incomes below \$2080, and only 0.3 percent for households with annual incomes above \$20800.

Overall, the effect of all federal social security and welfare spending in 1975-76 was highly redistributive. Some \$2636 million was successfully directed towards poor households with annual incomes below \$5720. Just over half of all social security and welfare spending was thus received by the households in these three lower income categories. The 50 percent of households in the six bottom income groups obtained three-quarters of total spending, while the top 50 percent of households gained the residual one-quarter. The sums redistributed to the top half of households were not insignificant however, amounting to about \$1240 million.

Social security and welfare spending was very progressive, particularly across the lower half of the income spectrum. As the bottom line of Table 4.1 indicates, welfare benefits amounted to 85.2 percent of income for the poorest income group. This plummeted to 41.9 percent for the third group and only 7.6 percent for the sixth. Spending was less spectacularly progressive across the rest of the income range, but benefits as a percent of income still dropped steadily and consistently, to settle at only 2.2 percent for the most affluent households, with annual incomes above \$20800. The extent of this progressivity was well captured in Figure 4.3, where the line representing the incidence of total welfare spending dropped sharply as one moved from the left to the right.

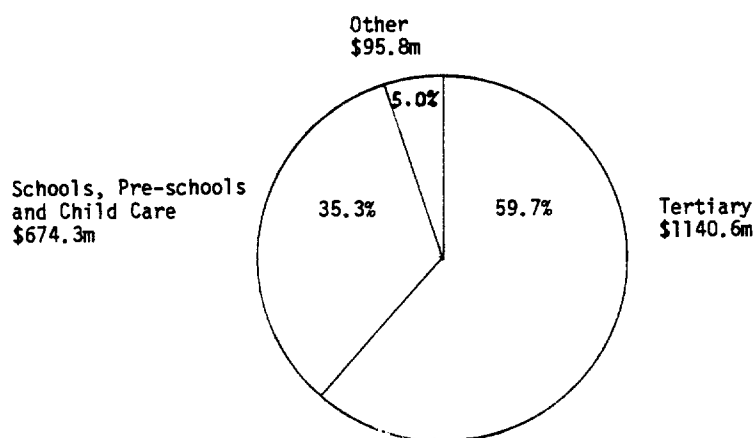
² For example, the households in the third income group (with annual incomes between \$4160-5719) received 25.7 percent of all unemployment benefits in 1975-76; they were therefore allocated 25.7 percent of expenditure on RED and unemployment relief.

Education

Education is one of Australia's largest 'industries', employing some four percent of the workforce, and having a significant impact on the economy. Formal education is divided into four sectors - schools (including pre-schools), technical and further education, colleges of advanced education and universities (Hancock, 1983:182). This vast enterprise has traditionally been the province of the states, but the federal government has increasingly encroached upon their territory.

The federal government's share of public education funding jumped from 22.4 percent in 1972-73 to 42.5 percent in 1975-76 (Davey, 1978:45) and accounted for 8.7 percent of all Federal budget outlays in that year. As Figure 4.4 indicates, expenditure on the tertiary sector dwarfed all other federal education spending, accounting for almost 60 percent of outlays. Expenditure on schools, pre-schools and child care accounted for another 35 percent, with special assistance for disadvantaged groups and general administrative expenditure taking the remaining 5 percent.

FIGURE 4.4: Composition of Federal Education Outlays, 1975-76



Source: Treasurer (1976a:32-33).

The 1975-76 HES recorded the number of students in every household, and classified them according to whether they were tertiary students, or primary or secondary students at either government or independent schools (Appendix 1:E6-18). This information was the main source of data about the distribution of the benefits of federal education spending. Spending was generally split equally among students so that, for example, as the top

household income group contained 22 percent of all tertiary students it was allocated 22 percent of grants paid to the states for tertiary education. Information about distribution was also derived from a wide range of other sources. The distribution of TEAS among the 12 income groups, for example, was estimated from a Department of Education survey which recorded the incomes of the parents of TEAS recipients (Appendix 1:B).

The resulting distribution and incidence patterns for education expenditure are shown in Table 4.2. It reveals that, in the case of tertiary education, the 34 percent of households in the top four income groups received 56 percent of the benefits. The fifty percent of households who were located in the lowest six income groups received only 30 percent of total tertiary spending.

This bias in tertiary spending towards higher income groups appears to be due to an amalgam of causes. Part of the explanation no doubt lies in the heavy concentration of aged in the three lowest income groups, who are presumably less likely to be supporting tertiary students. Other life cycle effects are also likely to be significant, with most of the parents of tertiary students probably being in their peak earning years, and therefore disproportionately represented among upper income households. In addition, the clustering of tertiary students in the top four household income brackets would reflect the unequal access to higher education experienced by different social classes (Craney et al, 1980:280). Thus, studies have shown that a greater proportion of the children of parents of higher income or socio-economic status continue their education past the secondary stage (Tertiary Education Commission (TEC), 1982:61; Anderson et al, 1983).

The weighting of benefits towards higher income groups meant that tertiary education expenditure in 1975-76 was not redistributive towards the poor. Table 4.2 shows that its incidence was basically proportional, for expenditure as a percent of income remained close to two percent for all income groups except the very lowest (where it reached 4.2 percent).

Somewhat suprisingly, expenditure on schools, pre-schools and child care was only slightly more progressive in 1975-76. Once again, upper income households fared particularly well, but the distribution was more equal

TABLE 4.2: Distribution and Incidence of Federal Education Outlays, 1975-76.

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
Tertiary													
- \$m	14.9	52.3	37.0	47.3	81.0	101.5	103.4	67.9	150.2	104.0	148.5	232.5	\$1140.6m
- % of total	1.3%	4.6%	3.2%	4.2%	7.1%	8.9%	9.1%	6.0%	13.2%	9.1%	13.0%	20.4%	100%
- % of income	4.2%	2.1%	1.8%	1.8%	2.1%	2.4%	2.3%	1.4%	2.2%	2.1%	2.3%	1.7%	2.0%
Schools, Pre- Schools and Child Care													
- \$m	10.5	21.5	34.9	52.7	72.5	72.3	62.4	64.3	79.3	51.9	63.8	88.9	\$675.0m
- % of total	1.6%	3.2%	5.2%	7.8%	10.7	10.7%	9.3%	9.5%	11.8%	7.7%	9.5%	13.2%	100%
- % of income	3.0%	0.9%	1.7%	2.1%	1.9%	1.7%	1.4%	1.4%	1.2%	1.0%	1.0%	0.6%	1.2%
Other Education													
- \$m	4.4	10.6	15.6	9.4	10.9	7.8	7.0	5.8	6.5	6.6	5.3	6.1	\$95.9m
- % of total	4.5%	11.1%	16.3%	9.8%	11.4%	8.2%	7.3%	6.0%	6.8%	6.9%	5.5%	6.4%	100%
- % of income	1.3%	0.4%	0.8%	0.4%	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	-	0.2%
TOTAL EDUCATION													
- \$m	29.8	84.4	87.5	109.4	164.4	181.5	172.8	138.0	236.0	162.5	217.5	327.6	\$1911.5m
- % of total	1.6%	4.4%	4.6%	5.7%	8.6%	9.5%	9.0%	7.2%	12.4%	8.5%	11.4%	17.1%	100%
- % of income	8.4%	3.3%	4.2%	4.3%	4.2%	4.2%	3.9%	3.0%	3.5%	3.2%	3.4%	2.4%	3.4%

Source: Derived from Appendix 1: E64, 69, 75 and 76

than for tertiary education. The top four income groups gained 42 percent of total school expenditure, while the half of all households in the bottom six income groups mustered only 39 percent.

A number of factors appeared to underlie this distribution. The average number of children was greater in upper income than in lower income households: for example, the average number of government primary school students per household was fifty percent greater for households in the seventh income group than for households in the third income group (Appendix 1:E9). Life cycle factors probably accounted for a significant part of the skewed distribution, particularly the high number of childless aged households in the three lowest income categories.

Another partial explanation might lie in the distribution of private school funding. While independent schools contained 21 percent of all school students, they received 28 percent of total grants to schools (Ibid: E16,17, 64 and 65). These grants were less progressively distributed than grants to government schools, for private school students were massed into the higher income brackets. Thus, 54 percent of all independent school students were in households with annual incomes above \$13520; this compared with only 41 percent of government school students (Ibid:E15-16).

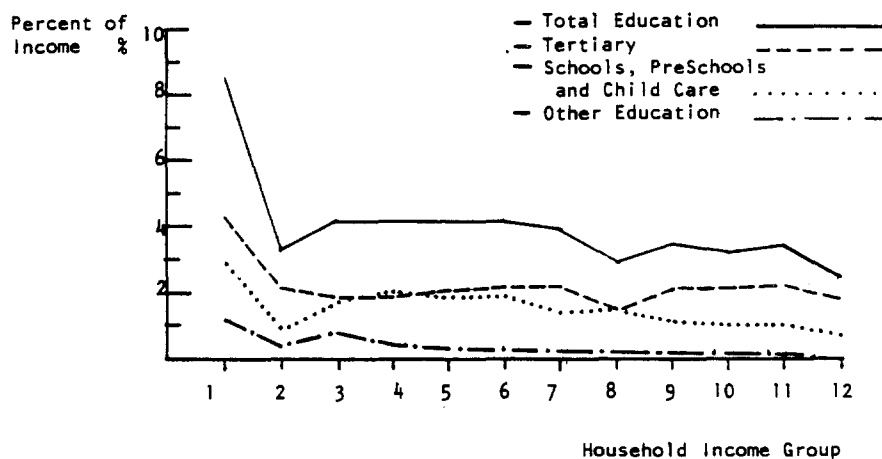
A third cause probably lies in unequal access to education, reflected in differential participation rates after the years of compulsory schooling are finished. For example, the children of parents of lower socio-economic status are believed to have higher leaving rates after the legal school leaving age is reached than children from the upper classes (TEC, 1982:101 and 107).

The redistributive effect of federal spending on schools, pre-schools and childcare is difficult to assess, because expenditure as a percent of income fluctuated (Table 4.2). While benefits amounted to 3.0 percent of income for households in the bottom income group, they dropped to only 0.9 percent for the next group and then rose again to 2.1 percent for households in the fourth income group. Thereafter, however, spending was mildly progressive, with expenditure as a percent of income declining consistently to reach 0.6 percent for households in the \$20800 plus category.

Expenditure on other education was more strongly pro-poor than that for schools (Table 4.2). This was partly due to the disadvantaged nature of the recipients, for more than two-fifths of the total was spent on aboriginal education programs. However, the redistributive effect was limited by the low levels of expenditure. As Table 4.2 suggests, spending was progressive, accounting for 1.3 percent of the income of the poorest households and declining to less than 0.1 for the richest.

Finally, the redistributive impact for all federal education outlays was muted. The distribution of expenditure favoured the better-off, with the half of all households in the top six income groups securing two-thirds of all outlays. However, education expenditure as a percent of income remained relatively stable at 3-4 percent across most of the income range (as shown by the almost horizontal line for all education spending in Figure 4.5).

FIGURE 4.5: Incidence of Federal Education Outlays, 1975-76



Source: Table 4.2.

Thus, except for the lowest group for which expenditure reached 8.4 percent of income, and the highest group for which it touched 2.4 percent, education expenditure was relatively proportional. It was, therefore, almost neutral in effect, redistributing only marginally towards poorer

households. It should be remembered, however, that the progressivity of education expenditure was measured against total household income; the greater number of children in higher income households suggests that progressivity might be somewhat greater if measured against per capita household income - a refinement unfortunately beyond the scope of this study.

Health

The health financing system in Australia has undergone repeated changes during the past decade, and is described by Deeble, one of the doyens of health economists, as an extraordinarily 'complex and often confusing process' (1983:205). Total financing for health in Australia originates from five public and private sources - public funding from the federal government and from state and local governments, and private funding from health insurance funds, direct individual contributions, and from various other sources (e.g. worker's compensation).

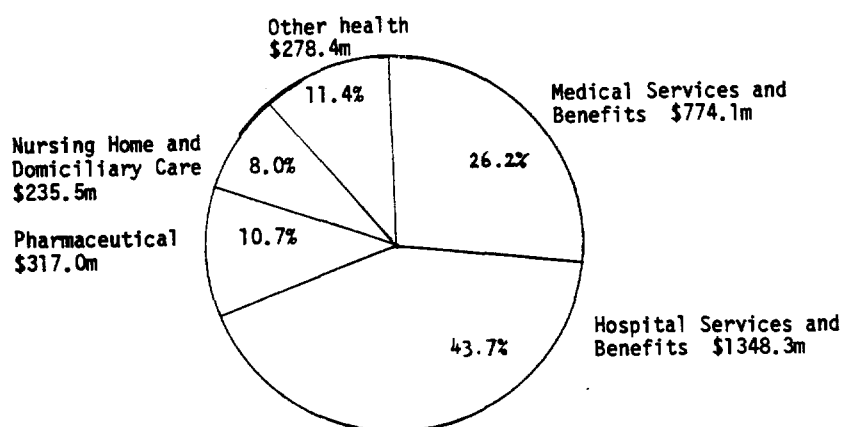
The balance between these different sources shifted substantially in 1975-76 with the first full year of operation of Medibank 'Mark I' and a more interventionist federal stance. In that year, the federal government's share of total current health funding shot up to 50 percent, while the public sector as a whole contributed 72 percent and the private sector 28 percent (Department of Health, 1978:11). Health outlays also grew as a proportion of total federal spending, from 7.2 percent in 1974-75 to 13.5 percent in 1975-76 (Treasurer, 1975a:121; 1976a:132).

Federal health expenditure, as Figure 4.6 demonstrates, was directed to five major areas in 1975-76. Hospital services and benefits overshadowed the field, accounting for 43.7 percent of total federal outlays. The second major area was medical services and benefits, which absorbed 26.2 percent of health spending, followed by pharmaceutical benefits (10.7 percent), nursing home and domiciliary care (8.0 percent) and other health expenditure, including general administration (11.4 percent).

The estimated distribution and incidence of the different components of health expenditure is based on a number of sources. Unpublished HES data reveals the number of nights spent in hospital during the three months preceding the survey by two groups - the general population and veterans.

This data has been used to distribute the benefits of hospital expenditure (Appendix 1:E19-24).

FIGURE 4.6: Composition of Federal Health Outlays, 1975-76



Source: Treasurer (1976a:38-39).

Other unpublished data records the number of visits made by household members during the three months preceding the survey to doctors and specialists, and this data underlies the allocation of spending on medical services. Such a procedure assumes that the usage and cost of other medical services (e.g. pathology tests) is closely correlated with the number of doctor contacts. This may slightly overstate the extent of redistribution, for Opit's study found that doctor contact did provide a remarkably accurate guide to medical service utilisation (1981a:76), but that cost appeared to increase with socio-economic status.

For many smaller health expenditure items such detailed information about the distribution of benefits was not available. In these cases assumptions have been made, and these are fully explained in Appendix 1:(Section) C. For example, spending on the provision of free dental services for primary school students is allocated in accord with HES data on the number of primary school students in each of the 12 income groups.

The distribution of hospital expenditure is summarised in Table 4.3, and was biased towards lower income households. The 22 percent of households in the three lowest income groups received 33 percent of hospital expenditure, while the 50 percent of households in the six lowest income groups received almost 60 percent. Spending on hospitals was also progressive, for spending as a percent of income declined fairly steadily from 19.1 percent for households with annual incomes below \$2080, to 0.8 percent for households with incomes above \$20800. The degree of progressivity, however, was not very marked for the top fifty percent of households.

The distribution of medical expenditure showed a different pattern (Table 4.3). The three lowest income groups, which contained 22 percent of households, received 19.1 percent of medical expenditure, and the top six income groups, which comprised 50 percent of households, gained 53.8 percent of expenditure. The distribution of medical expenditure correlated much more closely with household income shares, and this was reflected in the much lower degree of progressivity relative to hospital expenditure. However, expenditure as a percent of income clearly declined as income increased, although the descent was very gradual for much of the income range, and particularly for the top five income groups.

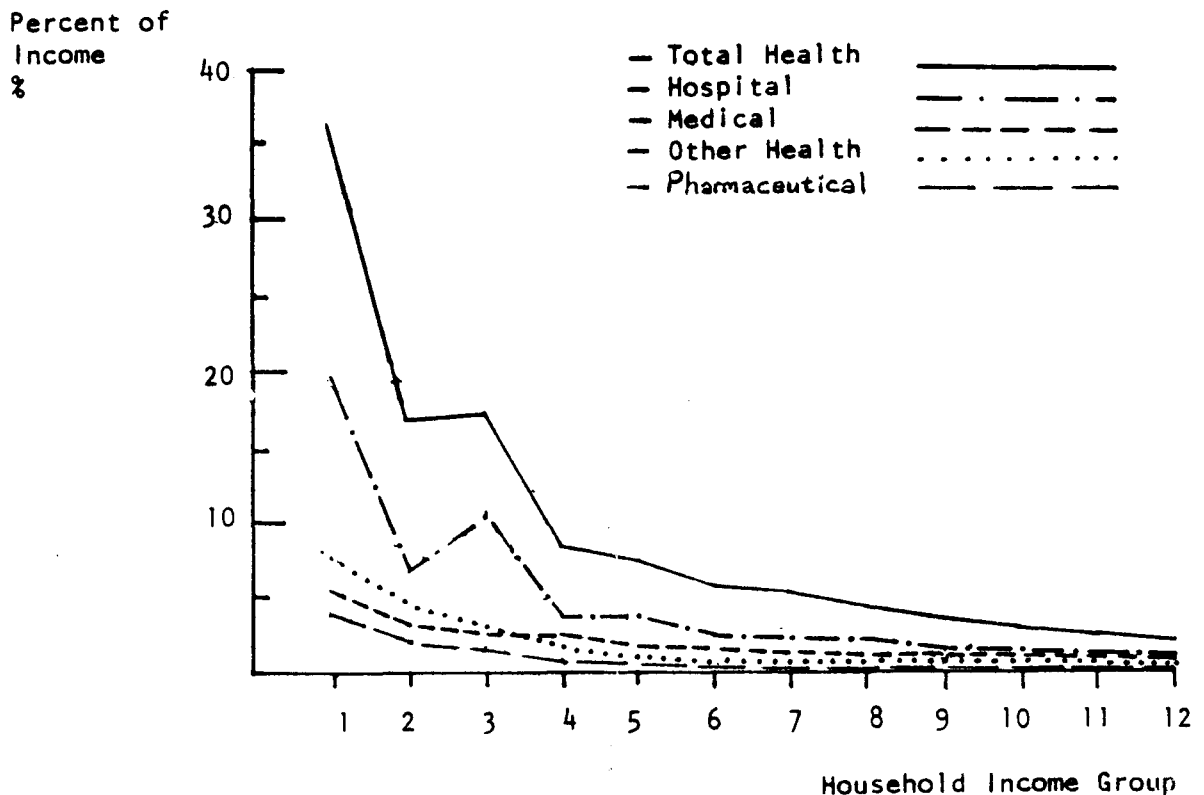
Both pharmaceutical and other health expenditure were distributed more heavily towards lower income groups than medical expenditure, with the bottom 50 percent of households gaining 60 percent of expenditure in both cases. Both were very progressive at lower income ranges, although the degree of progressivity was much smaller for households with annual incomes above \$11960.

The pattern for all health expenditure was definitely pro-poor. The 22 percent of households with incomes below \$5719 collected 30.7 percent of all federal health expenditures, while the 50 percent of households with incomes below \$10,399 drew 56 percent. Health expenditures were strongly progressive across the lower half of the income spectrum, declining from 36.3 percent of income for the bottom income group, to 5.7 percent of income for those households with incomes between \$8840-10399. However the degree of progressivity was much less significant across the top six income groups, although expenditure as a percent of income clearly declined as income increased (Figure 4.7).

TABLE 4.3: Distribution and Incidence of Federal Health Outlays, 1975-76.

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
Medical													
- \$m	18.8	77.7	52.0	59.5	74.0	75.3	73.3	57.1	78.0	51.3	57.5	99.5	\$774.1m
- % of total	2.4%	10.0%	6.7%	7.7%	9.6%	9.7%	9.5%	7.4%	10.1%	6.6%	7.4%	12.8%	100%
- % of income	5.3%	3.1%	2.5%	2.3%	1.9%	1.8%	1.6%	1.2%	1.2%	1.0%	0.9%	0.7%	1.4%
Hospital													
- \$m	67.4	171.6	209.5	91.6	147.7	112.4	101.1	95.0	107.7	62.4	73.7	108.4	\$1348.3m
- % of total	5.0%	12.7%	15.5%	6.8%	11.0%	8.3%	7.5%	7.0%	8.0%	4.6%	5.5%	8.0%	100%
- % of income	19.1%	6.8%	10.2%	3.6%	3.8%	2.6%	2.3%	2.0%	1.6%	1.2%	1.2%	0.8%	2.4%
Pharmaceutical													
- \$m	15.1	63.2	35.2	23.6	27.8	25.3	24.2	16.9	23.9	15.3	17.2	29.6	\$317.0m
- % of total	4.8%	19.9%	11.1%	7.4%	8.8%	8.0%	7.6%	5.3%	7.6%	4.8%	5.4%	9.3%	100%
- % of income	4.3%	2.5%	1.7%	0.9%	0.7%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%	0.2%	0.6%
Other Health													
- \$m	26.8	107.4	61.4	35.4	40.9	33.7	40.3	29.7	35.3	25.0	28.8	49.2	\$513.9m
- % of total	5.2%	20.9%	11.9%	6.9%	8.0%	6.6%	7.8%	5.8%	6.9%	4.9%	5.6%	9.6%	100%
- % of income	7.6%	4.3%	3.0%	1.4%	1.0%	0.8%	0.9%	0.6%	0.5%	0.5%	0.5%	0.4%	0.9%
TOTAL HEALTH													
- \$m	128.1	419.8	358.0	210.2	290.4	246.9	238.9	198.6	244.9	154.0	177.2	286.7	\$2953.3m
- % of total	4.4%	14.2%	12.1%	7.1%	9.8%	8.4%	8.1%	6.7%	8.3%	5.2%	6.0%	9.7%	100%
- % of income	36.3%	16.6%	17.4%	8.2%	7.4%	5.7%	5.3%	4.2%	3.6%	3.0%	2.8%	2.1%	5.2%

Source: Derived from Appendix 1:E81, 85, 89, 97 and 98.

FIGURE: 4.7: Incidence of Federal Health Outlays, 1975-76

Source: Table 4.3.

While health expenditures thus appeared to be significantly progressive in 1975-76, it is possible that the figures hid substantial inequality. There are two possible reasons for this. First, the preceding analysis measured the progressivity of health spending against the incomes of all households, rather than just those with ill members. If lower income households had much higher rates of illness, health expenditures per ill household might have revealed a very different incidence pattern.

The distribution of illness by income in Australia is, however, uncertain. Some writers have found that mortality and morbidity rates are higher among those of lower socio-economic status and income (Taylor, 1979; Powles, 1982). Yet Broom, after reviewing the results of the national ABS 1977-78 Australian Health Survey and other research, argued that there was no clear relationship between income and chronic illness (1983). In fact, the Australian Health Survey revealed a remarkably equal distribution of chronic illness across income classes (Figures 4.8 and 4.9).

FIGURE 4.8: Percent of Persons with a Chronic Illness, By Income and Sex, Australia, 1977-78

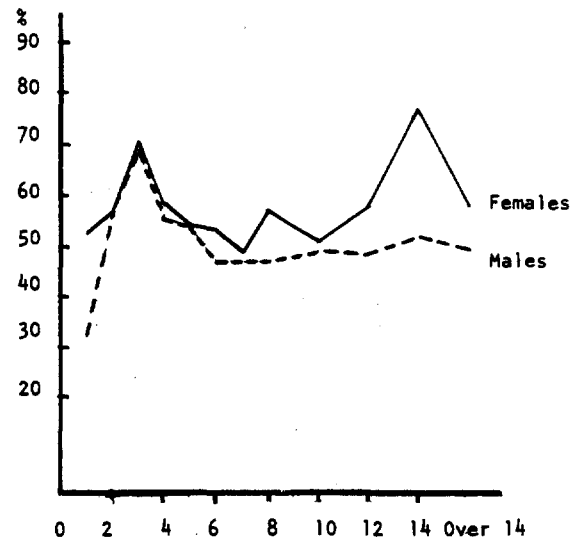
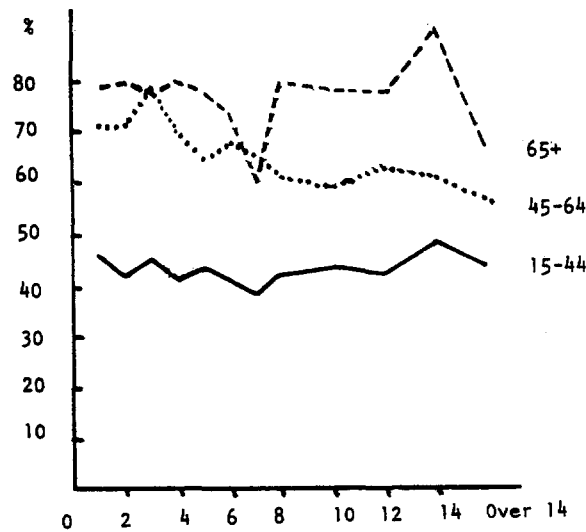


FIGURE 4.9: Percent of Persons with a Chronic Illness, by Income and Age, Australia, 1977-78



Source: Broom (1983: 33-34).

If illness was equally distributed across income groups, adjustment of the earlier health incidence figures to reflect health expenditures per ill household (rather than just per household) would not change the results. If, however, illness distribution was skewed towards lower income groups, such adjustment would reduce the degree of progressivity of federal health expenditures (and could even make them regressive, depending upon the degree of bias in illness towards the poor).

The second possible source of concealed inequity lies in different health service utilisation rates. Thus, even though health expenditure was progressive in 1975-76, this does not necessarily mean that all income groups enjoyed equal access to health services. Actual utilisation rates were used to calculate the incidence of health expenditure and they resulted in a progressive pattern; yet, for example, if lower income groups went to the doctor less frequently than their upper income counterparts, this pattern of progressivity would actually disguise substantial inequalities in access to medical services.³

If it is assumed (on the basis of Figures 4.8 and 4.9) that the distribution of illness by income in Australia was relatively equal in 1975-76, one would have expected similar hospital and medical service utilisation rates for each income group - if access to services was equal. Actual utilisation rates are shown in Table 4.4.

3 Some overseas studies have found lower health service utilisation rates among the poor. For example, Le Grand's study of the British National Health Service found that a higher proportion of the people in lower socio-economic groups who suffered illness did not go to the doctor, in comparison to their counterparts in the higher groups (1982:26-27). However, other studies have reported more mixed or opposite results (Opit, 1981a:77-78; Cullis et al, 1979:241; Richardson, 1982:8; Powles, 1981; Opit and Gadiel, 1982:93).

TABLE 4.4: Utilisation Rates of Medical and Hospital Services, 1975-76.

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
No. of contacts with doctors, specialists etc during preceding 3 months, per hundred households	206	318	354	362	349	376	422	341	372	371	385	446	
No of nights spent in hospital during preceding three months, per hundred households	100	94	214	79	98	71	84	82	61	65	71	70	

Source: Derived from unpublished 1975-76 Household Expenditure Survey data

Although there were fluctuations, the number of contacts with doctors generally increased as income rose. The average number of visits for the top income group, for example, was about 120 percent higher than for the bottom income group.

The same bias is not immediately evident for hospital utilisation rates. However, high usage by the three lowest income groups reflected the very heavy concentration of aged in these categories, who spend about 300 percent more days in hospital a year than other age groups (Opit, 1981a:40). The influence of age cannot be removed from the HES data, but, after standardizing his sample survey results for age, Opit found 'under utilization' of hospital services at the lower end of the social status scale, and 'over utilisation' in suburbs of higher socio-economic status (1981a:40).

Overall, on the assumption of equal distribution of sickness, there is little doubt that access to medical services was unequal in 1975-76, and it is possible that the same applied to hospital services. If the distribution of illness was in fact skewed towards lower income groups, the actual inequalities would have been greater. Therefore, even though federal health expenditures were progressive in 1975-76, they might have been substantially more progressive had equal access to health services been achieved.

Housing

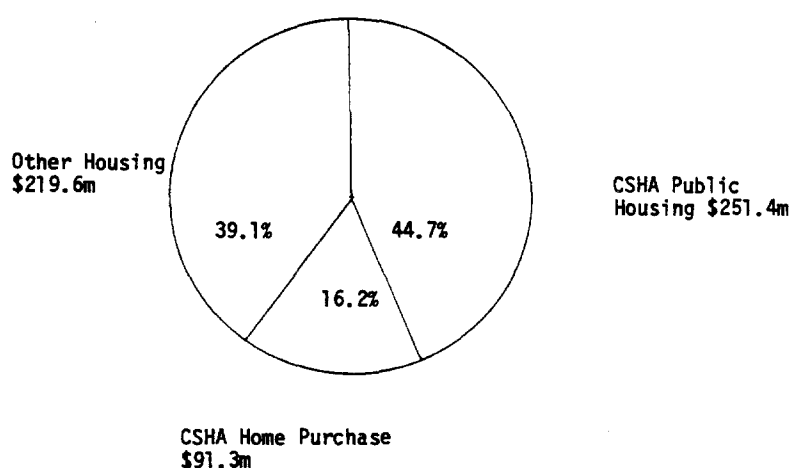
Housing in Australia has long been a politically sensitive issue, and government policy has been characterised by strong emphasis upon and encouragement of home ownership rather than other forms of housing tenure. Following Small, the housing market can be usefully divided into three categories - owner-occupied, private rental and public rental (1979:56). According to the 1975-76 HES, almost 70 percent of households were owner-occupiers, with this group being split fairly evenly between those who already owned their own home and those still in the process of purchase (Neutze, 1981:107). Another 24.5 percent of households rented privately, while the remaining 5.3 percent rented public housing from government housing authorities.

To a greater degree than for any of the other social services, federal government expenditure on housing does not capture the real extent of involvement. Direct housing expenditures are less important than the regulation of housing interest rates, macro-economic policy and taxation concessions (Carter, 1980:78). Nonetheless, federal housing expenditures in 1975-76 reached \$562 million, or 2.6 percent of total federal outlays (Treasurer, 1976a:132); the Commonwealth's contribution amounted to four-fifths of all public funding for housing in 1975-76, with state and local governments chipping in the remaining fifth (Carter, 1980:89).

Since 1945, the Commonwealth State Housing Agreement (CSHA) has dominated federal housing policy, having taken various forms and been regularly renegotiated since then. In 1975-76 advances of \$343 million, repayable over 53 years and with concessional interest rates, were lent to the states for welfare housing purposes. These funds were used for two purposes - provision of public rental housing, and home purchase assistance (Egan and Wall, 1983:233).

As Figure 4.10 indicates, advances for public housing absorbed 45 percent of all federal housing outlays in 1975-76. The other arm of the CSHA was designed to help lower income groups vault the home ownership hurdle, and accounted for another 16 percent of federal housing outlays.

FIGURE 4.10: Composition of Federal Housing Outlays, 1975-76



Source: Treasurer (1976a:60-61).

The remaining 40 percent of 1975-76 federal housing expenditure was directed into a wide range of programs, including rent rebates, housing for disadvantaged groups and the Defence Services Homes Scheme.

Information about the distribution of housing outlays came from a diverse range of sources. The distribution of CSHA public housing and home purchase funds was estimated from Department of Housing and Construction statistics on the incomes of new public housing tenants and incomes of successful loan applicants respectively. For the remaining 40 percent of spending little reliable information was available. Although precise details about receipt of Home Savings Grants for each of the 12 income groups was available directly from the HES (Appendix 1:E105), for most other line items the likely distribution could only be estimated. It was known, for example, that most of the beneficiaries of rental assistance grants for needy public housing tenants were pensioners; spending was thus allocated in the same way as spending on social security pensions (Ibid:D).

The distribution and incidence of federal housing outlays in 1975-76 is presented in Table 4.5. It shows that the benefits of public housing expenditure went principally to poorer households. The 22 percent of households with annual incomes under \$5720 claimed 42.3 percent of the \$251 million spent on public housing, while the bottom 50 percent of households with annual incomes under \$10,400 procured 76.2 percent.⁴ The slight leakage of assistance to the upper 50 percent of households principally reflected the means test, which applied only to the main breadwinner's income and thereby allowed spillage of benefits to higher two-income households (Carter, 1980:110).

Expenditure on public housing was particularly progressive at the lower end of the income spectrum, accounting for 9.2 percent of the income of households in the lowest income category and slumping to only 0.6 percent

⁴ This distribution is based on new public housing entrants, not on the incomes of existing tenants. As the Henderson Poverty Inquiry showed, many public housing tenants were not poor (Carter, 1980:106). This was because tenants were only means-tested at the time of entry to public housing, and the financial position of many subsequently improved. HES data demonstrated that one third of those renting public housing in 1975-76 were in the top six income groups, which contained 50 percent of all households (Appendix 1:E25).

TABLE 4.5: Distribution and Incidence of Federal Housing Outlays, 1975-76.

HOUSEHOLD INCOME GROUP \$	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
CSHA Public Housing - \$m	32.5	32.5	41.5	35.2	25.5	24.3	14.5	14.5	10.5	8.1	7.1	5.5	\$251.4m
- % of total	12.9%	12.9%	16.5%	14.0%	10.2%	9.7%	5.8%	5.8%	4.2%	3.2%	2.8%	2.2%	100%
- % of income	9.2%	1.3%	2.0%	1.4%	0.7%	0.6%	0.3%	0.3%	0.2%	0.2%	0.1%	-	0.4%
CSHA Home Purchase - \$m	1.1	2.2	2.2	11.3	16.1	16.4	16.1	10.7	5.5	4.3	3.6	1.9	\$91.3m
- % of total	1.2%	2.4%	2.4%	12.3%	17.6%	18.0%	17.6%	11.7%	6.0%	4.7%	4.0%	2.1%	100%
- % of income	0.3%	0.1%	0.1%	0.4%	0.4%	0.4%	0.4%	0.2%	0.1%	0.1%	0.1%	-	0.2%
Other Housing - \$m	6.6	15.3	20.2	15.4	21.5	19.9	19.4	20.5	21.4	15.3	19.5	24.8	\$219.6m
- % of total	3.0%	7.0%	9.2%	7.0%	9.8%	9.1%	8.8%	9.3%	9.7%	6.9%	8.9%	11.3%	100%
- % of income	1.9%	0.6%	1.0%	0.6%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%	0.4%
TOTAL HOUSING - \$m	40.2	50.0	63.9	61.8	63.1	60.0	49.9	45.7	37.4	27.6	30.2	32.2	\$562.3m
- % of total	7.2%	8.9%	11.4%	11.0%	11.2%	10.8%	8.9%	8.1%	6.6%	4.9%	5.4%	5.7%	100%
- % of income	11.4%	2.0%	3.1%	2.4%	1.6%	1.4%	1.1%	1.0%	0.6%	0.5%	0.5%	0.2%	1.0%

Source: Derived from Appendix 1:E99, 100, 112 and 113.

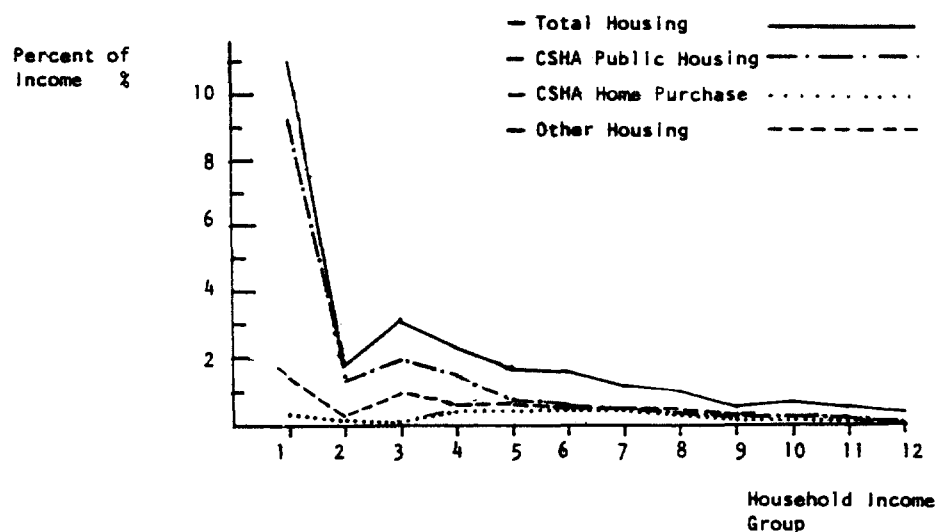
for those in the \$8840-10,399 group (Table 4.5). Incidence continued to be progressive over the top half of the income range, declining to less than 0.1 percent for the richest income group.

Middle income groups monopolised most of the benefits of CSHA home purchase assistance, with three quarters of all spending reaching the five groups with annual incomes between \$5720-\$13520. This lack of assistance to the lowest income groups reflected the inability of the very poor to muster the necessary deposit and repayments, while leakage to higher income groups was partly due to the means test; this was based only on the breadwinner's income, and therefore substantially advantaged two income families (Carter, 1980:112).

The concentration of assistance upon middle income groups distorted the pattern of progressivity; spending as a percent of income was 0.3 percent for the lowest household income group, dropped to 0.1 percent for the next two groups, stabilised at 0.4 percent for households with annual incomes between \$5720 and \$11959, and then declined again. Overall, despite the intention to assist lower income households into home ownership, it is difficult to describe the results as particularly progressive.

Other housing expenditure was markedly progressive, but its redistributive impact was limited by the relatively small outlays. The pattern for all federal spending on housing in 1975-76 is indicated in the bottom lines of Table 4.5. The distribution of total housing expenditure favoured lower to middle income groups in 1975-76. The 22 percent of households in the three bottom income categories received 27.5 percent of all expenditure, while the 24 percent in the top three income categories gained only 16 percent. The middle six groups acquired the remaining 56.5 percent.

Housing expenditure was redistributive towards the poor, with spending as a percent of income declining fairly steadily from 11.4 percent for the very poorest households to only 0.2 percent for the richest households. The degree of progressivity was more substantial, however, across the lower income ranges, and much less obvious for the top four household income groups (Figure 4.11).

FIGURE 4.11: Incidence of Federal Housing Outlays, 1975-76.

Source: Table 4.5.

Changes Since 1975-76

The likely redistributive impact of changes in social outlays since 1975-76 is extremely difficult to trace. An accurate assessment requires knowledge of likely changes in the distribution of the benefits of each item of expenditure (e.g. due to changes in income tests), as well as shifts in the real level of expenditure on each item and in its relative contribution to total social outlays. A definitive answer must therefore await the results of the 1984 Household Expenditure Survey.

In 1975-76 federal expenditure on social security and welfare comprised 48 percent of total social outlays; by 1982-83 this had risen sharply to 64 percent (Treasurer, 1983a:328). As this study showed that such social security and welfare outlays were more redistributive than other social outlays on education, health and housing, their greater relative contribution would suggest that federal social outlays as a whole were more redistributive in 1982-83.

Collins and Drane have estimated the incidence of social security cash payments provided in the 1981-82 budget (1982). However, their data has been extrapolated from the 1975-76 HES, and they have therefore assumed that there has been no change since 1975-76 in either the distribution of each welfare cash transfer between households, the composition of households or the distribution of income (1982:6). Each of these assumptions seems highly questionable, even in broad terms.

The picture is equally complicated in the educational field. For example, while government schools in the states received more federal aid than private schools in 1975-76, by 1982-83 the position had been reversed. The increasing proportion of total school expenditure devoted to non-government schools could have been expected to make outlays on schools less progressive in 1982-83 than in 1975-76.

On the other hand, expenditure on technical education accounted for only 8.9 percent of tertiary outlays in 1975-76, but almost 13 percent in 1982-83. As research by Anderson et al shows that TAFE students tend to come from households of lower income and socio-economic status than university students (1983), this shift in the relative composition of tertiary outlays contributed to greater progressivity.

The enormous and continuing changes in health financing since 1975-76 make assessment of changes in the redistributive impact of health outlays exceptionally difficult. However, as this study demonstrated that access to medical services still appeared to be unequal in 1975-76 when free medical care was provided under Medibank, the return to a private health insurance system for all but the very poorest could presumably have been expected to exacerbate such inequalities. Surveys by the Australian Bureau of Statistics repeatedly demonstrated that a very high proportion of the poor did not possess private health insurance, and that the proportion of insured people increased steadily with income (1980:12); it is therefore possible that many households faced greater financial barriers to access to health services in 1982-83 than in 1975-76, and that health expenditure was consequently less progressive. Indeed, Tarlo suggests that the health financing changes resulted in 'a massive redistribution of private income and the social wage from the poor to the rich' (1982:22).

Finally, changes in the degree of redistribution achieved via federal housing outlays are difficult to assess. Carter points out that initiatives in the 1978 Commonwealth State Housing Agreement, such as the move to market related rents and improved rental rebate schemes, 'should have improved the effectiveness of public housing programmes' (1980b:21). While these and other changes in the 1981 CSHA should have boosted the progressivity of outlays, cutbacks in the real level of assistance would have ameliorated the redistributive effect. The impact upon households of other new measures such as the Home Deposit Assistance Scheme and the Mortgage and Rent Relief Scheme is also not certain.

Overall, even this very brief analysis should have demonstrated that it is difficult to make definitive judgements about changes in the redistributive impact of social outlays since 1975-76. Social outlays as a proportion of total federal outlays declined from 47.7 percent in 1975-76 to 45.1 percent in 1982-83, but the strong growth in social security and welfare meant that real social outlays (i.e. after adjustment for inflation) were higher in 1982-83 than seven years earlier (Treasurer, 1983a:358). Such factors have led Scotton to argue that 'when the extent and application of the Fraser government's expenditure cutbacks are both taken into account, the general conclusion to be drawn is that the overall impact on income distribution has not been large, but that the situations of many people in disadvantaged circumstances have been made more difficult' (1980a:24).

5. THE WELFARE STATE AND REDISTRIBUTION: ASSESSMENT OF RESULTS

The net effect of the welfare state can only be assessed by combining analysis of both the tax and expenditure sides of the budget. Such attempts to determine the redistributive effects of government, as was explained in Section 2, face enormous theoretical and practical difficulties, and the results must therefore be treated with some caution. The first part of this section summarises the individual results for the tax and social expenditure sides of the equation, while the second draws the two together and shows the net effect of the welfare component of the Australian welfare state on income distribution. In the third part, the remaining non-social components of state expenditure have been arbitrarily allocated to the different income groups, and the effect of all federal fiscal activities upon income distribution is estimated.

Distributional Impact of Federal Taxation and Social Expenditures

A wide range of federal taxes were levied in 1975-76, including personal income tax, customs and excise duties, sales tax and company income tax. The most important by far was personal income tax, which accounted for over half of all tax revenues, and was the major tax specifically designed to promote equity.

While nominally highly progressive, the actual progressivity of income tax was attenuated at each step of the income tax process, because of deficiencies in the definition of income, tax evasion and avoidance, and tax expenditures. As a result, while income tax in 1975-76 was progressive - with tax as a percent of income rising from 6.9 percent for households with annual incomes below \$2080, to 21.7 percent for those above \$20,800 - the degree of progressivity was not very marked across most of the income spectrum (Warren, 1979:23).

Most other federal taxes fell disproportionately upon the poorer households, thus substantially offsetting the moderate progressivity of personal income tax. The net effect for all federal taxes was consequently proportional for about half of the income range, regressive at the bottom end and progressive only at the very top (Ibid:23).

Clearly, the taxation system contributed little to income redistribution to the poor in 1975-76. Changes made to the nominal tax scales since then, the rapid growth of tax avoidance and evasion and the shifts in the composition of taxes, all analysed in Section 3, suggested that the tax system was probably even less progressive by 1982-83 - and might even have been regressive. Thus, if the welfare state redistributed to the poor, that redistribution must have occurred on the expenditure side of the budget.

The analysis of social outlays in Section 4 showed that social expenditures were indeed pro-poor. There were enormous variations, however, between the various components of the welfare state, with social security outlays being the most highly progressive and education spending the least. The distribution and incidence of each of the four categories of social outlays is shown in Table 5.1, which also contains new information about the dollar value of benefits per household. The combined effect for all of these social outlays and for the social services of education, health and housing only is also shown in Table 5.1. The implications of this daunting mass of figures are probably most easily grasped by examination of Figures 5.1 and 5.2. The former traces the incidence of each of the four categories of outlays while the latter plots the combined results for all social outlays and for just the social services of education, health and housing.

The results for each of the four categories of social outlays have already been examined in Section 4 and will only be briefly summarised here. As Table 5.1 demonstrates, social security outlays were by far the most pro-poor in effect. Their distribution favoured lower income households, and their incidence was extremely progressive; benefits accounted for 85.2 percent of the income of the lowest household income bracket, plummeting to only 2.2 percent for the richest households.

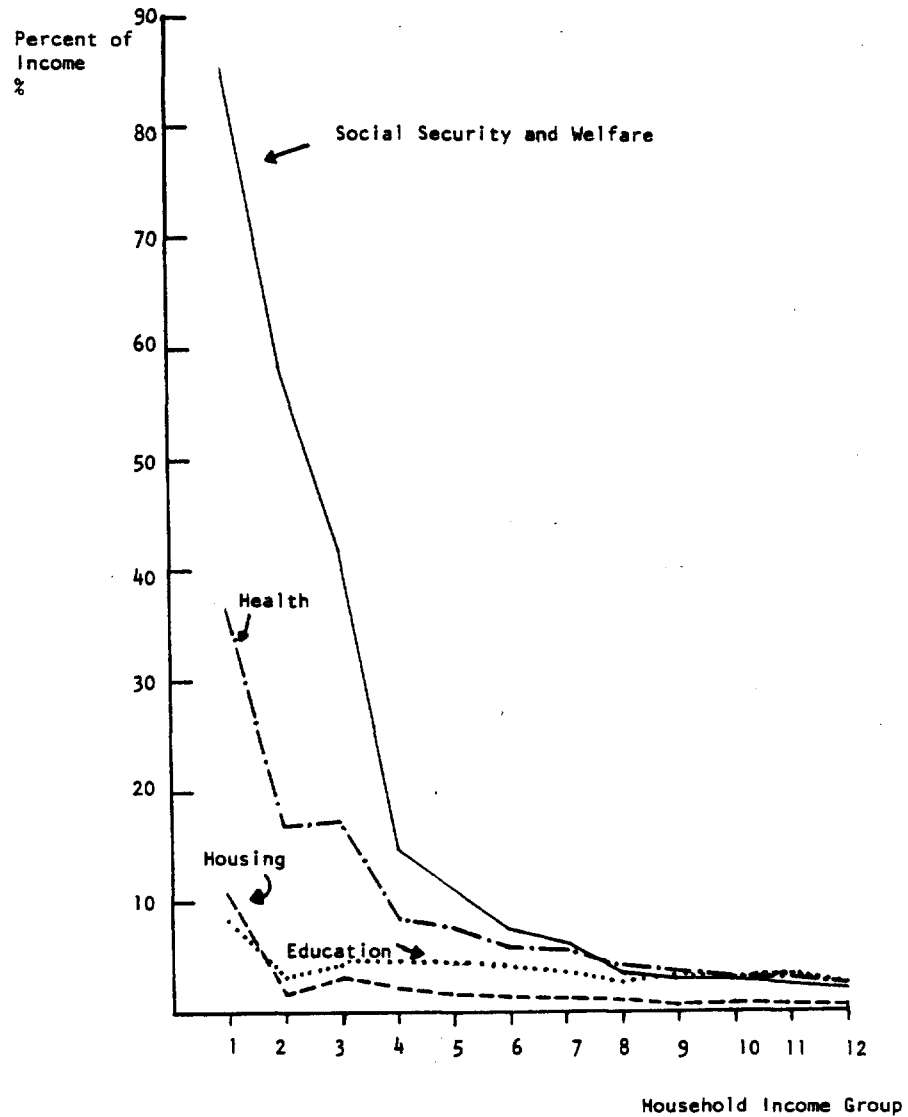
Health spending was also significantly redistributive. For most of the income groups, the value of health benefits per household remained close to \$600, but higher benefits for lower income households resulted in the 22 percent of households located in the three lowest income groups receiving almost one-third of total health outlays. Health spending contributed significantly to greater equality for those on lower incomes; its incidence was strongly progressive across the lower half of the income

TABLE 5.1: Summary Table : Distribution and Incidence of Federal Social Outlays, 1975-76

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	100%
Social Security - \$m	300.7	1470.0	865.0	379.7	437.8	325.0	278.2	158.1	206.4	153.8	161.2	280.2	\$5016.1m
-\$ per household	1704	3093	3114	1180	1053	824	809	478	499	561	546	637	\$1206
- % of total	6.0	29.3	17.2	7.6	8.7	6.5	5.6	3.2	4.1	3.1	3.2	5.6	100%
- % of income	85.2	58.2	41.9	14.8	11.2	7.6	6.2	3.4	3.1	3.0	2.5	2.2	8.8%
Education - \$m	29.8	84.4	87.5	109.4	164.4	181.5	172.8	138.0	236.0	162.5	217.6	327.5	\$1911.5m
-\$ per household	168	177	314	340	395	459	503	417	572	594	735	741	\$460
- % of total	1.6	4.4	4.6	5.7	8.6	9.5	9.0	7.2	12.4	8.5	11.4	17.1	100%
- % of income	8.4	3.3	4.2	4.3	4.2	4.2	3.9	3.0	3.5	3.2	3.4	2.4	3.4
Health - \$m	128.1	419.8	358.0	210.2	290.4	246.7	238.9	198.6	244.9	154.0	177.2	286.7	\$2953.3m
-\$ per household	730	896	1287	652	694	620	694	595	590	564	597	648	710
- % of total	4.4	14.4	12.1	7.1	9.8	8.3	8.1	6.7	8.2	5.2	6.0	9.7	100%
- % of income	36.3	16.6	17.4	8.2	7.4	5.7	5.3	4.2	3.6	3.0	2.8	2.1	5.2%
Housing - \$m	40.2	50.0	63.9	61.8	63.1	60.6	49.9	45.7	37.4	27.6	30.2	32.2	\$562.3m
-\$ per household	217	90	227	186	151	156	148	143	87	79	107	78	\$135
- % of total	7.2	8.9	11.4	11.0	11.2	10.8	8.9	8.1	6.6	4.9	5.4	5.7	100%
- % of income	11.4	2.0	3.1	2.4	1.6	1.4	1.1	1.0	0.6	0.5	0.5	0.2	1.0%
TOTAL SOCIAL SERVICES * - \$m	198.1	554.2	509.4	381.4	517.9	488.8	461.6	382.3	515.8	344.1	425.0	646.4	\$5427.1m
-\$ per household	1123	1166	1834	1186	1246	1237	1343	1157	1256	1258	1446	1463	\$1305
- % of total	3.7	10.2	9.4	7.0	9.5	9.0	8.5	7.0	9.6	6.3	7.8	11.9	100%
- % of income	56.1	21.9	24.7	14.8	13.2	11.4	10.3	8.2	7.7	6.8	6.7	4.7	9.5%
TOTAL, ALL SOCIAL OUTLAYS - \$m	498.8	2024.2	1374.4	761.1	955.7	813.8	739.8	540.4	724.7	497.9	586.2	926.6	\$10443.2m
- \$ per household	2828	4260	4947	2367	2230	2059	2153	1636	1756	1820	1981	2097	\$2511
- % of total	4.8	19.4	13.2	7.3	9.2	7.8	7.1	5.2	6.9	4.8	5.6	8.9	100%
- % of income	141.3	80.1	66.6	29.6	24.4	18.9	16.5	11.5	10.7	9.8	9.2	6.7	18.3%

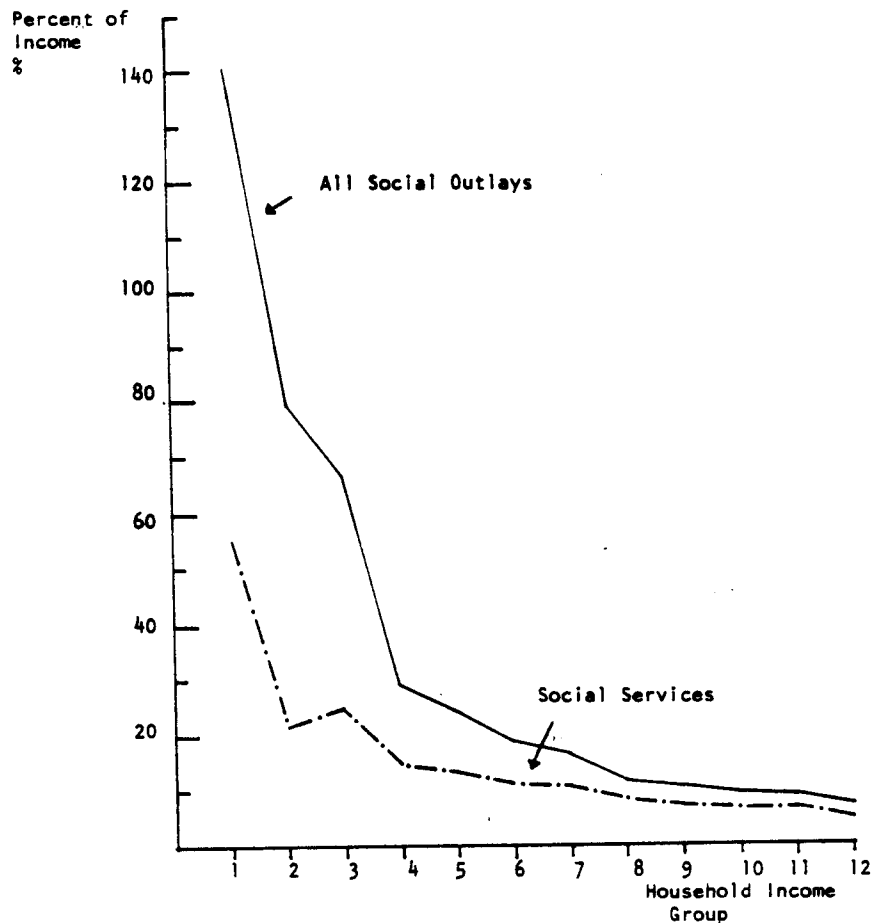
* That is, Education, Health and Housing.
Source: Derived from Appendix 1.

FIGURE 5.1: Incidence of Outlays on Social Security and Welfare, Education, Health and Housing, 1975-76



Source: Table 5.1.

FIGURE 5.2. Incidence of All Social Outlays, and of Social Service Outlays Only, 1975-76



Source: Table 5.1.

spectrum, with benefits declining from 36.3 percent of income for the bottom group to 5.7 percent for households with incomes between \$8840 and \$10399.

The effects of housing outlays were more difficult to assess, for spending per household and benefits as a percent of income both oscillated. The distribution of housing expenditure favoured middle income groups, with households in the five income brackets with income between \$4160 and \$11959 gaining half of total outlays. However, benefits as a percent of income diminished steadily as income increased, although the degree of progressivity was minimal across the top third of the income range. Although they were progressive, the small volume of housing outlays meant that their redistributive effect was limited.

For education outlays, the picture was very different. Average benefits per household rose as income increased, so that the richest households each received an average benefit of \$741, while the poorest group each gained a scanty \$168. (Table 5.1) Distribution of education outlays was strongly pro-rich, with the fifty percent of households in the six top income brackets obtaining two-thirds of total benefits. However, this inequitable distribution closely matched the unequal distribution of original household incomes, so that education spending as a percent of income hovered at around three to four percent for most income groups, (although it reached 8.4 percent for the very poorest households and declined to only 2.4 percent for the richest households). Education outlays did not therefore substantially redistribute to the poor, but basically left the original income distribution almost unchanged.

Finally, Table 5.1 also shows that the redistributive effect of all the social services was significant. Average benefits per household from education, health and housing outlays were fairly uniform, remaining relatively stable at about \$11-13,000 for most income groups, although rising to around \$1450 for the two highest household income categories. Distribution of the total benefits of education, health and housing was also reasonably equal, with the 50 percent of households in the top six income brackets attaining 51 percent of all outlays. The incidence of the social services was progressive, with benefits accounting for 56.1 percent of the income of the poorest households and declining smoothly to 4.7 percent for households whose income exceeded \$20,800.

When social security outlays were included, the redistributive effect of Australian welfare state expenditure was even further enhanced. The average value per household of benefits derived from social security, education, health and housing was markedly greater for the three lowest income groups; the annual income of each household in these three groups was boosted by around \$4000, compared to an average of \$2511 for all households (Table 5.1). The distribution of all social outlays was also heavily skewed towards the poor, with the one-fifth of households with incomes below \$5719 receiving two-fifths of total benefits. It is also interesting to note, however, that upper income groups also derived substantial benefits from the activities of the welfare state, with households in the very top income bracket, for example, receiving benefits

approaching one billion dollars, or some nine percent of total social outlays.

Notwithstanding the considerable benefits flowing to middle and upper income groups, the net effect of all federal social outlays was to make income distribution significantly more equal. Thus, benefits as a percent of income dropped from 141.3 percent for households with incomes under \$2080 to 6.7 percent for the richest households. The impact upon redistribution of policy changes and shifts in the real value and relative composition of social outlays since 1975-76 is uncertain, but such changes are probably unlikely to have increased the net redistributive effect of social outlays.

Net Impact of Federal Taxation and Social Expenditures

Total social expenditures in 1975-76 reached \$10,443 million. In Table 5.2, \$10,443 million worth of taxes have been taken and allocated to income groups in accord with the distributional pattern shown in Section 3. The table shows that, for example, the very poorest households received \$498.8 million in social benefits, and paid \$65.8 million of the taxes used to finance those benefits. Similarly, the income of households with annual incomes above \$20,800 was boosted by \$926.6 million worth of social benefits and reduced by their \$2958.6 million contribution to the taxes which financed those benefits. The cross-over point, interestingly, occurs at the middle of the income range; the 50 percent of households with incomes below \$10400 are net winners from welfare state activities, while the 50 percent of households with incomes above \$10,400 are net losers. These results are shown graphically in Figure 5.3.

While these results show the dollar gains and losses for different income groups, it is also possible to look at gains and losses as a percent of the income of different groups. Table 5.3 presents the results in this form, and indicates that social outlays raised the original income of households in the lowest income bracket by 141.3 percent, while, of the taxes used to pay for these expenditures, the share paid by these households cut their original income by 18.6 percent. For the households in the top income bracket, social outlays enlarged their income by 6.7 percent, while taxes reduced it by 21.4 percent. The turning point between payees and payers, as Figure 5.4 demonstrates, was around the mid point of the income range.

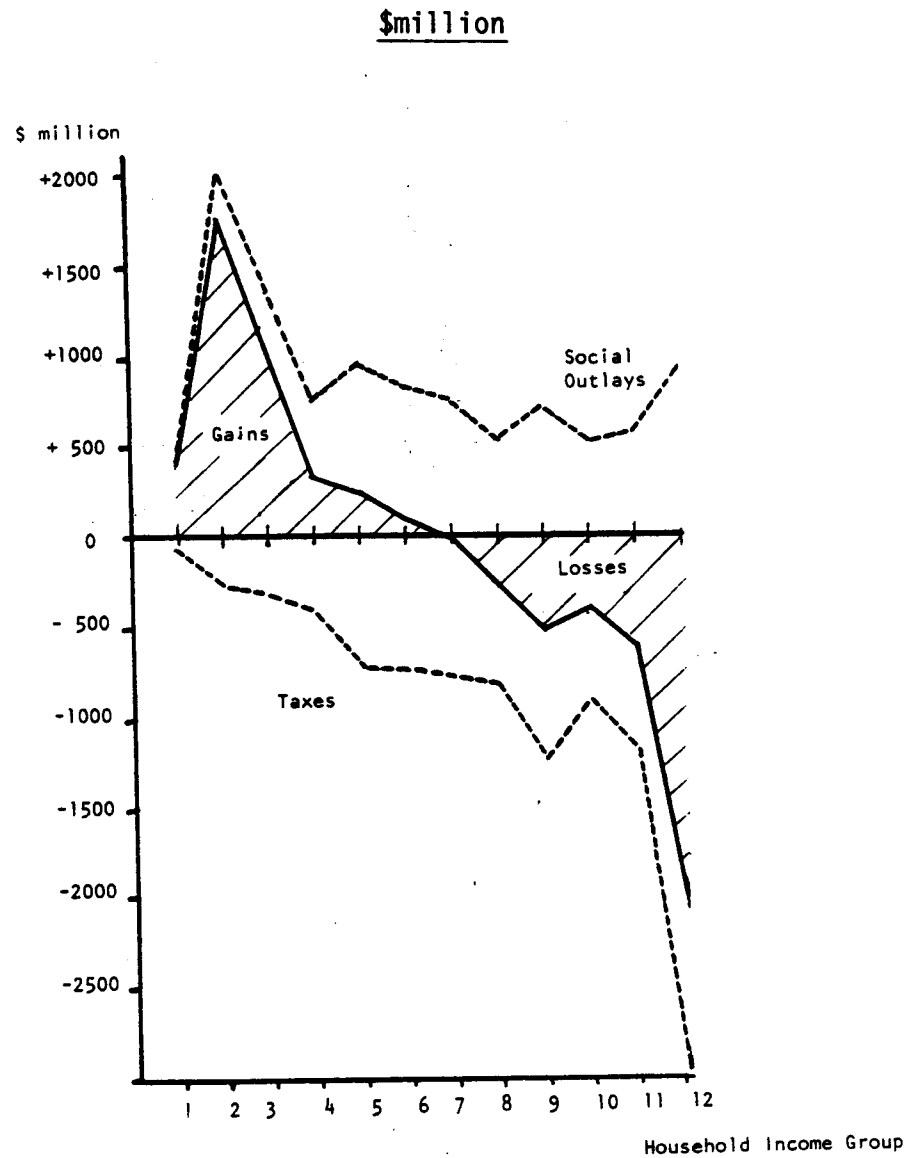
TABLE 5.2: Net Redistributive Effect of Taxes and Social Outlays, 1975-76
\$ million.*

HOUSEHOLD INCOME GROUP \$	1	2	3	4	5	6	7	8	9	10	11	12	Total**
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17670	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	100%
Social Expenditures	- \$m 498.8	2024.2	1374.4	761.1	955.7	813.8	739.8	540.4	724.7	497.9	586.2	926.6	\$10443.2m
Taxes	- \$m 65.8	264.2	323.7	426.1	724.8	743.6	777.0	818.8	1240.7	905.4	1195.8	2958.6	\$10443.2m
Net Effect	- \$m 433.0	1760.0	1050.7	335.0	230.9	70.2	-37.2	-278.4	-516.0	-407.5	-609.6	-2032.0	—

* Taxes have been distributed in accord with Warren's results, excluding subsidies (1979). It could not be determined exactly which federal outlays had been regarded as subsidies, and this created difficulties for the attempt in the following section of this chapter to allocate all federal outlays to income groups. However, the removal of subsidies, in any case, made a negligible difference to the distribution of taxes.

** May not add due to rounding.

FIGURE 5.3: Net Redistributational Effect of Taxes and Social Outlays
1975-76

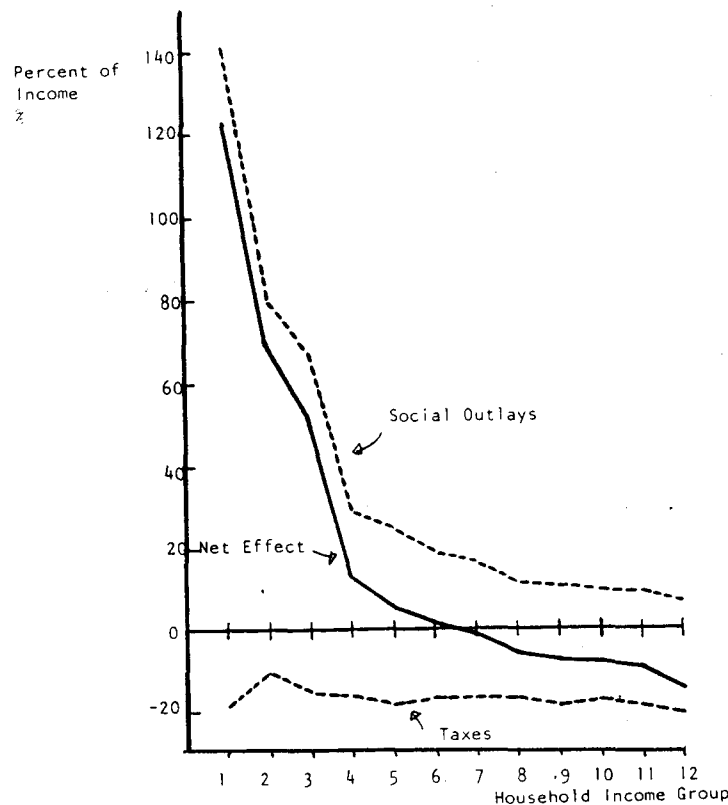


Source: Table 5.2.

TABLE 5.3: Net Incidence of Taxes and Social Outlays, 1975-76
Percent of Income.

	1	2	3	4	5	6	7	8	9	10	11	12
HOUSEHOLD INCOME GROUP \$	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)
Social Expenditure	- % 141.3	80.1	66.6	29.6	24.4	18.9	16.5	11.5	10.7	9.8	9.2	6.7
Taxes	- % 18.6	10.5	15.7	16.6	18.5	17.3	17.3	17.5	18.4	17.9	18.7	21.4
Net Effect	- % 122.7	69.6	50.9	13.0	5.9	1.6	-0.8	-5.9	-7.6	-8.0	-9.5	-14.7

FIGURE 5.4: Net Incidence of Taxes and Social Outlays, 1975-76
Percent of Income

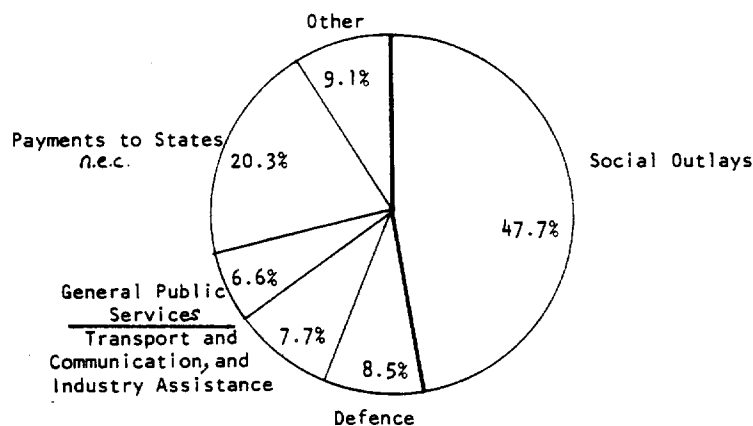


Source: Table 5.3.

Net Distributional Impact of All Federal Taxes and Expenditures

This study has so far considered only the combined redistributive impact of federal social expenditures and of the equivalent amount of taxes required to finance them. This does not capture the total effect of the state on income distribution, for some 50 percent of federal outlays in 1975-76 were devoted to non-social outlays (Figure 5.5).

Many Marxist theorists argue that beliefs about the redistributive effect of the welfare state rest upon a very limited definition of what 'welfare' is - a definition which embraces transfers to the poor, but excludes both the 'massive concessions to capitalist enterprises, in the form of investment allowances' etc and other 'transfer payments to the rich' (Higgins, 1978:137; see also Head, 1983). Many assume that if these

FIGURE 5.5: Composition of Total Federal Outlays, 1975-76

Source: Treasurer (1976a:142).

other non-welfare payments were included in the analysis, the welfare state would no longer appear to redistribute towards the poor. Ofse, for example, suggests that business rather than 'traditional' welfare recipients 'capture the lion's share of state "welfare"', and that 'the welfare state is more accurately described as capitalism for the poor and socialism for the rich' (1972:482). To test this proposition, an attempt is made in this section to allocate the benefits of non-social expenditure to the various income groups. This is, unfortunately, a hazardous exercise.

First, it is difficult to allocate accurately the benefits of non-social expenditure to the various income groups; adequate information about actual usage by income group of transport, communication, electricity and water supply services, for example, is not available, and the 'indivisible' services such as defence supposedly provide a collective benefit which cannot be allocated on the basis of utilisation.

Given these problems, all non-social expenditures have been distributed in the 'standard' manner (Gillespie, 1965:163), in accord with income shares. Thus, the top household income group in 1975-76 gained 24 percent of all income and has therefore been allocated 24 percent of all non-social expenditures. The actual distribution of non-social expenditures is most unlikely to be more unequal than this; in fact, as the benefits of some public expenditures are likely to be more equally distributed between

households than is income, this method probably understates the redistributive impact of the state.¹

A second hurdle is that while total federal outlays in 1975-76 amounted to \$21,859 million, tax revenues were only \$16,843 million. This discrepancy was due to two factors; \$1188 million collected in non-tax receipts, principally interest, rent and dividends, and a \$3583 million deficit. Although the real costs of non-taxation revenue were clearly borne by someone, there is no reliable information at all about which income groups actually carried the burden. Similarly, there is no information about the distribution of the costs (via higher interest rates and inflation) or the benefits (via expanded economic activity) of the deficit. Yet, if this \$5 billion is just ignored when assessing the total impact of the state, expenditures will greatly exceed taxes and the redistributive effect will consequently be grossly overstated.

To overcome this the following analysis assumes, like other incidence analyses, that the budget was balanced in 1975-76 (Ibid:158). In practice, this means that it has been assumed that the costs of non-tax receipts and of the deficit were distributed in the same way as taxes in 1975-76. If these costs actually fell more heavily upon the poor than did taxes, this procedure overstates the extent of redistribution; conversely, if the rich shouldered a heavier burden, the degree of redistribution is understated.

The results based on the above assumptions are shown in Table 5.4. It suggests that federal expenditures added \$569.6 million to the incomes of the poorest households while tax reduced their incomes by \$137.7 million. The net effect was to add \$431.9 million to their incomes. In contrast, taxes paid by the richest households far exceeded the benefits received via federal outlays, and their total income was reduced by \$2499.1 million.

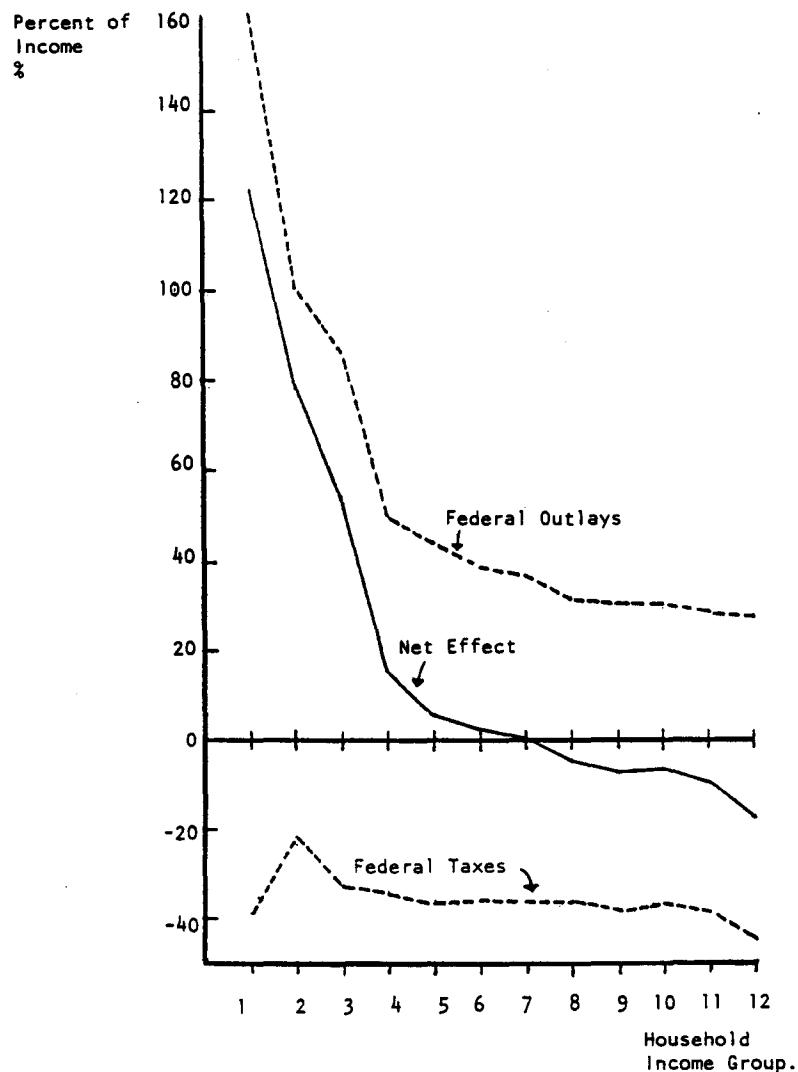
¹ The author did experiment with a range of other assumptions, including the relatively generous one of distributing half of non-social expenditure in accord with household income shares, and the other half equally per household. Surprisingly, the incidence results appeared fairly robust, for varying the assumptions made relatively little difference to incidence for most of the income groups.

TABLE 5.4: Net Redistributive Effect and Incidence of All Federal Expenditures and Equivalent Amount of Taxes

HOUSEHOLD INCOME GROUP \$		1	2	3	4	5	6	7	8	9	10	11	12	
		Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	TOTAL
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
		DISTRIBUTION												
Social Expenditure	\$m	498.8	2024.2	1374.4	761.1	955.7	813.8	739.8	540.4	724.7	497.9	586.2	926.2	10443
Non-Social Expenditure	\$m	70.8	506.9	413.3	514.9	786.6	863.1	900.7	939.5	1355.1	1017.2	1282.0	2767.2	11416
<u>Total Expenditure</u>	\$m	569.6	2531.1	1787.7	1276.0	1742.3	1676.9	1640.5	1479.9	2079.8	1515.1	1868.2	3693.8	21859
<u>Taxes</u>	\$m	137.7	553.00	677.6	891.9	1517.1	1556.5	1626.4	1713.9	2597.0	1895.2	2503.0	6192.9	21859
<u>Net Result</u>	\$m	431.9	1978.1	1110.1	384.1	225.2	120.4	14.1	-234.0	-517.2	-380.1	-634.8	-2499.1	-
		INCIDENCE												
<u>Total Expenditure</u>	%	161.4	100.1	86.7	49.7	44.4	38.9	36.6	31.6	30.8	29.9	29.2	26.	
<u>Taxes</u>	%	39.0	21.9	32.9	34.7	38.7	36.1	36.3	36.6	38.4	37.4	39.2	44.9	
<u>Net Results</u>	%	112.4	78.3	53.8	15.0	5.7	2.8	0.3	-5.0	07.7	-7.5	-9.9	-18.1	

Table 5.4 and Figure 5.6 also present the incidence results for the federal budget (with Figure 5.6 being drawn to the same scale as Figure 5.4, which showed the incidence of the welfare state). Comparison of the two shows that the incidence of all expenditures, not surprisingly, was less progressive than that for social expenditures only. Taxes, however, also accounted for a higher proportion of income for all income groups, and the additional taxes and additional non-social expenditures almost exactly cancelled each other out. As a result, even on the basis of the

FIGURE 5.6: Net Incidence of All Federal Outlays and Equivalent Amount of Taxes, 1975-76



Source: Table 5.4.

assumptions adopted here (which would possibly tend to understate the redistributive impact of non-social outlays), the net incidence for all taxes and expenditures was remarkably similar to the pattern recorded for just the welfare part of the state. Thus, when all federal outlays and an equivalent amount of taxes were considered, the net effect on income distribution was almost exactly the same in 1975-76 as for only social outlays and an equivalent amount of taxes.

6. SUMMARY AND CONCLUSIONS

Much social and economic theory suggests that a major rationale for government intervention in the economy lies in the achievement of a more egalitarian distribution of income and wealth (e.g, Groenewegen, 1979). In addition, as Section 1 established, redistribution has long been a very widely accepted goal of Australian taxation and social policy. Taken together, these two factors suggest that, while the Australian welfare state also has other objectives, it is specifically intended to redistribute resources to the poorest.

There is, however, a deep division in Australia between those who believe that this objective has been successfully attained, and those who argue that the welfare state principally benefits the middle and upper classes rather than the poor.¹

Despite the enormous sums involved in tax collections and social outlays, and the critical import of the issue for many areas of political science, economics and industrial relations, such doubts have until now been irresolvable. The dearth of information about the beneficiaries of government social outlays has frustrated any desire to draw up a welfare state 'balance sheet'.

This study represented an exploratory attempt to answer questions about who actually benefited from the activities of the welfare state, and the problems and pitfalls involved in any such incidence analysis were discussed in Section 2; the magnitude of the difficulties involved suggested that the results should be treated with caution.

Three basic steps were involved in the incidence analysis. First, the population was divided into 12 household income groups, and the amount of 'original' income accruing to each group was calculated. Second, the distribution of the tax burden was estimated, and the amount of tax paid by

¹ It should be noted that this study used the term 'welfare state' as a convenient shorthand expression to embrace federal taxation and social expenditures, while 'social expenditures' were defined as federal outlays on social security and welfare, education, health and housing, and 'social services' as outlays on the latter three.

each group was subtracted from their original income. Third, the distribution of the benefits of federal government expenditure on social security and welfare, education, health and housing was estimated, and added onto each group's post-tax income. The net effect of the welfare state upon each income group could then be determined.

Because the analysis required extremely detailed information about the income, expenditure and numerous other characteristics of each household, the study was forced to rely upon the 1975-76 Household Expenditure Survey conducted by the Australian Bureau of Statistics. Some limitations to the generality of the study and the likely impact upon the results were canvassed in Section 2; a particularly obvious omission was the exclusion because of insufficient data of state and local government taxes and social outlays, although it was unclear whether their inclusion would have made the welfare state appear more or less progressive.

The tax side of the welfare state equation was examined in Section 3. The analysis showed that although the richer households paid more taxes, federal tax as a percent of each group's income varied little across income groups. Personal income tax was found to be the only progressive tax, and the counteracting effect of other regressive federal taxes ensured that the incidence of all federal taxes in 1975-76 was barely progressive. Changes in the personal income tax system, the growth of tax avoidance, and shifts in the composition of taxes since then seemed likely to have made the federal tax system even less progressive - and possibly even regressive - by 1982-83. These results mirrored those of overseas incidence studies, which also found that taxation had little or no equalizing effect upon income distribution (e.g. Gillespie, 1965; Ross, 1980).

Taxation in Australia therefore no longer appears to meet the policy goal of equity and is in urgent need of reform, as a growing number of tax experts have pointed out. Thus, Collins writes that 'the Australian tax system is in crisis' and is 'unfair' (1983:1), while Head recently delivered a blistering indictment of the current inequities of the tax system (1983b).

It is therefore clear that any redistribution to the poor in 1975-76 must have occurred on the expenditure side of the budget. Detailed analysis in Section 4 of the distribution of the benefits resulting from federal outlays in the four budget categories of social security and welfare, education, health and housing showed that their distribution was indeed pro-poor, and these results were summarised in Section 5. The average value of the benefits received via social outlays in these four categories amounted to \$4000 per year for every household in the three lowest income groups; this was more than double the average amount accruing to households in the top three income brackets in 1975-76.

However, this pro-poor distribution was principally due to the impact of cash transfers within the social security and welfare outlays. Households in the lowest three income brackets each gained, on average, \$2640 a year from social security and welfare outlays; this was more than four times as much as the \$580 a year received by all households in the top three income groups.

It is therefore important to separately analyse the distribution of benefits resulting only from outlays on the social services of education, health, and housing, particularly as many have argued that greater redistribution may be achieved if assistance is provided in kind rather than in cash. This is due to the extensive opposition aroused by the direct redistribution of income through cash transfers, because of fears that such unearned transfers will erode the work ethic or produce 'parasites on the pension' (Stretton, 1980b:48).

Scotton, for example, argues that 'whatever the theoretical advantages of effecting income redistribution in the form of free transfers of income, the fact is that democratic societies have shown themselves more ready to transfer resources constrained to socially 'worthy' consumption' (1978a:4). Similarly, Le Grand suggests that public expenditure on the social services has been in part 'designed to avoid the nettle of income redistribution; in other words, an attempt to achieve such redistribution via the back door' (1982:142).

Analysis of the distribution of the benefits accruing from outlays on the social services in 1975-76 indicated that they boosted the income of all

households by around \$1300. Expenditure on education, health and housing was thus fairly equally distributed among all households, rather than being pro-poor.

Although the comparability of these estimates with those for other countries is uncertain, one recent study of the distribution of the social services in Great Britain apparently showed significant differences. After an extensive analysis, Le Grand found that 'almost all public expenditure on the social services in Britain benefits the better off to a greater extent than the poor' (1982:3); he argued that the road to equality through public provision of services had therefore proved 'inadequate for the task. Indeed, through convincing people (wrongly) that a substantial measure of redistribution was taking place it may even have confused the basic aim' (1982:142). Le Grand therefore concludes that 'the strategy of equality through public provision has failed', and accordingly draws some sweeping policy implications (1982:151,141).

While the apparently more equal distribution of the social services in Australia has interesting implications for comparative social policy, a more important point is that Le Grand's conclusions and policy prescriptions may be misplaced. As discussed in Section 2, Le Grand's study analysed the distribution of social services rather than their incidence.

While the distribution of social outlays between income groups is of interest in its own right, the appropriate measure for assessing the redistributive impact of social outlays is their incidence - i.e. their value as a percent of each group's original income. When this measure is used, the social services in Australia had a strong redistributive impact, accounting for 56.1 percent of the income of households in the lowest income bracket, and only 4.7 percent of the income of households in the top income bracket.

Within the social service outlays, however, there were marked differences. While both health and housing outlays were significantly progressive, the redistributive effect of the former was much greater, because health outlays reached almost \$3 billion - and were thus about five times larger

than housing outlays. The progressivity of education outlays, on the other hand, was muted, and their redistributive effect was consequently minimal.

When social security and welfare outlays were again added in, Australian welfare state expenditure emerged as a significant redistributive force. Outlays on social security and welfare were extremely progressive, accounting for 85.2 percent of the income of the poorest households and dropping sharply to only 2.2 percent for the richest. As a result, as Table 5.1 in the preceding section demonstrated, the combined effect of all social outlays was even more redistributive than for just the social services. The value of the total dollar benefits from federal outlays on social security and welfare, education, health and housing was equivalent to 141.3 percent of the income of households in the bottom income category; benefits from spending on social outlays as a percent of income declined steadily as income increased, settling at only 6.7 percent for households in the top income bracket.

While the degree of comparability between the results of this study and those conducted overseas in different years and under varying assumptions is unclear, it is interesting to note that Gillespie also found that social security expenditures in the United States were the most redistributive of the social outlays, followed by health, housing and then education (1965:141). Similarly, although the results reported by Ross for Canada did not include housing outlays, they also revealed that social security outlays were the most redistributive, and were trailed by health and then education (1980).

Many would intuitively feel that the results presented earlier would give a biased impression of the usual redistributive impact of social outlays because they reflected the culmination of three years of expansionary Labor policies, and would argue that social outlays would now be much less progressive. Analysis of changes in social outlays since 1975-76 in Section 4 suggested that it was difficult to be certain about the net effect of all social outlays by 1982-83, but that they probably tended to be slightly less redistributive.

While the individual effect of the tax and social expenditure sides of the budget is important, the net impact of the welfare state can only be gauged

when the two are combined. When the tax and expenditure branches of the welfare state were brought together in Section 5, the net effect was still highly redistributive. The net effect of all social outlays and an equivalent amount of taxes was to add \$433 million to the incomes of the lowest household income category and subtract \$2032 million from the incomes of the richest households. The cross-over point occurred at the middle of the income range, with the bottom 50 percent of households emerging as net winners and the top 50 percent as net losers.

While the preceding results only considered the net effect of social outlays and of the taxes required to finance them, an attempt was also made in Section 5 to allocate to income groups the benefits of the remaining non-social federal outlays (e.g. on defence, transport and communication, industry assistance etc). On the basis of fairly restrictive assumptions (which would be most unlikely to underestimate the net redistributive effect of the state), the analysis indicated that the net impact of all federal outlays and an equivalent amount of taxes was almost exactly the same as for only social outlays and the taxes required to finance them. Although only based on a very rough comparison, these results suggested that the net redistributive effect of all federal budgetary activities in 1975-76 was fairly similar to that of only welfare activities - and thereby cast some doubt upon claims that the welfare state would appear much less redistributive once non-welfare outlays were considered (Head, 1983; Higgins, 1978; Offe, 1972).

Overall, and while it must be stressed that these estimates must be treated with considerable caution, it appears that the Australian welfare state does make the distribution of income substantially more equal. Such results have major policy implications, and also raise interesting issues for political theory.

Outlays on social security and welfare clearly had by far the greatest effect on equalizing incomes, as a result of the cash transfer system. This suggests, as Jencks pithily observes, that 'if we want to redistribute income, the most effective strategy is probably still to redistribute income' (quoted in Le Grand, 1982:139).

However, this study also indicates that redistribution via the public

provision of social services is also a viable, although less effective, policy option. Both health and housing programs appear to be fulfilling to some extent the policy goal of equalizing access and thereby real incomes. The education results, however, indicate that the provision of a free social service to all may have a minimal redistributive effect. The entrenched nature of social inequality and the ability of the better off to take greater advantage of a free service suggest that more positive education policies may be required. In particular, policies to boost the participation rates of children from lower income households after the legal school leaving age is reached appear to be essential.

This study has also suggested that the pessimism displayed by many social scientists about the redistributive potential of the welfare state may be partially misplaced. Jones, for example, recently argued that 'one can support [social scientists'] aims to develop a better society, but doubt whether the welfare state will be an important instrument' (1981:287).

Many political scientists have also questioned the ability of the state to alter the prevailing distribution of income and power. Green observes that many argue 'that the modern welfare state apparatus is inherently vulnerable to capture by key groups among the citizenry and that these groups have tended to use the machinery of government in their own favour, often at the expense of the poor' (1983:157). The results of this study, however, suggest that the state can exert a significant equalizing effect, and may therefore be something more than the pluralist vision of a neutral arena where competing interest groups battle it out.

At the other end of the political spectrum, Le Grand argues that many Marxist theories of the welfare state falsely assume that the working class are prime recipients of welfare expenditure (1982:13). However, this study apparently confirms the veracity of the implicit or explicit assumption that 'legitimation' expenditures on welfare principally benefit poorer working class members, such as impoverished competitive sector workers or the unemployed (O'Connor, 1973; Gough, 1979). Unfortunately, it sheds no additional light on what the 'real' functions of the welfare state are, or whether its growth is due to the functional requirements of capital (O'Connor, 1973; Gough, 1979), an increased need for either legitimation

(Habermas, 1976) or social control and integration (Piven and Cloward, 1971), the successful efforts of humanitarian and philanthropic reformers (Head, 1980:45), or any of a host of other commonly advanced explanations.

Yet, regardless of the actual functions of the welfare state, this study has shown that it successfully redistributes income to the poorer; while minimal redistribution occurs through the taxation system, social outlays comprise a significant redistributive force. It need hardly be said, however, that despite the positive impact of the welfare state the distribution of income remains massively unequal.

APPENDIX ONE: DETAILED INCIDENCE ASSUMPTIONS AND STATISTICAL CALCULATIONS

The first part of this appendix describes the general incidence assumptions adopted in this study. The next section covers the detailed incidence assumptions and explains how each budget line item was distributed. It is divided into five parts - part A deals with social security and welfare outlays; B with education; C with health and D with housing. Part E contains the actual statistical calculations; each line item in Table E has been numbered for easy reference.

GENERAL INCIDENCE ASSUMPTIONS

This study is primarily based upon the 1975-76 Household Expenditure Survey (HES).¹ As a result, there is no choice about factors such as the appropriate income base. The income base used is gross income, comprising original income plus cash transfers. The income unit is the household, defined as a group of people who live together as a single unit, in the sense that they share common housekeeping arrangements. The time period is one year. Total household income (rather than per capita) has been used, as a result of data deficiencies.

With regard to tax incidence, the study relies upon Warren's analysis (1979) which was also based on the 1975-76 HES. The host of shifting assumptions underlying this analysis are fully explained in his study.

With regard to the original analysis of expenditure incidence, the 'standard' shifting assumptions adopted by other studies of incidence or income redistribution have been used (e.g. Gillespie 1965; Reynolds and Smolensky, 1977; Webb and Sieve, 1971; Ross, 1980; Le Grand, 1982; Collins and Drane 1981, 1982; Peacock and Browning 1954; Dodge, 1975).²

¹ For a detailed explanation of this survey's methodology, see ABS, (1977)

² Some of these studies adopt one or two of the 'standard' assumptions and vary the others; the assumptions used in this study are those adopted by the majority.

These assumptions are:

- * cash transfers are assumed to be incident on individuals receiving them;
- * divisible public goods and services such as education, health, and housing have been allocated solely to consumers on the basis of actual utilisation of the relevant services by income group;
- * indivisible public goods and services have been generally allocated solely to consumers in accord with household income shares;
- * the benefits of government expenditure have been valued by their cost of provision.

DETAILED INCIDENCE ASSUMPTIONS

<u>\$ m</u>	<u>Item of Expenditure</u>
<u>A. Social Security and Welfare</u>	
\$2129.4m	Age pensions paid to residentially qualified men and women reaching the ages of 65 and 60 years respectively. Pensions taxable, and, except for permanently blind or over-70 year olds, means-tested. Distributed according to HES receipts pattern - E30 ³
\$407.1	Invalid pensions, available under similar conditions to the age pension to those aged 16 or more who were at least 85 percent permanently incapacitated for work or were permanently blind. Distributed according to HES receipts pattern - E31 ³
\$325.3	Widows' pensions, paid to various categories of widows, depending upon their age, financial circumstances and age of dependent child/ren. Means-tested. Distributed according to HES receipts pattern - E32 ³
\$559.0	War (or disability) pensions and associated allowances paid to incapacitated veterans or their widows, and service pensions, broadly equivalent to the age pension but available to veterans five years earlier. Distributed according to HES receipts pattern (Note that Budget expenditure figure differs from Department of Veterans' Affairs figures. After consultation with the Department's Statistical Section, their figure has been used) - E38-41.

³ A range of additional allowances were payable, where applicable, with all of the preceding pensions. These were an additional payment per child, a single parent's/guardian's allowance, and supplementary assistance for those renting in the private rental market. Fringe benefits were also available to those who could meet a strict income test (Kewley, 1978:141), and were of considerable benefit to many pensioners (Social Welfare Policy Secretariat, 1983).

\$623.3m	Unemployment, sickness and special benefits and allowances. Unemployment benefits were available to those aged at least 16 who were unemployed yet willing and able to undertake suitable work and making efforts to find work. Sickness benefits were paid, subject to an income-test, to those who lost income when they were temporarily incapacitated for work due to sickness or injury. Special benefits were not subject to a specific income or means test, but were paid to those unable to earn sufficient to support themselves or their dependants and yet not receiving other pensions or benefits. Additional benefits for children were paid to all three groups where applicable, and eligible sickness beneficiaries also received supplementary allowance for rent. Distributed according to HES receipts pattern. (Note that Budget figures for this expenditure differ from Department of Social Security figures. According to the Department, the latter is correct, and has been used here) - E33-34.
\$169.6m	'Other' government benefits - supporting mother's benefit (\$127.2m); handicapped child's allowances payable to parents whose severely handicapped child was cared for at home (\$8.5m); sheltered employment allowances, paid at the same rate and conditions as invalid pension to disabled people employed in approved sheltered workshops (\$9.8m); double orphans' pensions, paid free of means test to such orphans' guardians (\$1.8m); structural adjustment assistance, paid to those who became unemployed as a direct result of the government's decision to cut tariffs by 25 percent in 1973 (\$8.5m) ⁴ ; and, finally, funeral benefits (\$1.5m) and telephone rental concessions (\$12.3m) paid to those eligible pensioners who satisfied a strict means test. Combined and distributed according to HES receipts pattern for 'other government benefits' - E35.
\$7.2m	Maternity allowances paid free of means test to mothers upon the birth of children. Distributed according to HES receipts pattern - E36.
\$265.5m	Family allowances (then termed child endowment). Distributed according to HES receipts pattern - E42.
\$94.2m	Assistance for aged accommodation through grants to organisations and local governments under the Aged and Disabled Persons Homes Act and the Aged Persons Hostels Act. Also grants to states, under States Grants (Dwellings for Pensioners) Act, and personal care subsidy. Some assistance not means tested, and open to

4 Expenditures on structural adjustment assistance, the Regional Employment Development Scheme and unemployment relief grants were all classified in the 1975-76 Budget into the 'Social Security and Welfare' category.

all aged not just pensioners; poorest pensioners often excluded (Graycar et al, 1981:70), and accommodation often built in affluent areas (Ibid). For these three reasons, distributed according to HES age pensions receipts pattern with some slight arbitrary weighting towards middle and higher income groups - E43.

- \$12.3m Assistance for home care services, through States Grants (Home Care) Act (domestic assistance, mainly for aged, plus grants to senior citizens centres); States Grants (Paramedical Services) Act; Delivered Meals Subsidy Act ('meals on wheels') and other. Services not means tested; open to all aged not just pensioners; low income groups less likely to tap such resources (Home Support Services Committee, 1981:15,16); low income areas often poorly serviced (Ibid:27); and poorest aged often effectively excluded from Senior Citizens Centres (Graycar et al, 1981:75). For these reasons distributed according to HES age pensions receipts pattern with some slight arbitrary weighting towards middle and higher income groups - E44.
- \$1.0m 'Other' assistance for ex-servicemen and dependants. Distributed according to HES receipts pattern for all veterans pensions - E45.
- \$1.2m Handicapped children's benefits, paid to eligible organisations caring for handicapped children. Distribution of handicapped children assumed to be correlated with distribution of children; therefore distributed according to HES receipts pattern for family allowances - E46.
- \$30.0m Subsidies provided to non-profit organisations and local governments under Handicapped Persons Assistance Act. Distributed according to HES invalid pension receipts pattern - E47.
- \$12.2m Rehabilitation services and other handicapped expenditure. Distributed as for previous item - E48.
- \$9.7m Assistance to states under States Grants (Deserted Wives) Act, and other miscellaneous expenditure on widows and supporting mothers. Distributed according to HES widows pension receipts pattern (because it is not possible to isolate distribution of supporting mother's benefits) - E49.
- \$2.5m 'Other' family assistance e.g. expenditure on family planning, marriage guidance organisations etc. Distributed as for HES family allowances receipts pattern - E50.
- \$153.4m Grants to states etc for unemployment relief and Regional Employment Development Scheme. Distributed according to HES unemployment benefits receipts pattern - E51.

- \$6.8m Expenditure on Australian Assistance Plan. Beneficiaries ultimately assumed to be welfare clients; therefore distributed according to HES pattern for all Department of Social Security (DSS) pensions, benefits and allowances - E52 and 37.
- \$1.6m Grants to voluntary agencies and local governments under Homeless Persons Assistance Act. Distributed according to HES unemployment benefits receipts pattern - E53.
- \$1.9m Assistance for migrants, through grants to committees and agencies engaged in migrant integration activities. Expenditure distributed among migrant households, in accord with 1976 census data on migrant incomes (supplied by ABS) - E54.
- \$43.5m Aboriginal advancement programs n.e.c. . 1976 Census shows aboriginal household incomes lower than all household incomes (figures supplied by ABS). Expenditure distributed according to census pattern with some arbitrary weighting towards lower income groups - E55.
- \$159.5m General administration and other expenditure, less recoveries and repayments. Allocated in accord with distribution of all preceding social security and welfare expenditure - E56.

B. Education

- \$1014.9m Grants to universities (\$539.4m), colleges of advanced education (\$386.8m) and technical and further education (\$81.1m), plus expenditure on the relevant Commissions e.g. the Universities Commission (\$2m) and other expenditure (\$5.6m). Combined and distributed according to HES tertiary education utilisation pattern, (because HES data does not differentiate between university, CAE and TAFE students - E18 and 59.
- \$89.5m Means-tested assistance to university and CAE students through Tertiary Education Assistance Scheme (TEAS). Distribution derived from Department of Education (1981:22), deflated by average weekly earnings (AWE) to 1975-76 income levels. (Other research by Beswick et al, (1983:78 and 158) suggests that this may overstate degree of redistribution to lower income groups) - E60.
- \$7.8m Assistance to post-graduates through competitive, non-means-tested Postgraduate Awards Scheme. Distributed according to HES tertiary education utilisation pattern - E61.
- \$8.2m Other assistance to university and CAE students e.g. Pre-school Teacher Education Allowances Scheme and Commonwealth Technical Scholarships. Distributed according to HES tertiary education utilisation pattern - E62.

- \$20.2m Assistance to technical college students through TEAS. The socio-economic status of parents of TAFE students is lower than for university and CAE students (Anderson et al, 1983: Chapters 9 and 11). Socio-economic status assumed to be roughly correlated with income, so TEAS distribution, as shown in Department of Education (1981:22) for CAE and university students has been arbitrarily weighted towards lower income groups - E63.
- \$408.9m Grants to government schools in the states (and government schools, pre-schools and child care in the territories). Distributed according to HES public school student utilisation pattern. This procedure assumes government expenditure per student was equal. Schools Commission programs attempted to give greater benefits to resource-poor schools, but the relationship between resource-poor schools and the household incomes of their students is not clear cut. However, to the extent that Schools Commission programs did deliver greater benefits to students from lower income households, this procedure underestimated the extent of redistribution - E65 and 15.
- \$162.5m Grants to non-government schools in states and territories. Distributed according to HES independent school student utilisation pattern. (See note for preceding item) - E 66 and 16.
- \$65.0m Grants for pre-schools and child care in the States. Distributed according to utilisation pattern shown in ABS (1981: Tables 2 and 11), deflated by AWE to 1975-76 income levels - E67.
- \$28.5m Expenditure on joint projects for schools, school transport, Commonwealth Teaching Service, Schools Commission and other assistance. Distributed according to HES combined private and public school student utilisation pattern - E68.
- \$10.1m Assistance to school students, primarily through two means-tested schemes - the Adult Secondary Education Assistance Scheme (\$3.2m) and the Secondary Allowances Scheme, which assisted low income families to maintain children at school for final two years of secondary education (\$5.6m). Distribution estimated after consideration of likely variation from TEAS distribution, and income tests and levels of assistance applying to these other schemes - E69.
- \$41.4m Assistance for aboriginal education, through grants to states and non-government organisations for aboriginal education purposes, expenditure in Northern Territory, and on the Aboriginal Secondary Grants and Study Grants Schemes. Distributed as for social security expenditure on aboriginal services - E71.
- \$21.4m Assistance for adult and child migrant education. Distributed as for social security expenditure for migrants - E72.

- \$3.6m Assistance for secondary and tertiary education of children of specified ex-servicemen through Soldier's Children Education Scheme. Distributed as for HES war widow's pension utilisation pattern - E73.
- \$10.4m Assistance For Isolated Children Scheme, consisting of range of means-tested and non-means tested allowances (see Tomlinson et al, 1982:12). Estimated distribution after consideration of levels of assistance, means tests, and distribution of taxable income of male parent recipients in Western Australia and Queensland (Ibid:60) - E74.
- \$19.1m General administrative and other expenditure less recoveries. Distributed in accord with pattern for all preceding education expenditure - E75.

C. Health

- \$629.5m Medibank benefits, paid for medical services provided by private doctors to patients out of hospital and to private patients in public or private hospitals. No precise information about actual distribution of benefits by income available, and expenditure therefore distributed according to HES data on number of contacts during preceding three months by general population with doctors, specialists and other medical practitioners. Opit's study of privately insured clients suggested patients actually presenting to doctors received equal follow up medical treatment, and that measures of doctor contact therefore provided a good guide to medical service utilisation (1981a:76); however, costs rose slightly with socio-economic status, and so this procedure may overstate extent of redistribution - E78 and 23.
- \$86.0m Residual expenditure from pre-Medibank days on medical benefits and payments for general population (\$80.7m) and pensioners (\$5.3m). Distributed as for preceding item - E79.
- \$20.4m Diagnostic services e.g. pathology. Distributed as for Medibank benefits - E80.
- \$38.2m Medical treatment and allowances for ex-servicemen and women and their dependants. Distributed according to HES data on number of contacts during preceding three months with doctors, specialists and other medical personnel by those eligible for free medical treatment under Repatriation Medical Services Scheme. (Estimated distribution of such repatriation households determined after discussions with Department of Veterans' Affairs) - E81 and 20.

- \$1116.1m Medibank and other hospital benefits paid to states and territories.⁵ Information about actual hospital costs per patient by income group not available (Hickson, 1983:380). Therefore distributed according to HES data on number of nights spent in hospital by general population in preceding three months - E83 and 24.
- \$113.9m Expenditure on hospitals development program (\$107.2) and mental health facilities (\$6.7m) Distributed as for preceding item - E84.
- \$118.3m Hospital treatment of ex-servicemen and women and dependants. Distributed according to HES data on number of nights spent in hospital in preceding three months by those eligible for free hospital treatment under Repatriation Medical Scheme (estimated distribution of households determined after discussions with Department of Veterans' Affairs) - E85 and 21.
- \$178.3m Pharmaceutical benefits (from subsidised prescription costs) for general population. Distributed as for Medibank medical benefits - E87.
- \$108.4m Pharmaceutical benefits for pensioners. Distributed as for all social security pensions. This may understate degree of redistribution to poor. To gain pharmaceutical benefits pensioners must meet fringe benefits income test, which is stricter than that for pensions. Some 20 percent of pensioners are not eligible for fringe benefits, but it is not clear that all of these will belong to higher income households. The fringe benefits income test only applies to recipient's (or spouse's) income. HES data indicates that many pensioners live in higher income households e.g. with their children, or with other unrelated individuals (Collins and Drane, 1982:8). Many such pensioners would be entitled to fringe benefits - E88.
- \$30.3m Pharmaceutical benefits for ex-servicemen and women and their dependants. Distributed as for Repatriation Service medical treatment - E89.
- \$203.8m Nursing home benefits (\$195.7m) and other nursing home expenditure (\$8.1m). Distributed as for aged accommodation assistance provided through social security outlays - E91.
- \$7.7m Domiciliary care benefits, to assist with nursing care of elderly relatives at home. Distributed as for preceding item - E91.

5

In 1975-76 budget papers and in preceding years, health expenditure on the Territories was divided into two line items - 'Hospitals in the Territories' and 'Health Services in the Territories'. In 1976-77 Budget papers these two items were combined and actual 1975-76 expenditure could not therefore be identified for each item. The Department of Health was unable to provide a breakdown, and it has therefore been assumed that the estimated distribution in the 1975-76 Budget papers was in fact achieved.

- \$24.0m Nursing home and domiciliary nursing care for ex-servicemen and women. Distributed as for veterans' pensions - E92.
- \$101.9m Community health facilities and services (\$55.4m), treatment and prevention of tuberculosis (\$12.8m), health services in the territories n.e.c. (\$26.6m), and health program grants (\$7.1m). Distributed as for Medibank medical benefits - E93.
- \$24.4m Free dental services for primary school students. Distributed according to HES primary school students pattern - E94 and 11.
- \$21.5m Health services for aboriginals. Distributed as for social security expenditure on aboriginals - E95.
- \$51.0m Other medical expenditure, on medical research grants, public education campaigns, quarantine services etc. Distributed according to HES income shares - E96 and 2.
- \$79.6m General administrative expenditure, less recoveries. Distributed as for combined pattern for all other health expenditure - E97.

D. Housing

- \$251.4m Net advances to states under Commonwealth State Housing Agreement (CSHA) for provision of public housing for rental. Distributed in accord with data on new public housing tenants accommodated in 1979-80, deflated by AWE to 1975-76 income levels (Egan and Wall, 1983:238). Income test set at 85 percent of AWE, but only applied to main breadwinner's income; distribution therefore adjusted upwards to reflect leakage of assistance to higher two income families - E100.
- \$91.3m Net advances to states under CSHA for means-tested home purchase assistance. Distributed in accord with data on income of successful loan applicants in 1979-80, deflated by AWE to 1975-76 income levels (Egan and Wall, 1983: 238). Income test set at 95 percent of AWE, but only applied to main breadwinner's income; distribution therefore adjusted upwards to reflect leakage of assistance to higher two income families - E101.
- \$3.85m Grants to states for provision of public housing for rental. Distributed as for CSHA rental housing - E102.
- \$1.65m Grants to states for home purchase assistance. Distributed as for CSHA home purchase assistance - E103.
- \$1.3m Rental Assistance Grants - rent rebates for low income public housing tenants. Principally pensioners (Department of Housing and Construction, 1982:63); therefore distributed as for total Department of Social Security cash transfers - E104 and 37.

- \$72.4m Australian Housing Corporation (including the Defence Service Homes Scheme). The Corporation was to have established an innovatory range of housing programs (Carter, 1980:102), but was terminated in February 1976 by the new Liberal government. It therefore only actually achieved administration of the Defence Services Homes Scheme, which provided non-means-tested loans to eligible ex-servicemen and consequently primarily favoured those who already owned homes (Ibid:118). No information is available on the distribution by income of home-ownership and purchase by ex-servicemen, and expenditure has therefore been distributed in accord with HES pattern of home ownership and purchase for whole population - E105 and 29.
- \$6.6m Home Savings Grants, paid to eligible persons who accumulated savings over a specified period for the purchase or construction of their first home. Distributed according to HES data on receipt of the grants - E106.
- \$23.0m Net housing loans to savings banks to make additional housing finance available (repayments exceeded new loans). Distributed according to HES pattern for households in process of purchasing a home - E107 and 27.
- \$120.2m Net expenditure on construction of new houses and flats in the territories, and advances to individuals in the territories for house construction. Distributed as for preceding item - E108 and 27.
- \$2.8m Expenditure on Commonwealth Hostels and other housing for migrants. Distributed as for social security expenditure for migrants - E109.
- \$43.4m Expenditure on aboriginal housing. Distributed as for social security expenditure for aboriginals - E110.
- \$13.6m Other recoveries and repayments, overwhelmingly rent from government-owned dwellings in the territories. Distributed as for HES data on rental of government accommodation - E111 and 25.
- \$4.2m General administrative expenditure, plus other general housing expenditure. Distributed in accord with combined pattern for all preceding housing expenditures - E112.

E. STATISTICAL CALCULATIONS

HOUSEHOLD INCOME GROUP \$	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
<u>GENERAL CHARACTERISTICS (a)</u>													
1. Number of Households													
- '000	176.4	475.2	277.8	321.6	415.6	395.2	343.6	330.3	412.7	273.5	295.9	441.8	4159.5
- %	4.24	11.42	6.68	7.73	9.99	9.50	8.26	7.94	9.92	6.58	7.11	10.62	100
2. Total Household													
Money Income - \$m	353	2528	2063	2570	3924	4307	4483	4684	6758	5072	6393	13804	56937
%	0.62	4.44	3.62	4.51	6.89	7.56	7.87	8.23	11.87	8.91	11.23	24.24	100
Annual Average House-													
hold Money Income - \$	2001	5320	7426	7991	9442	10898	13047	14181	16375	18545	21605	31245	13688
Weekly Average House-													
hold Money Income - \$	38.48	102.31	142.81	153.68	181.57	209.58	250.91	272.71	314.91	356.63	415.49	600.86	263.24
3. Av. No. of Persons per													
Household	1.62	1.82	2.55	2.73	3.11	3.36	3.41	3.37	3.41	3.57	3.69	3.91	3.09
4. Av. No. of Adults per													
Household													
- Male	0.42	0.58	0.75	0.82	0.94	0.99	1.01	1.02	1.10	1.18	1.24	1.45	0.98
- Female	0.85	0.91	0.98	0.91	0.96	1.00	1.05	1.01	1.06	1.15	1.18	1.26	1.03
5. Av. No. of Children per													
Household	0.35	0.33	0.82	1.00	1.20	1.37	1.35	1.34	1.25	1.24	1.27	1.19	1.08
6. Av. No. Primary School													
Students per Household													
- Government	0.10	0.09	0.29	0.33	0.42	0.45	0.46	0.50	0.40	0.37	0.43	0.36	0.36
- Independent	0.03	0.01	0.06	0.09	0.08	0.09	0.10	0.10	0.11	0.13	0.15	0.11	0.09
7. Av. No. Secondary School													
Students per Household													
- Government	0.06	0.06	0.13	0.18	0.16	0.21	0.19	0.25	0.25	0.27	0.28	0.27	0.19
- Independent	0.02	0.01	0.04	0.02	0.04	0.03	0.06	0.04	0.10	0.06	0.09	0.15	0.06
8. Av. No. Tertiary													
Students Per Household	0.02	0.04	0.04	0.05	0.08	0.11	0.13	0.09	0.17	0.18	0.24	0.25	0.12
9. Primary School Student													
- Government: No	17640	42768	80562	106128	174552	177840	158056	165150	165080	101195	127237	159048	1475256 ^b
%	1.20	2.90	5.46	7.19	11.83	12.05	10.71	11.19	11.19	6.86	8.62	10.78	100
10. Independent: No	5292	4752	16668	28944	33248	35568	34360	33030	45397	35555	44385	48598	365797 ^b
%	1.45	1.30	4.56	7.91	9.09	9.72	9.39	9.03	12.41	9.72	12.13	13.29	100
11. - Total: No	22932	47520	97230	135072	207800	213408	192416	198180	210477	136750	171622	207646	1841053 ^b
%	1.25	2.58	5.28	7.34	11.29	11.59	10.45	10.76	11.43	7.43	9.32	11.28	100

HOUSEHOLD INCOME GROUP \$		1	2	3	4	5	6	7	8	9	10	11	12	
		Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	TOTAL
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
12.	Secondary School Students													
	- Government: No	10584	28512	36114	57888	66496	82992	65284	82575	103175	73845	82852	119286	809603 ^b
	%	1.31	3.52	4.46	7.15	8.21	10.25	8.06	10.20	12.74	9.12	10.23	14.73	100
13.	Independent: No	3528	4752	11112	6432	16624	11856	20616	13212	41270	16410	26631	66270	238713 ^b
	%	1.48	1.99	4.65	2.69	6.97	4.97	8.64	5.53	17.29	6.87	11.16	27.76	100
14.	-Total: No	14112	33264	47226	64320	83120	94848	85900	95787	144445	90255	109483	185556	1048316 ^b
	%	1.35	3.17	4.50	6.14	7.93	9.05	8.19	9.14	13.78	8.61	10.44	17.70	100
15.	All School Students													
	- Government: No	28224	71280	116676	164016	241048	260832	223340	247725	268255	175040	210089	278334	2284859
	%	1.24	3.12	5.11	7.18	10.55	11.42	9.77	10.84	11.74	7.66	9.19	12.18	100
16.	- Independent: No	8820	9504	27780	35376	49872	47424	54976	46242	86667	51965	71016	114868	604510
	%	1.46	1.57	4.60	5.85	8.25	7.85	9.09	7.65	14.34	8.60	11.75	19.00	100
17.	-Total: No	37044	80784	144456	199392	290920	308256	278316	293967	354922	227005	281105	393202	2889369
	%	1.28	2.80	5.00	6.90	10.07	10.67	9.63	10.17	12.28	7.86	9.73	13.61	100
18.	Tertiary Students: No	3528	19008	11112	16080	33248	43472	44668	29727	70159	49230	71016	110450	501698 ^b
	%	0.70	3.79	2.21	3.21	6.63	8.66	8.90	5.93	13.98	9.81	14.16	22.02	100
19.	Estimated No. of Repatriation Households Eligible for Free Hospital and Medical Treatment '000	1.6	48.8	31.4	9.7	20.2	7.8	2.5	4.2	13.6	4.4	2.9	10.5	157.6
	%	1.02	30.96	19.92	6.15	12.82	4.95	1.59	2.66	8.63	2.79	1.84	6.66	100
20.	-No. of Consultations with Doctors etc in Last 3 Months '000	28.2	95.0	138.9	54.7	62.3	31.6	20.6	23.1	45.4	16.4	14.8	26.5	557.5 ^b
	%	5.06	17.04	24.91	9.81	11.17	5.67	3.70	4.14	8.14	2.94	2.65	4.75	100
21.	-No. of Nights Spent in Hospital in Last 3 Months '000	14.1	38.0	2.8	6.4	12.5	35.6	-	-	49.5	-	-	-	158.9 ^b
	%	8.87	23.91	1.76	4.03	7.87	22.40	-	-	31.15	-	-	-	100
22.	Estimated No. of Other Households (Non-Repat.) '000	174.8	426.4	246.4	311.9	395.4	387.4	341.1	326.1	399.1	269.1	293.0	431.3	4002.0
	%	4.37	10.65	6.16	7.79	9.88	9.68	8.52	8.15	9.97	6.72	7.32	10.78	100

HOUSEHOLD INCOME GROUP \$		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
		Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
23.	-No. of Consultations With Doctors etc in Last 3 Months '000	335.2	1416.1	844.5	1109.5	1388.1	1454.3	1429.4	1103.2	1489.8	998.3	1124.4	1943.9	14636.7 ^b
	%	2.29	9.67	5.77	7.58	9.48	9.94	9.77	7.54	10.18	6.82	7.68	13.28	100
24.	-No. of Nights spent in Hospital in Last 3 Months '000	162.3	408.7	591.7	247.6	394.8	245.0	288.6	270.8	202.2	177.8	210.1	309.3	3508.9 ^b
	%	4.63	11.65	16.86	7.06	11.25	6.98	8.22	7.72	5.76	5.07	5.99	8.81	100
25.	No of Households Renting From: Government (Public Housing) ^(c) '000	15.52	41.82	21.11	24.44	22.03	20.95	13.06	12.55	21.46	14.22	6.21	9.28	222.65
	%	6.97	18.78	9.48	10.98	9.89	9.41	5.87	5.64	9.64	6.39	2.79	4.17	100
26.	No of Owner Occupied Households ^(c) :													
27.	- in process of purchase '000	14.29	38.49	65.28	75.58	157.10	149.39	156.34	150.29	196.03	129.91	159.79	238.57	1531.06
	%	0.93	2.51	4.26	4.94	10.26	9.76	10.21	9.82	12.80	8.48	10.44	15.58	100
28.	- owned outright-'000	107.43	289.40	107.51	124.46	116.37	110.66	92.08	88.52	87.08	57.71	79.01	117.96	1378.19
	%	7.80	21.00	7.80	9.03	8.44	8.03	6.68	6.42	6.32	4.19	5.73	8.56	100
29.	Total owner occupied '000	121.72	327.89	172.79	200.04	273.47	260.05	248.42	238.81	283.11	187.62	238.80	256.53	2909.25
	%	4.18	11.27	5.94	6.88	9.40	8.94	8.54	8.21	9.73	6.45	8.21	12.26	100
SOCIAL SECURITY & WELFARE EXPENDITURE														
30.	Age Pensions \$m	210.59	833.45	358.17	138.84	124.78	76.66	116.69	35.77	51.53	43.44	47.27	92.20	2129.4
	%	9.89	39.14	16.82	6.53	5.86	3.60	5.48	1.68	2.42	2.04	2.22	4.33	100
31.	Invalid Pensions \$m	19.05	130.64	58.46	24.18	46.74	42.22	18.44	13.15	16.94	7.45	12.54	17.30	407.1
	%	4.68	32.09	14.36	5.94	11.48	10.37	4.53	3.23	4.16	1.83	3.08	4.25	100
32.	Widows Pensions \$m	20.27	111.84	40.96	23.71	25.60	35.43	13.60	8.17	18.83	7.81	11.06	8.00	325.3
	%	6.23	34.38	12.59	7.29	7.87	10.89	4.18	2.51	5.79	2.40	3.40	2.46	100
33.	Unemployment Benefits \$m	10.48	62.03	132.23	37.15	51.44	34.07	35.66	29.04	18.96	30.22	19.79	52.88	513.9
	%	2.04	12.07	25.73	7.23	10.01	6.63	6.94	5.65	3.70	5.88	3.85	10.29	100
34.	Sickness, Special Benefits \$m	-	21.25	20.79	19.69	24.23	10.37	3.34	3.21	-	1.06	2.88	2.58	109.4
	%	-	19.42	19.00	18.00	22.15	9.48	3.05	2.93	-	0.97	2.63	2.36	100

HOUSEHOLD INCOME GROUP \$													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
35. "Other" Government Benefits (principally Supporting Parents)													
\$m	1.07	33.04	13.72	23.49	10.67	20.10	13.16	4.32	14.55	7.99	12.36	15.13	169.6
%	0.63	19.49	8.09	13.85	6.29	11.85	7.76	2.55	8.58	4.71	7.29	8.92	100
36. Maternity Allowances													
\$m	0.08	0.22	0.65	0.75	1.36	1.11	0.80	0.77	0.58	0.26	0.41	0.21	7.2
%	1.14	3.08	9.01	10.43	18.87	15.38	11.15	10.72	8.03	3.55	5.76	2.87	100
37. TOTAL DSS PENSIONS BENEFITS AND ALLOWANCES													
\$m	261.54	1192.47	624.98	267.81	284.82	219.96	201.63	94.43	121.39	98.23	106.31	188.30	3661.9
%	7.14	32.56	17.07	7.31	7.78	6.01	5.51	2.58	3.31	2.68	2.90	5.14	100
38. War Pensions													
\$m	2.22	21.86	51.96	33.43	25.58	21.26	10.67	8.49	8.36	6.87	3.00	11.88	205.6
%	1.08	10.63	25.27	16.26	12.44	10.34	5.19	4.13	4.08	3.34	1.46	5.78	100
39. War Widow Pensions													
\$m	-	40.03	25.85	7.22	12.00	4.76	0.82	4.24	18.21	6.15	-	15.24	134.5
%	-	29.76	19.22	5.37	8.92	3.54	0.61	3.15	13.54	4.57	-	11.33	100
40. Service Pensions													
\$m	5.12	79.33	42.93	11.49	39.01	12.81	4.86	3.83	7.20	0.92	9.59	1.84	218.9
%	2.34	36.24	19.61	5.25	17.82	5.85	2.22	1.75	3.29	0.42	4.38	0.84	100
41. TOTAL VETERANS' AFFAIRS PENSIONS AND ALLOWANCES													
\$m	7.34	141.22	120.74	52.14	76.59	38.83	16.35	16.56	33.77	13.94	12.59	28.96	559.0
%	1.31	25.26	21.60	9.33	13.70	6.95	2.92	2.96	6.04	2.49	2.25	5.18	100
42. Family Allowances (Child Endowment)													
\$m	3.85	8.04	15.48	20.44	29.68	32.55	27.05	25.01	30.48	20.17	23.82	28.89	265.5
%	1.45	3.03	5.83	7.70	11.18	12.26	10.19	9.42	11.48	7.61	8.97	10.88	100
43. Aged Persons Accommodation													
\$m	8.37	33.18	14.24	5.83	5.23	3.22	6.83	3.17	3.21	2.85	3.03	5.02	94.2
%	8.89	35.22	15.12	6.19	5.55	3.42	7.25	3.37	3.41	3.03	3.22	5.33	100
44. Home Care and Other Aged													
\$m	1.09	4.33	1.86	0.76	0.68	0.42	0.89	0.41	0.42	0.37	0.40	0.66	12.3
%	8.89	35.22	15.12	6.19	5.55	3.42	7.25	3.37	3.41	3.03	3.22	5.33	100
45. "Other" assistance to ex-servicemen and dependants													
\$m	0.01	0.25	0.22	0.09	0.14	0.07	0.03	0.03	0.06	0.02	0.02	0.05	1.0
%	1.31	25.26	21.60	9.33	13.70	6.95	2.92	2.96	6.04	2.49	2.25	5.18	100
46. Handicapped Children's Benefits													
\$m	0.02	0.04	0.07	0.09	0.13	0.15	0.12	0.11	0.14	0.09	0.11	0.13	1.2
%	1.45	3.03	5.83	7.70	11.18	12.26	10.19	9.42	11.48	7.61	8.97	10.88	100

		1	2	3	4	5	6	7	8	9	10	11	12		
HOUSEHOLD INCOME GROUP \$		Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	TOTAL	
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)	
47.	Handicapped Person's Facilities	\$m %	1.40 4.68	9.63 32.09	5.83 14.36	1.78 5.94	3.44 11.48	3.11 10.37	1.36 4.53	0.97 3.23	1.25 4.16	0.55 1.83	0.92 3.08	1.27 4.25	30.0 100
48.	Rehabilitation Services and "Other" Handicapped	\$m %	0.57 4.68	3.91 32.09	1.75 14.36	0.72 5.94	1.40 11.48	1.27 10.37	0.55 4.53	0.39 3.23	0.51 4.16	0.22 1.83	0.38 3.08	0.52 4.25	12.2 100
49.	"Other" Assistance to Widows and Supporting Mothers	\$m %	0.60 6.23	3.33 34.38	1.22 12.59	0.71 7.29	0.76 7.87	1.06 10.89	0.41 4.18	0.24 2.51	0.56 5.79	0.23 2.40	0.33 3.40	0.24 2.46	9.7 100
50.	Other Family Assistance	\$m %	0.04 1.45	0.08 3.03	0.15 5.83	0.19 7.70	0.28 11.18	0.31 12.26	0.25 10.19	0.24 9.42	0.29 11.48	0.19 7.61	0.22 8.97	0.27 10.88	2.5 100
51.	Unemployment Relief and R.E.D. Scheme	\$m %	3.13 2.04	18.52 12.07	39.47 25.73	11.09 7.23	15.36 10.01	10.17 6.63	10.63 6.94	8.67 5.65	5.68 3.70	9.02 5.88	5.91 3.85	15.78 10.29	153.4 100
52.	Australian Assistance Plan	\$m %	0.49 7.14	2.21 32.56	1.16 17.07	0.50 7.31	0.53 7.78	0.41 6.01	0.37 5.51	0.18 2.58	0.23 3.31	0.18 2.68	0.20 2.90	0.35 5.14	6.8 100
53.	Homeless Persons	\$m %	0.03 2.04	0.19 12.07	0.41 25.73	0.12 7.23	0.16 10.01	0.11 6.63	0.11 6.94	0.09 5.65	0.06 3.70	0.09 5.88	0.06 3.85	0.16 10.29	1.6 100
54.	Assistance for Migrants	\$m %	0.08 4.29	0.20 10.50	0.19 9.75	0.15 7.77	0.30 15.63	0.17 8.84	0.17 8.85	0.13 6.76	0.15 7.77	0.17 8.87	0.10 5.43	0.11 5.57	1.9 100
55.	Aboriginal Advancement Programs	\$m %	2.61 6.01	5.68 13.06	11.19 25.73	5.31 12.21	4.35 10.01	2.88 6.62	2.59 5.96	2.45 5.64	1.61 3.69	2.55 5.87	1.67 3.85	0.59 1.35	43.5 100
56.	General Administration and Other	\$m %	9.55 5.99	46.73 29.30	27.51 17.25	12.07 7.57	13.92 8.73	10.34 6.48	8.85 5.55	5.02 3.15	6.56 4.11	4.90 3.07	5.14 3.22	8.92 5.59	159.5 100
57.	TOTAL OTHER WELFARE	\$m %	27.99 5.28	128.28 24.21	103.75 19.58	39.32 7.43	46.68 8.81	33.69 6.36	33.16 6.26	22.10 4.17	20.73 3.91	21.43 4.04	18.49 3.49	37.07 6.43	529.8 100
58.	TOTAL SOCIAL SECURITY AND WELFARE	\$m %	300.72 6.00	1470.01 29.31	864.95 17.24	379.71 7.57	437.77 8.73	325.03 6.48	278.19 5.55	158.10 3.15	206.37 4.11	153.77 3.07	161.21 3.21	280.22 5.59	5016.1 100

HOUSEHOLD INCOME GROUP \$													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
EDUCATION EXPENDITURE													
59. Grants to Universities, CAEs and TAFE	\$m	7.10	38.46	22.43	32.58	67.29	87.89	90.33	60.18	141.88	99.56	143.71	223.48
	%	0.70	3.79	2.21	3.21	6.63	8.66	8.90	5.93	13.98	9.81	14.16	22.02
59. TEAS for CAE and University Students	\$m	6.13	10.63	11.52	11.54	10.22	9.88	9.54	5.61	5.04	2.45	2.17	4.77
	%	6.85	11.88	12.87	12.89	11.42	11.04	10.66	6.27	5.63	2.74	2.43	5.33
60. Postgraduate Awards	\$m	0.05	0.30	0.17	0.25	0.52	0.68	0.69	0.46	1.09	0.77	1.10	1.72
	%	0.70	3.79	2.21	3.21	6.63	8.66	8.90	5.93	13.98	9.81	14.16	22.02
61. Other CAE and University Student Assistance	\$m	0.06	0.31	0.18	0.26	0.54	0.71	0.73	0.49	1.15	0.80	1.16	1.81
	%	0.70	3.79	2.21	3.21	6.63	8.66	8.90	5.93	13.98	9.81	14.16	22.02
63. TEAS for TAFE Students	\$m	1.59	2.60	2.71	2.70	2.41	2.33	2.15	1.16	1.04	0.45	0.39	0.67
	%	7.85	12.88	13.41	13.38	11.92	11.54	10.66	5.74	5.13	2.24	1.93	3.33
64. TOTAL TERTIARY	\$m	14.93	52.30	37.01	47.33	80.98	101.49	103.44	67.90	150.20	104.03	148.53	232.45
	%	1.31	4.59	3.24	4.15	7.10	8.90	9.07	5.95	13.17	9.12	13.02	20.38
65. Government Schools	\$m	5.07	12.76	20.89	29.36	43.14	46.70	39.95	44.32	48.00	31.32	37.58	49.80
	%	1.24	3.12	5.11	7.18	10.55	11.42	9.77	10.84	11.74	7.66	9.19	12.18
66. Non Government Schools	\$m	2.37	2.55	7.48	9.51	13.41	12.76	14.77	12.43	23.28	13.98	19.09	30.88
	%	1.46	1.57	4.60	5.85	8.25	7.85	9.09	7.65	14.34	8.60	11.75	19.00
67. Pre-schools and Child Care in States	\$m	1.61	3.92	3.59	10.20	11.48	8.55	4.28	4.28	4.28	4.28	4.28	4.28
	%	2.47	6.04	5.52	15.69	17.66	13.15	6.58	6.58	6.58	6.58	6.58	6.58
68. Other School Expenditure	\$m	0.36	0.80	1.43	1.97	2.87	3.04	2.74	2.90	3.50	2.24	2.77	3.88
	%	1.28	2.80	5.00	6.90	10.07	10.67	9.63	10.17	12.28	7.86	9.74	13.61
69. Assistance to School Students (e.g., S.A.S.)	\$m	1.10	1.42	1.54	1.67	1.60	1.16	0.65	0.41	0.23	0.11	0.10	0.10
	%	10.90	14.10	15.20	16.50	15.90	11.50	6.40	4.10	2.30	1.10	1.00	1.00

HOUSEHOLD INCOME GROUP \$		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
		Under 2080	2080-4159	4160-5719	5720-7279	7280-8839	8840-10399	10400-11959	11960-13519	13520-15599	15600-17679	17680-20799	20800 & over	
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
70.	TOTAL SCHOOLS, PRE-SCHOOLS AND CHILD CARE	\$m 10.51 % 1.56	21.45 3.18	34.93 5.17	52.71 7.81	72.51 10.74	72.21 10.70	62.39 9.24	64.34 9.53	79.29 11.75	51.93 7.69	63.82 9.45	88.94 13.18	657.0 100
71.	Aboriginal Education	\$m 2.49 % 6.01	5.41 13.06	10.65 25.73	5.05 12.21	4.14 10.01	2.77 6.62	2.46 5.96	2.53 5.64	1.52 3.69	2.43 5.87	1.59 3.85	0.56 1.35	41.4 100
72.	Migrant Education	\$m 0.92 % 4.29	2.25 10.50	2.09 9.75	1.66 7.77	3.34 15.63	1.89 8.84	1.89 8.85	1.45 6.76	1.66 7.77	1.90 8.87	1.16 5.43	1.19 5.57	21.4 100
73.	Soldier's Children Education	\$m - % -	1.07 29.76	0.69 19.22	0.19 5.37	0.32 8.92	0.13 3.54	0.02 0.61	0.11 3.15	0.49 13.54	0.16 4.57	- -	0.41 11.33	3.6 100
74.	Isolated Children's Scheme	\$m 0.64 % 6.20	1.05 10.13	1.28 12.31	1.41 13.54	1.47 14.12	1.26 12.10	0.85 8.21	0.51 4.92	0.48 4.62	0.46 4.41	0.35 3.32	0.64 6.12	10.4 100
75.	General Administrative and Other	\$m 0.30 % 1.55	0.84 4.41	0.87 4.58	1.09 5.73	1.64 8.60	1.82 9.52	1.73 9.04	1.38 7.22	2.36 12.35	1.63 8.51	2.18 11.39	3.27 17.13	19.1 100
76.	TOTAL OTHER EDUCATION	\$m 4.35 % 4.54	10.62 11.07	15.58 16.25	9.40 9.80	10.91 11.38	7.84 8.18	6.96 7.26	5.78 6.03	6.52 6.80	6.58 6.86	5.28 5.51	6.07 6.33	95.9 100
77.	TOTAL EDUCATION	\$m 29.79 % 1.56	84.37 4.41	87.52 4.58	109.44 5.73	164.40 8.60	181.54 9.50	172.79 9.04	138.02 7.22	236.01 12.35	162.54 8.50	217.63 11.39	327.46 17.13	1911.5 100
HEALTH EXPENDITURE														
78.	Medibank Medical Benefits	\$m 14.42 % 2.29	60.87 9.67	36.32 5.77	47.72 7.58	59.68 9.48	62.57 9.94	61.50 9.77	47.46 7.54	64.08 10.18	42.93 6.82	48.35 7.68	83.60 13.28	629.5 100
79.	Pre-Medibank Medical Benefits	\$m 1.97 % 2.29	8.33 9.67	4.96 5.77	6.52 7.58	8.15 9.48	8.55 9.94	8.40 9.77	6.48 7.54	8.75 10.18	5.87 6.82	6.60 7.68	11.42 13.28	86.0 100
80.	Diagnostic Services	\$m 0.47 % 2.29	1.97 9.67	1.18 5.77	1.55 7.58	1.93 9.48	2.03 9.94	1.99 9.77	1.54 7.54	2.08 10.18	1.39 6.82	1.57 7.68	2.71 13.28	20.4 100

HOUSEHOLD INCOME GROUP \$													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	
	Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
81. Medical Treatment for Ex-servicemen etc													
\$m	1.93	6.51	9.52	3.75	4.27	2.17	1.41	1.58	3.11	1.12	1.01	1.81	38.2
%	5.06	17.04	24.91	9.81	11.17	5.67	3.70	4.14	8.14	2.94	2.65	4.75	100
82. TOTAL MEDICAL													
\$m	18.79	77.67	51.98	59.54	74.03	75.32	73.30	57.06	78.02	51.31	57.53	99.54	774.1
%	2.42	10.03	6.70	7.68	9.56	9.71	9.45	7.36	10.06	6.62	7.42	12.82	100
83. Hospital Benefits													
\$m	51.58	130.03	188.17	78.80	125.56	77.90	91.74	86.16	64.29	56.59	66.85	98.33	1116.1
%	4.63	11.65	16.86	7.06	11.25	6.98	8.22	7.72	5.76	5.07	5.99	8.81	100
84. Hospital Development Program etc.													
\$m	5.27	13.27	19.20	8.04	12.81	7.95	9.36	8.79	6.56	5.77	6.82	10.03	113.9
%	4.63	11.65	16.86	7.06	11.25	6.98	8.22	7.72	5.07	5.99	5.98	8.81	100
85. Hospital Treatment of Ex-servicemen etc													
\$m	10.49	28.29	2.08	4.77	9.31	26.50	-	-	36.85	-	-	-	118.3
%	8.87	23.91	1.76	4.03	7.87	22.40	-	-	31.15	-	-	-	100
86. TOTAL HOSPITAL													
\$m	67.44	171.59	209.45	91.61	147.68	112.35	101.10	94.95	107.70	62.36	73.67	108.36	1348.3
%	5.00	12.73	15.53	6.79	10.95	8.33	7.50	7.04	7.99	4.63	5.46	8.04	100
87. Pharmaceutical benefits for:													
(a) General Population													
\$m	4.08	17.24	10.29	13.52	16.90	17.72	17.42	13.44	18.15	12.16	13.69	23.68	178.3
%	2.29	9.67	5.77	7.58	9.48	9.94	9.77	7.54	10.18	6.82	7.68	13.28	100
88. (b) Pensioners													
\$m	9.46	40.76	17.33	7.07	7.47	5.84	5.64	2.16	3.31	2.22	2.69	4.46	108.4
%	8.73	37.60	15.99	6.52	6.89	5.39	5.20	1.99	3.05	2.05	2.48	4.11	100
89. (c) Ex-servicemen etc													
\$m	1.53	5.16	7.55	2.97	3.38	1.72	1.12	1.25	2.47	0.89	0.80	1.44	30.3
%	5.06	17.04	24.91	9.81	11.17	5.67	3.70	4.14	8.14	2.94	2.65	4.75	100
90. TOTAL PHARMACEUTICAL													
\$m	15.07	63.16	35.17	23.56	27.75	25.28	24.18	16.85	23.93	15.27	17.18	29.58	317.0
%	4.78	19.92	11.09	7.43	8.75	7.97	7.61	5.32	7.55	4.82	5.42	9.33	100

HOUSEHOLD INCOME GROUP \$		1	2	3	4	5	6	7	8	9	10	11	12	
		Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	TOTAL
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
91. Nursing Home Benefits etc and Domiciliary care Benefits	\$m	18.80	74.49	31.98	13.09	11.74	7.23	15.33	7.13	7.21	6.41	6.81	11.27	211.5
	%	8.89	35.22	15.12	6.19	5.55	3.42	7.25	3.37	3.41	3.03	3.22	5.33	100
92. Nursing Home Care etc for Ex-servicemen	\$m	0.31	6.06	5.18	2.24	3.29	1.67	0.70	0.71	1.45	0.60	0.54	1.24	24.0
	%	1.31	25.26	21.60	9.33	13.70	6.95	2.92	2.96	6.04	2.49	2.25	5.16	100
93. Community Health Facilities etc	\$m	2.33	9.85	5.88	7.72	9.66	10.13	9.96	7.68	10.37	6.95	7.83	13.53	101.9
	%	2.29	9.67	5.77	7.58	9.48	9.94	9.77	7.54	10.18	6.82	7.68	13.28	100
94. Free School Dental Service	\$m	0.31	0.63	1.29	1.79	2.75	2.83	2.55	2.63	2.79	1.81	2.27	2.75	24.4
	%	1.25	2.58	5.28	7.34	11.29	11.59	10.45	10.76	11.43	7.43	9.32	11.28	100
95. Health Services for Aborigines	\$m	1.29	2.81	5.53	2.63	2.15	1.42	1.28	1.21	0.79	1.26	0.82	0.29	21.5
	%	6.01	13.06	25.73	12.21	10.01	6.62	5.96	5.64	3.69	5.87	3.85	1.35	100
96. Other Medical Expenditure e.g., on Research	\$m	0.32	2.26	1.85	2.30	3.51	3.86	4.01	4.20	6.05	4.54	5.73	12.36	51.0
	%	0.62	4.44	3.62	4.51	6.89	7.56	7.87	8.23	11.87	8.91	11.23	24.24	100
97. General Administration Expenditure	\$m	3.45	11.32	9.65	5.67	7.82	6.65	6.44	6.13	6.60	3.45	4.78	7.73	79.6
	%	4.34	14.22	12.12	7.12	9.83	8.35	8.09	7.70	8.29	4.33	6.00	9.71	100
98. TOTAL OTHER HEALTH	\$m	26.81	107.42	61.36	35.44	40.92	33.69	40.27	29.69	35.26	25.02	28.78	49.17	513.9
	%	5.22	20.90	11.94	6.90	7.96	6.56	7.84	5.78	6.68	4.87	5.60	9.57	100
99. TOTAL HEALTH	\$m	128.11	419.84	357.96	210.15	290.38	246.74	238.84	198.55	244.91	153.96	177.16	286.65	2953.3
	%	4.34	14.22	12.12	7.12	9.83	8.35	8.07	6.72	8.29	5.21	6.00	9.71	100
<u>HOUSING EXPENDITURE</u>														
100. Advances to States for Rental Welfare Housing	\$m	32.48	32.48	41.51	35.15	25.52	24.26	14.45	14.45	10.46	8.07	7.06	5.51	251.4
	%	12.92	12.92	16.51	13.98	10.15	9.65	5.75	5.75	4.16	3.21	2.81	2.19	100

HOUSEHOLD INCOME GROUP \$		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
		Under 2080	2080- 4159	4160- 5719	5720- 7279	7280- 8839	8840- 10399	10400- 11959	11960- 13519	13520- 15599	15600- 17679	17680- 20799	20800 & over	
(% of Households)		(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
101. Advances to States for Home Purchase Assistance	\$m	1.10	2.15	2.19	11.25	16.08	16.42	16.08	10.72	5.50	4.26	3.63	1.92	91.3
	%	1.21	2.36	2.40	12.32	17.61	17.98	17.61	11.74	6.02	4.67	3.98	2.10	100
102. Grants to States for Rental Welfare Housing	\$m	0.50	0.50	0.64	0.54	0.39	0.37	0.22	0.22	0.16	0.12	0.11	0.08	3.85
	%	12.92	12.92	16.57	13.98	10.15	9.65	5.75	5.75	4.16	3.21	2.81	2.19	100
103. Grants to States for Home Purchase Assistance	\$m	0.02	0.04	0.04	0.20	0.29	0.30	0.29	0.19	0.10	0.08	0.07	0.03	1.65
	%	1.21	2.36	2.40	12.32	17.61	17.98	17.61	11.74	6.02	4.67	3.98	2.10	100
104. Rental Assistance Grants	\$m	0.09	0.42	0.22	0.10	0.10	0.08	0.07	0.03	0.04	0.03	0.04	0.07	1.3
	%	7.14	32.56	17.07	7.31	7.78	6.01	5.51	2.58	3.31	2.68	2.90	5.14	100
105. Australian Housing Corporation	\$m	3.03	8.16	4.30	4.98	6.81	6.47	6.18	5.94	7.04	4.67	5.94	8.87	72.4
	%	4.18	11.27	5.94	6.88	9.40	8.94	8.54	8.21	9.73	6.45	8.21	12.25	100
106. Home Savings Grants	\$m	-	-	0.22	0.26	-	0.95	0.27	2.37	0.82	-	1.53	0.18	6.6
	%	-	-	3.36	3.88	-	14.32	4.15	35.91	12.47	-	23.24	2.67	100
107. Net Housing Loans to Savings Banks	\$m	-0.21	-0.58	-0.98	-1.13	-2.36	-2.24	-2.35	-2.26	-2.94	-1.97	-2.40	-3.58	-23.0
	%	0.93	2.51	4.26	4.93	10.25	9.75	10.20	9.81	12.80	8.55	10.43	15.57	100
108. Housing in Territories	\$m	1.12	3.02	5.12	5.94	12.33	11.73	12.27	11.80	15.39	10.19	12.55	18.73	120.2
	%	0.93	2.51	4.26	4.94	10.26	9.76	10.21	9.82	12.80	8.48	10.44	15.58	100
109. Hostels and Other Migrant Housing	\$m	0.12	0.29	0.27	0.22	0.44	0.25	0.25	0.19	0.22	0.25	0.15	0.16	2.8
	%	4.29	10.50	9.75	7.77	15.63	8.84	8.85	6.76	7.77	8.87	5.43	5.57	100
110. Aboriginal Housing	\$m	2.61	5.67	11.16	5.20	4.34	2.87	2.59	2.45	1.60	2.55	1.67	0.59	43.4
	%	6.01	13.06	25.73	12.21	10.01	6.62	5.96	5.64	3.69	5.87	3.85	1.35	100
111. Recoveries and Repayments	\$m	-0.95	-2.55	-1.28	-1.49	-1.35	-1.28	-0.80	-0.77	-1.31	-0.87	-0.38	-0.57	-13.6
	%	6.97	18.78	9.48	10.98	9.89	9.41	5.87	5.64	9.64	6.39	2.79	4.17	100
112. General Administration	\$m	0.29	0.36	0.46	0.45	0.46	0.44	0.36	0.33	0.27	0.20	0.22	0.23	4.1
	%	7.15	8.89	11.36	10.99	11.21	10.78	8.87	8.12	6.64	4.90	5.37	5.73	100

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
113. TOTAL OTHER HOUSING (E101-111)	\$m 6.62	15.33	20.17	15.37	21.45	19.94	19.35	20.49	21.39	15.25	19.50	24.79	219.6
	% 3.01	6.98	9.18	7.00	9.77	9.08	5.81	9.33	9.74	6.94	8.88	11.29	100
114. TOTAL HOUSING	\$m 40.20	49.96	63.87	61.77	63.05	60.62	49.88	45.66	37.35	27.58	30.19	32.22	562.3
	% 7.15	8.88	11.36	10.99	11.21	10.78	8.87	8.12	6.64	4.90	5.37	5.73	100

- Notes: (a) In all cases totals may not add due to rounding procedures employed and limitations of HES data base.
(b) Totals derived by adding preceding 12 columns, rather than direct from data base.
(c) Derived from Neutze (1981:107) and HES data base.
(d) Results differ slightly from those in Harding (1983), principally due to the marginally different rounding procedure.

Source: Principally calculated from unpublished Household Expenditure Survey data from data base at University of New South Wales, and various other sources identified in Appendix 1: Sections A-D.

APPENDIX TWO - STATISTICAL SUPPLEMENT

TABLE 1: Average Tax Rates by Total Household Income, 1975-76

Range of Income	% of Households	Average Tax Rate
Under \$40	4.24	10.72
\$40-80	11.41	4.36
\$80-110	6.68	7.19
\$110-140	7.74	8.94
\$140-170	9.97	10.79
\$170-200	9.51	11.25
\$200-230	8.26	12.18
\$230-260	7.94	12.32
\$260-300	9.92	13.29
\$300-340	6.58	12.84
\$340-400	7.12	13.69
\$400 +	10.63	17.11

TABLE 2: Average Tax Rates by Per Capita Household Income, 1975-76

Range of Income	% of Persons	Average Tax Rate
Under \$30	12.68	7.3
\$30-50	26.07	8.7
\$50-70	22.03	11.3
\$70-100	18.18	13.0
\$100-130	9.86	13.6
\$130-160	5.51	13.7
\$160-190	2.39	13.8
\$190-220	1.40	16.6
\$220-250	0.80	18.1
\$250-280	0.47	26.4
\$280-310	0.14	21.6
\$310 +	0.47	29.6

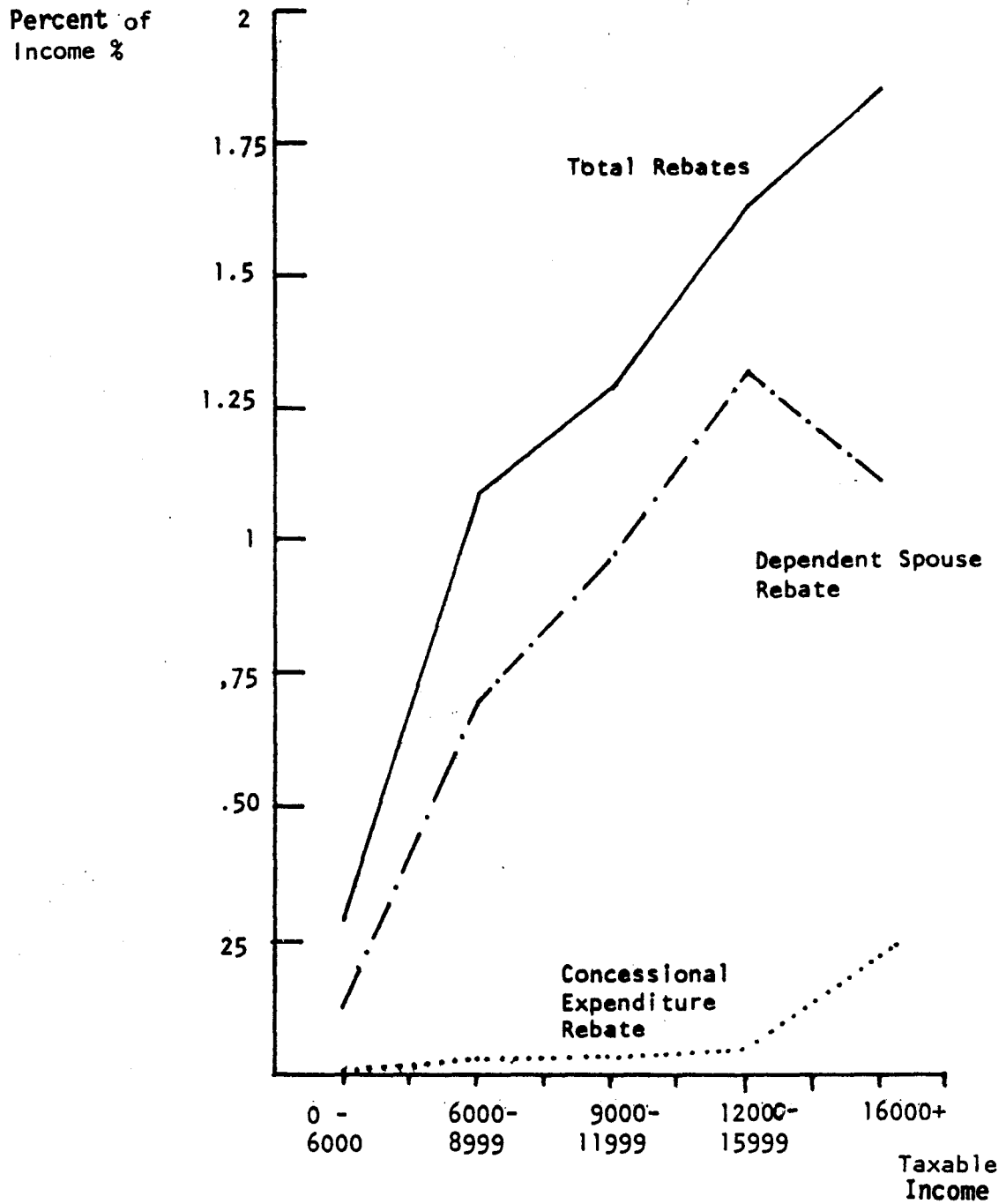
Source: Kakwani, (1983:26 and 28)

TABLE 3: Adjusted Comparison of Average Tax Rates Assessed Against Total and Per Capita Household Income

TOTAL HOUSEHOLD INCOME			PER CAPITA HOUSEHOLD INCOME		
Household Income	% of Households	Average Tax Rate	Per Capita Household Income	% of Persons	Average Tax Rate
\$0-65(a)	12.8	6.5	\$ 0-30	12.7	7.3
\$0-170	40.0	7.9	\$30-50	38.8	8.2
\$400 +	10.6	17.1	\$130 +	11.2	15.6

(a) One quarter of the households in the \$40-80 income bracket in Table 1 have been excluded (so that they equal approximately 12.7 percent when added to households in the lowest income group, and can then be compared with the lowest income bracket used in Table 2). It has thus been arbitrarily assumed that households in this bracket are evenly spread throughout the income range and all pay the same average tax rate. This is unlikely to be correct, but will suffice for the rough comparison required here.

Source: Recalculated from Kakwani (1983:26 and 28)

FIGURE 1: Incidence of Tax Rebates, 1980-81

Source: Commissioner of Taxation (1982:30).

TABLE 4: Distribution of Rebates by Taxable Income Group, 1980-81

Rebate	GRADE OF TAXABLE INCOME Percent					TOTAL (a) %
	\$0 \$6000	\$6000- \$8999	\$9000- \$11999	\$12000- \$15999	\$16000 +	
Spouse/Daughter						
Housekeeper	0.6	7.1	16.9	32.2	43.2	100
Sole Parent	2.6	22.7	31.1	26.1	17.5	100
All Dependant(b)	0.7	8.0	17.8	32.0	41.2	100
Concessional Expenditure	-	2.9	4.2	13.3	79.0	100
Zone/Overseas Forces	4.7	10.7	15.0	23.0	46.5	100
All Rebates	0.3	7.6	15.4	27.2	48.9	100

(a) Totals may not add to 100 due to rounding.

(b) Comprises spouse/daughter housekeeper, sole parent, parent/parent-in-law, invalid relative and housekeeper rebates.

Source: Commissioner of Taxation (1982b:30).

TABLE 5: Incidence of Tax Rebates, 1980-81(a)

	GRADE OF TAXABLE INCOME				
	\$0- \$6000	\$6000- \$8999	\$9000- \$11999	\$12000- \$15999	\$16000- +
<u>Percent of Taxpayers</u>	13%	18%	22%	23%	23%
<u>Spouse/daughter</u>					
<u>housekeeper rebate</u>	0.12	0.70	0.97	1.33	1.13
<u>Concessional</u>					
<u>expenditure rebate</u>	0.01	0.03	0.03	0.06	0.23
All Rebates	0.28	1.09	1.30	1.64	1.87

(a) That is, average value of rebate as percent of average taxable income for each income group.

Source: Commissioner of Taxation (1982:30).

TABLE 6: Comparison of Incidence of Rebates, 1975-76 and 1980-81

<u>1980-81</u>					
Income Groups	\$0- \$6000	\$6000- \$8999	\$9000- \$11999	\$12000- \$15999	\$16000- +
Cumulative Percent of Taxpayers	13.41	31.49	53.47	76.88	100
Rebates as Percent of Taxable Income (a)	0.28	1.09	1.30	1.64	1.87
<u>1975-76</u>					
Income Groups	\$0- \$3999	\$4000- \$5999	\$6000- \$7499	\$7500- \$9999	\$10000 +
Cumulative Percent of Taxpayers	13.15	32.51	51.72	76.72	100
Rebates as Percent of Taxable Income (b)	0.21	0.90	1.55	2.80	5.66

(a) Rebates comprise spouse/daughter housekeeper, invalid relative, parent/parent-in-law, housekeeper, sole parent, zone/overseas forces, and concessional expenditure rebates.

(b) Rebates comprise spouse/daughter housekeeper, other dependant, sole parent, zone/overseas forces, and concessional expenditure (only for taxpayers with concessional expenditure above \$1350). Excluded rebates are the student, other children, and general concessional rebates. Differs from results in Table 3.2, because rebates which existed in 1975-76 but not in 1980-81 have been excluded from the calculations.

Source: Commissioner of Taxation (1978:22, 24 and 96, 1982b:26 and 30).

TABLE 7: Incidence of Social Security and Veterans Affairs Cash Transfers
(value as Percent of Income)

HOUSEHOLD INCOME GROUP \$	1 Under 2080	2 2080- 4159	3 4160- 5719	4 5720- 7279	5 7280- 8839	6 8840- 10399	7 10400- 11959	8 11960- 13519	9 13520- 15599	10 15600- 17679	11 17680- 20799	12 20800 & over	TOTAL
(% of Households)	(4.24%)	(11.42%)	(6.68%)	(7.73%)	(9.99%)	(9.50%)	(8.26%)	(7.94%)	(9.92%)	(6.58%)	(7.11%)	(10.62%)	(100%)
Age Pensions	59.6	33.0	17.4	5.4	3.2	1.8	2.6	0.8	0.8	0.9	0.7	0.7	3.7
Invalid Pensions	5.4	5.2	2.8	0.9	1.2	1.0	0.4	0.3	0.3	0.1	0.2	0.1	0.7
Widows Pensions	5.8	4.4	2.0	1.0	0.7	0.8	0.3	0.2	0.3	0.2	0.2	0.1	0.6
Unemployment Benefits	3.0	2.5	6.4	1.4	1.3	0.8	0.8	0.6	0.3	0.6	0.3	0.4	0.9
Sickness & Special Benefits	-	0.8	1.0	0.8	0.6	0.2	0.1	-	-	-	-	-	0.2
Other Government Benefits (principally Supporting Parents)	0.3	1.3	0.7	0.9	0.3	0.5	0.3	0.1	0.2	0.2	0.2	0.1	3.0
Family Allowances	1.1	0.3	0.7	0.8	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.2	0.5
War Pensions	0.6	0.9	2.5	1.3	0.7	0.5	0.2	0.2	0.1	0.1	-	-	0.4
War Widows Pensions	-	1.6	1.3	0.3	0.3	0.1	-	0.1	0.3	0.1	-	0.1	0.2
Service Pensions	1.5	3.1	2.1	0.4	1.0	0.3	0.1	0.1	0.1	-	0.1	-	0.4

* In the 1975-76 HES, remaining cash transfers were grouped together in the "other government benefits" category. It has never been very clear exactly which payments were included within this category. In their studies of the incidence of cash transfers, Collins and Drane have placed expenditure items such as subsidies for delivered meals and personal care within the 'other government benefits' category (1982:56). However, as these subsidies were paid to organisations, not individuals, it seems unlikely that households participating in the HES survey would have considered them cash benefits. This study has therefore placed the following cash transfers in this category - supporting mothers benefits, handicapped child's allowance, sheltered employment allowances, orphan's pensions, funeral benefits, telephone rental concessions and structural adjustment assistance. Maternity allowances were not included in the table, as they did not even amount to 0.1 percent of income.

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