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A HISTORICAL PERSPECTIVE

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PROGRESSIVE PERSONAL INCOME TAX - A HISTORICAL PERSPECTIVE

Interest during the 1987 federal election campaign in flatter rate income taxation in Australia, whether by further rate scale simplification of the 1986 United States tax reform variety, or linear income taxes, or fully proportional income taxes, makes it useful to review the historical record with respect to income tax progression. Such a retrospective investigation is particularly illuminating because Australian tax reform debate is only a reflection of the international tax reform experience which during the 1980s has concentrated on personal income tax rate simplification, lowering tax rates, particularly maximum marginal rates, sometimes in the context of income base broadening or by shifting the relative weight of taxation from income to consumption expenditure taxation. This last strategy has often involved the introduction of a new broad based consumption tax, generally a value added tax. This change in attitude to the nature and role of personal income tax in a revenue system implies a remarkable turn around from the dominant view on this tax held during the 1950s and 1960s which in itself reflected the steady growth of progressive personal income taxation from the start of the twentieth century.

This *volte face* on progressive income tax can be explained by a growing realisation of a number of shared problems with income tax which were identified by the many tax commissions which reported from the 1970s onwards. These international findings on the defects of income taxation were remarkably similar despite substantial diversity in the economic, social and tax structures of the countries in which they reported. Shared problems of personal income tax can be summarised as follows: increased complexity of the legislation which raised both administrative and compliance costs; unfair distribution of tax burdens from exemptions or preferential treatment of particular classes of income which conflicted with equity (horizontal and vertical) and lowered tax morality; high marginal tax rates which distorted economic decisions with respect to work, saving behaviour and entry into the `black economy' and, where corporate tax rates were unaligned with the maximum personal income tax rate, business organisation. Such problems had been recognised by the Carter Commission (1966) but became more pressing in the subsequent decades, partly because changed economic circumstances, including higher inflation rates in the 1970s, made them quantitatively more important (Owens, 1987, pp. 3-5; Tanzi, 1987, pp. 3-8).

The focus of this discussion is on changing thought and practice in progressive income taxation to provide historical background to this shift in attitudes on the subject. It appropriately concentrates on Australian experience. Of necessity, the survey has to be a brief, and therefore selective presentation of the main ideas evolved during the long debate on the principle of tax progression in the literature. Likewise, selective observations on overseas experience in the practical adoption of the idea of progressivity, cannot be avoided in this account. Fortunately, there is a substantial, secondary literature on this subject, from which this brief treatment can be usefully supplemented.[1]

The discussion can be conveniently subdivided into a number of parts. One presents a review of Australian past practice by providing a sketch of the development of progressive taxation in this country from the 1890s to 1980s. Up to 1942 this sketch covers State as well as federal experience. This is followed by an outline of the historical development of the case for progressive taxation, highlighting the classical arguments for and against this approach to tax assessment. A final section draws some conclusions of relevance to the contemporary debate on the appropriate rate structure. By way of introduction, a brief definitional overview of the concept of progressive taxation is provided.

1. THE MEANING OF TAX PROGRESSION

Musgrave and Musgrave (1984, p. 360) provide a straightforward definition of the distinction between progressive, proportional and regressive taxes: "A tax is progressive if the ratio of tax to income rises when moving up the income scale, proportional if the ratio is constant, and regressive if the ratio declines". As the Musgraves (1984, pp. 360-3) also point out, progression therefore exists whenever average tax rates rise with income levels. Defining the degree of progression is less straightforward and there is in fact no single correct way of measuring it. Various measures may be applied of which the more important are the ratio of change in effective rate to change in income, the ratio of percentage change in liability to percentage change in income and, thirdly, the ratio of percentage change in after-tax income to percentage change in before-tax income. The third of these measures depends therefore on the level as well as the slope of average rate curve.

A number of implications of this approach to defining progression may be mentioned. First, it is general in the sense that it can be applied to all taxes either taken single or in combinations. Second, it is specific since it measures liability against income and not against what some may regard as more appropriate (and more complex) indicators of economic capacity to pay tax. In addition, this measurement and definition involves defining income itself, so that measures of progressivity are not immune to changes in the definition of income used in the tax base. Third, the notion of progressivity is a wide one covering all cases where average rates rise. It applies therefore even if there is only one positive rate in the rate scale greater than zero. Progression goes therefore beyond a graduated rate structure, as the term was applied in English terminology particularly during the nineteenth and early twentieth century. Likewise, it encompasses the notion of a degressive tax which Seligman (1908, p.4) defined as the situation where "the tax rate may increase up to a certain amount, but remain constant beyond that fixed point ... implying progression up to a definite limit, and proportion thereafter" (cf. Shehab, 1953, p.4, who also uses the term).

For the purpose of this discussion, average rate progression will be taken as a sufficient condition for a progressive income tax. This arises once there is a system of two marginal tax rates of which one may be zero (the linear income tax). It likewise embraces structures containing a graduated rate scale of two or more steps up to the scheme of almost continuous graduation, devised for Australia by Commonwealth Statistician Sir George Knibbs, at which each additional unit of income attracted a slightly higher marginal rate up to a specified maximum (Carslaw, 1941-47, p.330). The degree of progression can vary substantially between these sub-species of progressive income taxation, though as already indicated, it is difficult to generalise this point. A proportional income tax is defined as a tax where average and marginal rates are equal for all levels of income, that is, no income is exempt, a condition necessary to distinguish it from the linear income tax with a single marginal tax rate for all income above the level of income exempted. Such a genuinely flat tax has never been seriously put forward in recent Australian tax debate, except by the ignorant or the hyprocritical. In many respects, therefore, the tax debate during the 1987 federal election was over the acceptable degree of progression as here defined rather than the principle of progression itself.

One further definition issue needs to be raised. In the debates about progressive taxation in England during the nineteenth century, three strategies to introduce progression were identified (see Shehab, 1953, p.5). The first was to differentiate rates in favour of the temporary income from personal exertion (the only source of income for the labouring classes) and apply a higher rate scale to the more permanent property income which was the major income source of the wealthy. Such discrimination persisted in Australia till the 1950s, in England some vestiges of it remained extant until more recently. Secondly, there was the strategy of exempting a minimum level of income from tax, often determined by the estimated necessary minimum subsistence required for the tax unit, taxing the surplus income either at a single rate (that is, in the form of what is now called the linear income tax), or, the more common practice in actual early income tax systems, gradually eliminating the benefit of the tax free threshold over an intermediate range of income until at a specific, relatively high level of income, the whole of that income was taxed proportionately at the legislated single rate. This method had the advantage of eliminating the vast majority of the working population from liability to income tax, a convenience which disappeared when government's financial requirements during the second world war combined with the device of collection at source (pay as you earn) started to tax virtually all income recipients. Finally, there was the graduated scale where successive slices of income (or property) attracted gradually increased rates. This includes situations where, as in Australia from the 1920s to the 1960s, the slices became so small over the greater part of the operational income range that it is possible to speak of continuous progression. As already indicated, the overwhelming tendency in international tax practice of the 1970s and 1980s has been to reduce the number of discrete steps in a graduated rate scale.

2. AUSTRALIAN EXPERIENCE

Seligman (1908, p. 124, and see also pp. 92-100) singled out Australia and Switzerland as examples of "the most democratic countries" in which "the tendency towards progressive taxation" is particularly on the increase. These developments, as contemporary observers remarked, neither weakened the institution of private property nor had driven away any capital, contrary to contemporary fears (for example, `Dilke, *Problems of Greater Britain*, cited by Seligman, 1908, p. 124n). In fact, Australian economic discussion during the second half of the nineteenth century paid relatively little attention to the income tax. Land taxation and taxes on trade were the great tax reform issues of this era (see Goodwin, 1966, chapters 1, 2 and 4). What opinion there was on the income tax appears to have been divided. Hearn, Melbourne's Foundation Professor of Political Economy (1864, p.434) argued for example: "On both jural and on industrial principles therefore the proper mode of taxation is an income tax properly levied on every person according to his means. This method is consistent with natural justice, and causes the least possible interference with industry." Following Mill, Hearn advocated a proportional income tax. On the other hand, Foxall (1888, p.45) in one of the few articles devoted to general taxation issues in the *Australian Economist*, described income tax as advantageous in theory but "impossible to collect with any approach to equality and justice ... Practically it operates as a tax upon the man's honesty and truthfulness". Other views reported in the *Australian Economist* supported a linear income tax of the type New South Wales introduced in 1895 (Walker, 1889, p. 190).

Nevertheless, by the 1890s Australian states had introduced all three strategies of progressive income taxation which were discussed in England during the nineteenth century (Shehab, 1953, p.5). South Australia in 1884 and Tasmania in 1894 introduced income taxes with differential rates on classes of income. The South Australian income tax levied 3d in the £ on income from personal exertion and 6d in the £ on the property income (1.25 and 2.5 per cent respectively); Tasmania levied 8d in the £ on income from personal exertion and 10d in the £ on that derived from property and on the income from companies (3.3 and 4.17 per cent respectively). In 1895 New South Wales introduced a second variety in the form of what would now be called a linear income tax. It exempted the first £200 and taxed the remainder at 6d in the £ (2.5 per cent). Victoria in 1895 introduced the first Australian income tax with a graduated rate scale, the most progressive form. This rate scale was as follows:

income in £	rate d. in the £	per cent
below 200	0	0
201 - 1,200	4d	1.7
1,201 - 2.000	6d	2.5
over 2,000	8d	3.3

(Seligman, 1908, p. 97, Coghlan, 1897, p. 867, Van den Driesen and Fayle, 1987, n.29.)

By the start of the twentieth century, Queensland was likewise using progressive income taxation, with a graduated rate scale differentiating between income from exertion and income from property. Original income tax states, like Victoria, changed their rate scale on occasion, by adding further steps to enhance the degree of progression (Seligman, 1908, pp. 98-9). A survey of Australian income tax practice in 1921 (*Commonwealth Year Book*, 1921, pp. 722-33, esp. 730-3) shows that by then all States were levying individual income taxes with rate scales graduated in varying degrees. These invariably differentiated between income from exertion and income from property but generally speaking, applied a single rate of tax to company income.[2]

As the *Commonwealth Year Book* (1921, p. 722) also showed, the Commonwealth government had by then been levying an income tax since 1915, when legislation for its imposition was introduced by Billy Hughes, the Attorney General in the Fisher Labor Government. From August 1915 until 1942, when uniform income tax legislation was passed during the second world war, income taxation was levied in Australia at both the State and federal level, an instance of vertical tax overlapping of considerable importance. The explicitly stated purpose of the new federal income tax was its need to assist in meeting the growing burdens from Australia's participation in the first world war, but Hughes also defended its introduction as an "instrument of social reform". According to Hughes, both reasons indicated that the new tax should not be a light one and that it should be a sharply graduated tax, "distinguishing between incomes in such a way that the rate on small incomes is very much less than the rate on large incomes" with the tax rate increasing on an even scale "so that each additional £ 1 of taxable income bears a higher rate of tax than that which precedes it". The first £156 of taxable income from personal exertion was exempt and the full value of this exemption remained operational until levels of £500 were reached. It was then gradually removed and disappeared at levels of £1000 and over. Irrespective of income levels, exemptions of £ 13 were allowed for each child, a figure equivalent to the child allowance then payable to war widows. These proposals implied marginal rates of 2.78 per cent at £300, rising to a maximum of 25 per cent at incomes in excess of £6,500 (an income level applicable to considerably less than 0.1 per cent of the estimated income earning population). Information on estimated 1911 income distribution tabled with the second reading speech also showed that the vast majority of adults would have been exempt from the tax and that three quarters of the estimated tax paying population would have benefited from the full tax threshold. A separate and higher rate structure applied to property income. It is also interesting to note that Hughes defended the steep degree of progression implied in the tax from both comparisons with British tax practice and by pointing to the heavy relative indirect tax burden from customs and excise paid by low income groups and the other financial disadvantages they experienced relative to more wealthy sections of the community

(Commonwealth Parliamentary Debates, hereafter CPD , Vol. 78, pp. 5844-54).

There were few basic changes to the federal income tax rate structure over the first quarter century following its introduction. In 1931 the property income tax schedule was revised to make its degree of progression depend on the same principle as that used for calculating rates on income from personal exertion. In 1940 rate changes curtailed the range of continuous progression for both property income and income from personal exertion to incomes between £400 and £1500. Between 1915 and 1931 such progression had been applied up to £7600 for income from personal exertion and £6500 for property income, while from 1931 to 1940 the relevant range had been lowered to finish at a maximum of £6900 for income from personal exertion and £3700 for property income. Subsequent rate changes during the second world war and the period of post-war reconstruction maintained specific income intervals to which continuous progression applied, but raised the rate scale in such a way that at the height of government taxation demands for war finance in 1943, the maximum marginal tax rate had risen to ninety per cent (Carslaw, 1941-47).

Adjustments to income tax liability did not of course only arise from formal changes to the rate structure. Over the period of the first world war and its subsequent post-war reconstruction stage (the early 1920s), tax liability was increased by percentage surcharges (25 per cent in 1916, 30 per cent in 1918 and a modest 5 per cent in 1920) and were lowered during the 1920s in a similar manner (by 10 per cent in 1922 and 1924, by 12.5 per cent in 1925). Sometimes, as in the first 1929 Scullin budget, such surcharges were applied on their own graduated basis, for example, by adding ten per cent to tax liability for those on incomes between £201 and £1500, fifteen per cent for those between £1501 and £3000 and a surcharge of twenty per cent for those with incomes greater than £3000 (CPD, Vol. 122, p. 118). Adjustments were also made by varying the tax threshold, lowered from £150 to £100 in 1916 but raised again in stages to £300 in the income tax reduction policy of the Bruce-Page governments, and by variations in the child exemption limit which was raised to £26 in 1916 and £50 in the early 1920s. Finally, tax liability was adjusted by base changes through eliminating specific income forms from taxation (of which the removal from the tax base of inputed rent from owner-occupied dwellings in 1923 was clearly the most significant) but which also included extending concessional treatment to gifts to charities, expenditures for medical purposes and on rural investments such as fencing, deforrestation and water conservation.

During the 1920s, the Bruce-Page governments frequently promised to abolish federal income tax in return for abolition of the *per capita* grants of 25 shillings ($2.50) the federal government was then paying to the States. Such a policy was, however, never implemented. By 1928 all States and the federal government were still levying their own income taxes, which all differentiated between income from personal exertion and income from property and which also reflected considerable variations in the degree of progression over the various income ranges. Average tax rates for ranges of personal income from exertion for single tax payers are shown in Table 1. These reflect the vast differences in relative tax burdens between the states as well as the average relative burden of federal and state tax combined. This picture of income tax burdens can be compared to graphs of the rate schedules for Australian federal income tax from the 1940s, showing average and marginal rates of tax (provided in the appendix).

In 1942, war requirements introduced uniform income taxation and ended the tax overlapping inherent in separate federal and State income taxes with their differing rate structures. (Prest and Mathews, 1980, chapters XXI-XXIV reproduce many of the relevant papers on this subject.)

After the post-war reconstruction period and the defeat of the Chifley Labor Government in 1949 a number of important changes in the income tax rate scale were effected. In 1950 the smooth rising marginal tax rate which had been such a unique feature of Australia's income tax legislation were replaced by discrete marginal steps in line with the practice of most other income tax rate systems.[3] In 1953 the separate rate schedule for property income was abolished and a rate scale introduced which lasted for almost the next two decades. When necessary, tax liability (as in the first decades of income tax

TABLE 1: Average Tax Rates Personal Income: Unmarried Tax Payer 1928

Income	NSW	VIC.	QLD.	S.A.	W.A.	TAS.	Average all states	Federal	Total
£	%	%	%	%	%	%	%	%	%
200	-	-	-	2.1	0.75	1.25	0.7	-	0.7
250	-	0.36	-	2.3	0.84	1.44	0.84	-	0.84
300	-	0.63	0.6	2.5	0.93	1.60	1.0	-	1.0
400	0.925	0.925	1.5	2.85	1.15	1.875	1.55	0.525	1.56
500	1.5	0.944	2.44	3.16	1.34	2.04	1.94	0.96	1.95
600	1.9	2.42	3.25	3.46	1.53	2.18	2.45	1.35	3.8
800	2.475	2.45	4.69	4.025	1.91	2.50	3.00	2.10	5.1
1 000	2.90	2.75	6.00	4.58	2.31	2.81	3.56	2.73	6.29
1 200	3.23	2.93	6.60	5.12	2.69	3.13	3.95	3.38	7.33
1 500	3.64	3.11	7.50	5.91	3.28	3.59	4.51	3.88	8.39
2 000	4.22	3.56	9.0	7.24	4.25	4.38	5.41	4.73	10.14
3 000	5.22	3.75	12.0	9.86	6.19	5.94	7.16	6.41	13.57
4 000	6.13	3.88	15.0	12.47	8.14	6.23	8.64	8.10	16.74
6 000	7.88	4.17	16.0	15.39	12.0	6.65	10.35	11.48	21.83
10 000	10.61	4.27	16.8	15.48	13.33	7.16	11.28	17.25	28.53
20 000	12.81	4.35	17.4	15.55	13.33	7.54	11.83	22.13	33.96
40 000	13.9	4.39	17.7	15.59	13.33	7.73	12.11	24.56	36.67

Source: Calculated from Murphy (1928), p. 279.

experience) was adjusted by flat percentage surcharges or rebates of either 2 1/2 or 5 per cent. During the 1970s the effects of inflation on this unvaried rate scale induced a series of rate simplifications in 1970, 1973, 1975 and 1977 leading up to the rate restructuring of the 1980s (1984, 1985 and 1987) of the Hawke Labor Government. These are illustrated in graphs given in the Appendix.

The pattern of these rate scale simplifications was as follows. First the number of steps at which new marginal tax rates were introduced was steadily reduced from nearly 30 at the start of the 1950s to 13 in November 1974, seven in 1975, three in 1977, five in 1984 and four from 1987. At the same time the tax exempt threshold was gradually raised from $210 to $1040 in 1971, to $2520 in 1975, $3402 in 1977, $4595 in 1984 and $5100 from 1986, a much more varied change if examined in real terms. In terms of 1986 dollars, the $210 threshold of 1959 is the equivalent of $1214; the 1971 $1040 becomes $4291; the 1975 $2520 becomes $6769, the 1977 $3402 becomes $7170 and the 1984 $4549 converts to $5348. In short, the real value of the threshold rose rapidly during the 1970s but has fallen from the rate restructuring initiated by the Hawke Labor government. Minimum marginal rates changed with the threshold from 1.3 per cent to 4 per cent in 1954-55, then, as temporary aberrations, reduced to 3 per cent in 1970-71 and 2 per cent in 1973-74, sharply increased to 20 per cent in 1975, 32 per cent in 1977, with subsequent adjustments to 30 per cent in 1982, 25 per cent in 1984, and 24 per cent in 1986. Variations in maximum marginal rates over this period with the threshold at which it became effective expressed as a multiple of average earnings, are given in Table 2.

TABLE 2: Australian Personal Income Tax Maximum Marginal Rates from 1950 to 1987

Year	Maximum Rate	Threshold	As a Multiple of Average Earnings
1950	75	20 000	18.9
1953	70	32 000	20.1
1955	66.7	32 000	18.7
1969	66.7	32 000	8.4
1970	66.7	20 000	4.8
1972	66.7	40 000	8.3
1974	67	40 000	5.8
1975	65	25 000	2.8
1977	60	32 000	2.8
1984	60	35 000	1.7
1986	55	35 000	1.6
1987	49	35 000	1.5

Source: Annual Reports, Commissioner of Taxation: *Commonwealth Year Books* (various issues)

What rationale was offered to justify these changes in the rate scale? The most fundamental changes of the early 1950s were explained by a desire to simplify the income tax calculation for taxpayers (an appeal perhaps to Stamp's reference to Smith's certainty principle in this context?) and to lower overall income tax liability. The more frequent changes of the 1970s were largely explained in terms of the unintended consequences of inflation on personal tax liability, but indexation of the rate scale, although recommended by the Asprey (1975, chapter 6), The Mathews Committee (1975) and the Campbell Committee (1981, chapter 17), was rejected by the government as a permanent policy (see Morgan, 1983). The 1977 changes, and again those of 1986 and 1987 were defended on the ground of giving additional incentives to high income earners, and in addition by appeals to the incentives to increased avoidance and evasion given by too high rates . The rationale for combining a higher threshold with higher initial marginal tax rates which was likewise a feature of post 1970 reforms was fully explained in the discussion on the rate scale in the Asprey Committee Report (1975, chapter 14). In addition, rate scale simplification which brought the vast majority of taxpayers into a standard tax rate regime (of around 30 per cent) was, perhaps wrongly, defended in terms of administrative simplifications associated with tax unit problems (aggregation of income across households becomes less important when the vast majority of taxpayers face a uniform rate) and tax averaging. Unofficial attitudes to tax scales varied considerably. Already during the 1950s, progressive income tax scales had been attacked by the business community as inflationary, as inimical to growth and as disincentives to work, thrift and risk taking (e.g. Mountain, 1953) but many academics continued to give enthusiastic support for a considerable degree of progression (Downing, Arndt, Boxer and Mathews, 1964; McFarlane, 1968). A change in attitude is signalled by the cautious proposals for more modest progressivity by the Asprey Committee (1975, chapters 4, 14). The increasing drive towards flatter taxation from the mid-1970s onwards is surveyed in Groenewegen (1983, pp. 216-9) and the *Draft White Paper* (1985, pp. 110-12). Before drawing a number of specific conclusions from this factual overview of progressive personal income taxation in Australia over the last hundred years, some discussion is provided of the theoretical arguments for and against income tax rate progression in the economic literature, which also reflected changes in overseas economic practice.

One feature of the saga of Australian personal income tax development needs to be emphasised, however, before reviewing the theoretical debates on the advantages and disadvantages of tax progression. This is the transformation of the tax into a mass tax during the 1940s as a result of the financing requirements of the second world war. Prior to uniform income taxation (the one partial exception being the first world war period from 1916 to 1920), generous exemption limits were designed to eliminate the vast bulk of income recipients from the need to file income tax returns. This changed permanently during the second world war. Only from the mid-70s, rises in the threshold once more started to eliminate significant proportions of taxpayers from the need to file returns. A number of implications of this aspect of the change in progression need to be noted. First is the impact on acceptability of the income tax as a social instrument for income redistribution. When it was primarily an instrument to even out aggregate tax liability at what were then effectively upper income levels (a countervailing distributional influence to the substantial tax burdens from customs and excise faced by the working classes), this distributional objective was achievable without resorting to the very high marginal rates which came to the fore during the second world war. The conversion of the tax into a mass tax from the pressure of war finance qualitatively altered its original distributive functions, and altered the terms of the trade-off between fairness and efficiency which underlay its original introduction by the massive rise in rates it induced. Secondly, and a feature of rate simplification which preserves the revenue yield of the tax, high initial marginal rates changed the tax from a specific, and supplementary device to secure vertical equity objectives, to a very efficient revenue raising machine (particularly where tax liability was collected at source) in which equity considerations increasingly became secondary objectives. For example, during the 1980s horizontal equity considerations were virtually completely eliminated from the income tax in the interest of tax yield - a process started by Hayden in 1975 when his tax reforms introduced an automatic standard concessional rebate as an effective way to raise the tax threshold. Likewise, the vertical equity objectives which inspired the introduction of the income tax with a progressive rate structure (as one tax of many) are increasingly eliminated to enhance the alleged administrative simplicity from a flatter rate structure designed mainly to raise substantial revenue from the tax. Rate scale simplification in combination with base broadening makes it difficult, however, to generalise on the vertical equity implications of the post-1985 changes apart from describing them as anomalous, sometimes perverse and continuing to bear rather excessively on wage and salary earners.

3. THEORY AND PRACTICE OF THE IDEA OF PROGRESSION

As Seligman (1908, pp. 11-12) following Walker (1888, p.498) indicates, it appears that progressive taxation made its debut in Athens in the time of Solon around BC 596. Although sporadic use of the principle of progression in taxation is visible in the French and English graduated poll taxes of the late middle ages (Seligman, 1908, esp. pp. 14-15) the first use of a graduated scale for an income tax occurs in the Florentine Republic during the fifteenth century. For 1480, its rate scale varied in nine steps from seven to 22 per cent (Seligman, 1908, pp. 22-3). The distinguished Florentine historian and publicist, Guicciardini (*La Decima Scalata* in Guicciardini, 1867, X, pp. 553 ff) wrote two remarkable treatises in which arguments in favour and against tax progression were set out. Major stress was laid on the argument "that progressive taxation will lessen the disparity of fortunes and prevent the excessive accumulation of wealth" and that it therefore serves as an important instrument of social policy (cited in Seligman, 1908, pp. 134-5). Subsequent centuries saw little further discussion of the notion of progression, and during this period, it was even more rarely practised. Only with the revolutionary ferment of the second half of the eighteenth century did the idea seriously revive.

Three views in favour of progression from this age of revolution may be used as illustration. Other examples can be found in Seligman (1908, esp. pp. 136-8). Paine (1792, pp. 137-9) in the second part of *The Rights of Man*, proposed an exceedingly steep progressive tax on landed estates to improve equality in land ownership and combat the detrimental effects in this respect from primogeniture. Paine justified the principle of progression on the following ground: "Admitting that any annual sum, say, for instance, a thousand pounds, is necessary for the support of a family, consequently the second thousand is of the nature of a luxury, the third still more so, and by proceeding on we shall at last arrive at a sum that may not improperly be called a prohibitable luxury. It would be impolitic to set bounds to property acquired by industry ... but there ought to be a limit to property or the accumulation of it by bequest." On this line of reasoning, Paine's progressive land tax rose from 1 1/4 per cent on the first £500 to 100 per cent on the twenty-third thousand when presumably the level of "prohibitable luxury" had been reached. In that same year, Condorcet (1792, pp. 566-72) penned an essay on progressive taxation in which he supported the idea on the basis of equity and efficiency, because excessive inequality in property ownership implied wasteful use of resources. Likewise, on general ability to pay grounds and other principles of tax justice, Montyon (1808, esp. p. 391) defended the idea of progressive taxation with a graduated scale, because of the beneficent social and moral consequences such a tax policy produced on the people.

In eighteenth century England, the benefit tradition in public finance established by Hobbes, and subsequently elaborated by Sir William Petty, provided support for the notion of proportional taxation, a principle likewise endorsed as most appropriate by Sir James Steuart (1767, Book V, chapter 2, esp. pp. 679-80). Proportionality appears even to have been supported by Adam Smith (1776, p. 825) in his famous first taxation maxim. This proposed regulation of tax contributions by individuals "in proportion to their respective abilities". Subsequently, in the context of discussing taxes on house rents, which Smith saw as falling "heaviest upon the rich", the maxim is qualified into the statement that "the rich should contribute to the public expense, not only in proportion to their revenue, but something more than in that proportion" (Smith, 1776, p. 842). Say (1820, pp. 454-5) quoted Smith's second opinion on the subject with approbation, arguing from an example based on families with substantially different income levels that "a tax merely proportionate to individual income would be far from equitable ...". Ricardo, despite his extensive discussion of taxation in the *Principles*, said little on the subject of progression but seemed to support the view that "the burdens of the State should be borne by all in proportion to their means" (Ricardo, 1817, p. 204).

From the middle of the nineteenth century, a number of prominent English authorities on taxation were opposed to the principle of progressive income taxation. As Blum and Kalven (1953, p. 14 n.39) noted, these opponents included McCulloch, John Stuart Mill, Sidgwick and Bastable, the key writers on public finance in England in this period. This helps to explain why the application of a graduated rate scale to income taxation in England did not really come into effect until the start of the twentieth century with Lloyd George's "people's budget" (Sabine, 1966, chapter IX; Shehab, 1953, chapter XIV), and that the principle of graduation became first enshrined in Harcourt's estate duty legislation of 1894.[4]

McCulloch (1852, pp. 139-41) explicitly opposed Say's favourable view of the equity of graduated taxation. For him graduated taxes were diametrically opposed to tax justice because they altered the post-tax position of individuals relative to their pre-tax position. Such regulation of individual income was, in his view, outside the proper functions of government. In addition, he feared that the principle of graduation once adopted, would ultimately lead to confiscation, the `paralysis of industry' and capital accumulation and the flight abroad of capital. Once the "cardinal principle" of proportional taxation was abandoned, "you are at sea without rudder or compass, and there is no amount of injustice you may not commit". McCulloch's opposition to graduated taxes was also based on the potential for fiscal irresponsibility it induced in democratic society, because then people could vote for taxes which they themselves did not have to pay.

Starting from the maxim of equal sacrifice as a general guide to just taxation, John Stuart Mill (1848, pp. 808-10) claimed that this rule was most easily applied if each would pay a fixed proportion "not of his whole means, but of his superfluity" over and above "a certain minimum of income, sufficient to provide the necessaries of life".[5] He therefore opposed the principle of graduation in taxation, especially income taxation (see Hollander, 1985, pp. 858-81; Shehab, 1953, pp. 153-54) despite its immediate appeal, particularly because he doubted whether the proposition that "a person with 10,000 l. a year cares less for 1,000 l. than the person with only 1,000 l. cares for a 100 l. and if so, how much less" could ever be decided with any degree of certainty. In addition, Mill strongly advanced the belief that graduation would diminish if not "paralyse", industry, effort and thrift, particularly the latter because income taxation in itself already imposed double taxation on saving. If at all entertainable as a suitable tax policy, graduation was only "just and expedient" when applied to "legacy and inheritance duties". (Mill, 1848, pp. 811-12).

The other two major opponents of progressive taxation during the latter half of the nineteenth century did not advance a great deal beyond the authoritative McCulloch and Mill position. Sidgwick (1887, pp. 561-65) supported the principle of proportionality in calculating income tax liability with a universal exemption of that part of income required to sustain "the bare necessities of life" and rejected the imposition of graduated taxes because this generated difficulties in enforcement, and adverse economic effects for industry, thrift and the migration of capital. Bastable (1895, pp. 288-306), the first British textbook written on public finance, likewise opposed the imposition of progressive rate schedules in taxation. Design of a progressive rate scale was invariably arbitrary since "the possible scales are infinite in number". Moreover, such design would inevitably be capricious since it depended on the whims of a legislature "now dominated" by votes from those "who will not clearly feel the charges placed on the higher incomes". On administrative grounds Bastable argued progressive taxation encouraged evasion since the motive for such practice is greater under it as compared with proportional taxation. In addition it was likely to inhibit capital accumulation and to a lesser extent, personal thrift. Finally, Bastable produced two, more novel, arguments against progression. Practice only showed the adoption of progressive income tax in Swiss cantons and smaller German states with the inference that it was unsuitable for large, national governments. Secondly, "the modern adoption of the theory of utility fails to supply any definite practical basis on which to frame a scale of progression", so that its introduction was not based on scientific reasoning.

Bastable's final observation introduces what may be regarded as one of the more decisive influences in favour of progressive taxation which arose from economic argument at this time. As Musgrave and Peacock (1958, pp. x-xi) indicate, "The development of marginal utility analysis in the last quarter of the nineteenth century brought a considerable refinement of equal sacrifice doctrine" which, if interpreted as "equal marginal sacrifice" and on the assumption of declining marginal utility of income together with that of an identical utility schedule for all, produced a scientific case for maximum progression (Edgeworth, 1897; Cohen-Stuart, 1889). The theoretical problem with these sacrifice theories has been so clearly set out in more recent literature (Musgrave, 1959, pp. 95-110; Blum and Kalven, 1953, 39-63; Fagan, 1938, pp. 19-43; Simons, 1938, pp. 5-16) that no further discussion is necessary, apart from pointing to less frequently noted aspects of this literature.

It is important at the outset to note the general acceptance by many of the marginalist economists that their newly discovered doctrine of marginal utility had important implication for social policy, particularly for progressive taxation.[6] This was especially clearly perceived by Wicksell (1934, p.4) who described the science of political economy as implying "a thoroughly revolutionary programme" in which, as a consequence of studying "economic phenomena as a whole", "conditions of the welfare of the whole" become an important part of the research programme of the economist, "consideration for the interests of the proletariat must emerge; and from thence to the proclamation of equal rights for all is only a short step". Not surprisingly, therefore, Wicksell actively worked on applying the new doctrines in developing principles of just taxation. These resulted in a number of pleas for progressive income taxation he published in 1894 and 1895. Although he wished to safeguard minority interests from confiscation by distributing tax burdens as much as possible according to benefit (Wicksell, 1896), he felt nevertheless that progressive income tax based on ability to pay and the declining marginal utility of money income was fully justified in all other cases (Gårdlund, 1958, pp. 155-8, 305-06 and see 232-3). Similar views to Wicksell's position were held by Walras (1896, pp. 431-41) and Marshall (1917) likewise strongly supported a graduated income tax, with the warning that "excessive taxation on large incomes may check energy and enterprise".[7]

Major problems for the sacrifice theory arose from the interpersonal comparisons of utility such theories implied and from the difficulty in utility measurement. The latter was required for scientific application of the theory to the design of an appropriate rate scale. Irving Fisher, a leading second generation marginalist economist, in an essay in honour of J.B. Clark as one of the discoverers of marginal utility, attempted to illustrate the requirements for, and the theoretical possibility of, the latter, saying that given a set of five not unreasonable assumptions, it was possible to calculate the "theoretically just rate of progression or regression" (Fisher, 1927, esp. p. 186). Fisher's method assumed interpersonal comparisons of wants for his analysis as a common sense requirement of any reasonable tax policy (1927, pp. 179-81) but it was this assumption that ultimately led to the rejection of the sacrifice case for progression as just taxation (Roy, 1984, esp. pp. 360-2).

Following the Keynesian revolution (but earlier in the work of Hobson as well, see Fagan, 1938, pp. 47-9), progressive income taxation was defended for some time as a preventative of economic stagnation, because it diminished the tendency to over-saving which some then saw as a chronic feature of a modern, developed industrial system. Later, in the context of the desirability of a non-discretionary or automatic fiscal stabilisation policy, the progressive income tax was praised as the automatic stabiliser *par excellence*. However, when during the 1970s, high rates of inflation frequently made such automatic stabilisation properties of the income tax produce perverse, and unwanted results, this type of support for the notion of income tax progression also started to wane, a decline assisted further by the decreasing support for fiscal policy in general among many economists (cf. Morag, 1958, esp. pp. 224-5).

Many of these dilemmas about progressive taxation had been grasped by Henry Simons, the doyen of personal income taxation during the late 1930s. Simons (1938, pp. 18-19) simply argued that "the case for drastic progression in taxation must be rested on the case against inequality - on the ethical or aesthetic judgement that the prevailing distribution of wealth and income reveals a degree (and/or kind) of inequality which is distinctly evil or unlovely". The distributional gains of such a policy, he argued, were offset by some loss in production, but whereas the former effect could be described as "certain", the production effect was "problematical" and largely a matter of social psychology. Current views in so far as they have changed are less optimistic on the certainty of the distributional consequences of progressive income taxation and less uncertain, at least in terms of rhetoric, on the production losses they entail. This is of course not unrelated to the substantial increases in average income tax burdens for individuals over this period, and the relatively higher marginal rates required to make such burdens effective.

From this brief survey of the literature, the basic case for progressive taxation seems to be one of fairness combined with a desire for a greater degree of equality in income and/or wealth distribution. Needless to say, such judgements did not meet with universal approbation. Fairness in taxation was generally held to imply the exemption of a necessary minimum proportion of income (in itself a rather vague concept), with the associated proposition that in general, taxation can only be levied from surplus income or that over and above the necessary minimum. No satisfactory conclusions could be presented on the degree of equality to be aimed at, or again, an associated proposition, the degree of progression or specific rate scale to be implemented. If progression was too high (and for some writers this occurred with any departure from proportional taxation), fears were expressed about the feasibility of administering the system, because the incentives to evasion it provided and other forms of dishonesty or malpractice it encouraged. Steep progression was also said to encourage the flight of capital, lower thrift and capital accumulation, and reduce industry and the energy with which people applied themselves to work. For a number of decades from the 1930s, the requirements of stabilisation policy gave some additional support to the principle of progression which then in any case enjoyed widespread acceptance .

Some specific aspects of the problem of progression need also be noted. It was generally appreciated that the principle of graduation in practice was only applicable to the direct taxation of income or property. Strong preferences were generally expressed for its application to the former though some preferred graduated taxation of inheritance and landed property with lower disincentive output effects. It was also generally appreciated that the distributional aim of progressive taxation was clearly affected by all taxes, if not by all measures of government policy. This both weakened and strengthened the case for progression depending on the perceived distributional impact of these other policies. An example is the progressive income tax as a counterweight to regressive indirect taxation. Likewise, the composition of income and the definition of the tax base itself were seen to influence the effective degree of progression of any given rate scale and the distributional consequences actually achieved. Emphasis differed in the varying discussions depending on the conception of the nature of the problem as indicated by the practice actually in force when the specific discussion took place. In short, in many respects current debate on progression has little to teach the earlier evaluations of the problem.

4. CONCLUDING OBSERVATIONS

The lessons from past experiences are never simple and this proposition applies with particular force to deriving conclusions from past theory and practice on progressive personal income taxation. A few concluding observations from the material of the previous sections of this chapter nevertheless suggest themselves. First, and in some ways, most trivial, theoretical argument on the subject seems not to have advanced much beyond the debate of the nineteenth century. Exceptions are recognition of the impossibility of designing scientifically objective rate schedules based on laws of declining marginal utility of money income and improvements in the measurement of disincentive effects by statistical techniques though not to the extent that universally acceptable conclusions are derived from such measurement exercises. Secondly, the perspective of viewing progressive income taxation as a trade-off between a desire to reduce inequality in the distribution of income at the cost of losses in actual output produced remains a valid one, though experience suggests that these terms of trade can be shifted by actual income tax practice. It seems not unreasonable to conclude that the balance in recent progressive income tax practice has shifted away from favourable equity consequences (the major original reason for its application) towards greater concern about detrimental output and other effects. This may be explained by overapplication of the tax as a revenue raiser, a practice initiated during the second world war. This had disastrous consequences for rate structure including marginal rates, and placed precisely the type of burdens on graduated income taxation which its original supporters (recall Marshall's 1917 perspective) had particularly feared.

Such a diagnosis permits a more positive conclusion. Graduated tax scales may continue to play a useful vertical equity role in a tax system if that function is combined with a diminished overall responsibility in revenue raising of the taxes to which such rate scales are applied. Two policy implications immediately follow. A strategy of income base broadening combined with a reduction, and flattening, of the rate scale may improve the overall equity of the income tax system both horizontally and vertically, particularly when much of that broadening is designed to catch forms of income largely prevalent at upper income levels. Such base broadening can also be effectively implemented by introducing a broad based consumption tax as the "mass" tax (revenue collector) in the system, thereby allowing removal of many "average income" earners from the income tax system and further flattening and lowering of personal income tax rates. This latter strategy restores an originally perceived role of graduated taxation, and may of course be enhanced (depending on judgements about the degree of inequality that needs to be removed) by applying such taxation to the currently unused general wealth base (through introducing capital transfer, capital ownership taxes, or both). Such a strategy of income tax reduction restores the terms of trade back towards its major vertical (and horizontal) equity objectives by lowering costs from reduced incentives to work, save and invest and increased incentives to evade and avoid tax. It does not of course eliminate them altogether as some populist supporters of flatter rate schedules claim.

The last point raises a further lesson from the history of the application of progressive income taxation. Although currently there is much noise about the positive effects of rate reduction on avoidance and evasion, the evidence of history does not provide strong support for such a proposition. For example, when maximum marginal income tax rates were 34.5 per cent in 1925 (Mills, 1925, p. 240), there were just as many fears about evasion and avoidance of income tax then as there were at double the rates, (CPD, 1924, Vol 109, pp. 4963-9; and see Royal Commission on Taxation, 1934, pp. 162-5) Even during the period of `Gladstonian finance' with the income tax at 1.7 per cent (or 4d in the £), evasion and like fraudulent practices were frequently complained of in the Reports of the Board of Commissioners for Inland Revenue, particularly with respect to assessment and collection of Schedule D income tax on business profits (Sabine, 1966, pp. 104-05). Progressive income taxation when used as a supplementary instrument can far better deal with avoidance and evasion. This does not arise from the lower rates then possible (though they would help) but because it permits more concentrated administration and audit of the smaller number of (high income) tax payers in the system.

In short, history indicates that a progressive income tax still has a useful role to play for those in favour of reducing the degree of inequality produced by an unfettered market system. It is doubtful this role is satisfactorily performed if personal income tax at the same time acts as the major raiser of government revenue. A disincentive case for flat, linear or less graduated taxation, only arises when the costs of progressive taxation with respect to output and avoidance/evasion have been so inflated from an excessive emphasis on numerically high rates. In short, rethinking the rate structure of the personal income tax involves rethinking its major distributional objective and its overall position within the government's financial structure which best allows that function to be met.

FOOTNOTES

1. The classic, early text on progressive taxation is Seligman (1908). A detailed discussion of its historical evolution in the United Kingdom is Shehab (1953). On doctrinal history, reference should also be made to the accounts of Fagan (1938), Blum and Kalven (1953) and Musgrave (1959), chapter 5.

2. The company tax rates varied from 5 per cent to 10 per cent, with concessionary rates (generally half) for life insurance companies. Only Queensland employed a graduated scale, and it also applied different rates to income from public utilities and foreign companies. South Australia in 1921 taxed company incomes at the rates applicable to personal property income, an early Australian form of company tax integration.

3. Stamp (1936, p. 55) described Australia's continuous graduation as "a courageous effort of the Australian legislature". He however noted that because the scale became effectively proportional for incomes in excess of £6500, it did not perfectly reflect ability to pay while the complexity of the rate formula contradicted Adam Smith's "certainty" maxim. By the 1930s this continuous progression was near universal Australian practice. The *Third Report of the Royal Commission on Taxation* (1934, p. 94) urged Victoria to adopt this scheme of progression over the greater range of income because it was "more scientific" and "no more difficult to understand", or to apply, than the discrete step system.

4. Perhaps because J.S. Mill's authority could be invoked in support of graduation in inheritance taxation, in contrast with his strong opposition to the principle when applied to income tax. As noted earlier, Paine saw more merit in progressive taxation on transfers of property than on property and income acquired by personal industry.

5. Mill cited Bentham in support of this proposition, presumably referring to Bentham's, *Proposals for a Mode of Taxation*, 1794, esp. p. 388, in which it is argued that "insufficient income" from industry should be totally exempt from tax, where sufficient relates "to the sum which, in the estimation of the world, would enable a man to maintain himself with decency in the station in which he is placed by the occupation from which his income is derived." Mill therefore basically supported contemporary British income tax practice which exempted a minimum level of income, clawing back that exempt threshold at higher income levels, and taxing the greater part of income at a single rate of tax which fluctuated between 2d. and 1/4 in the £1 (0.8 and 6.6 per cent) over the second half of the nineteenth century, the high rate applying during the height of the Crimean War (Mill, 1848, pp. 830-3; Sabine, 1966, chapter 7).

6. A notable exception is Jevons who supported proportional taxation as equal, and therefore just, taxation (1905, pp. 253,

237) and who showed statistically that if taxes on intoxicating commodities (alcohol and tobacco) were ignored, contemporary British taxation was as fair and just as any tax system could be in the sense that it was proportional to income (see Jevons, 1905, pp. 253-61, cf. Jevons 1883, pp. 204-05). As Creedy (1986, pp. 115-6) points out Edgeworth dismissed the practical application of his equi-marginal sacrifice doctrine, siding instead with Sidgewick's more cautious conclusions.

7. Marshall cautioned however that not too much should be made of such disincentive effects, because they were so easily overstated. As he wrote to Lord Reay in 1909, "for about fifteen years I taught somewhat eagerly that "Death Duties" were a grievous evil because they checked the growth of capital ... Now I think they are on the whole a good method of raising a rather large part of the national revenue; because they do not check accumulation as much as had been expected ..." (in Pigou, 1925, pp. 461-5). In his lectures on taxation dated 1880 Marshall supported graduated income tax on two grounds: the poor should be taxed less than the rich to compensate for their heavy indirect tax burdens, and temporary (personal exertion) income should attract less income tax than permanent (property) income. Marshall (1975, pp. 383-4). In his 1897 Memorandum on Taxation, Marshall expressed in principle support for a progressive expenditure tax which avoided the problem of the double taxation of saving inherent in an income tax (Marshall, 1897, p. 338).

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APPENDIX

AVERAGE AND MARGINAL INCOME TAX RATES

AUSTRALIA

1943 TO 1987

Source:

Figures 1 and 2:
Carslaw (1941-47), pp. 373-4.

Figure 3:
Downing, Arndt, Boxer and Mathews (1964), p. 24.

Figures 4, 5, 6, and 7:
Peter Groenewegen, *Public Finance in Australia, Theory and Practice*, Sydney, Prentice Hall, 1984, pp. 134-137.

Figure 8:
Peter Groenewegen, *Everyone's Guide to Taxation in Australia*, Sydney, Allen and Unwin, 1985, p. 160.

Figures 9 and 10:
based on income tax rates 1986-87, 1987-88.

Figure 1

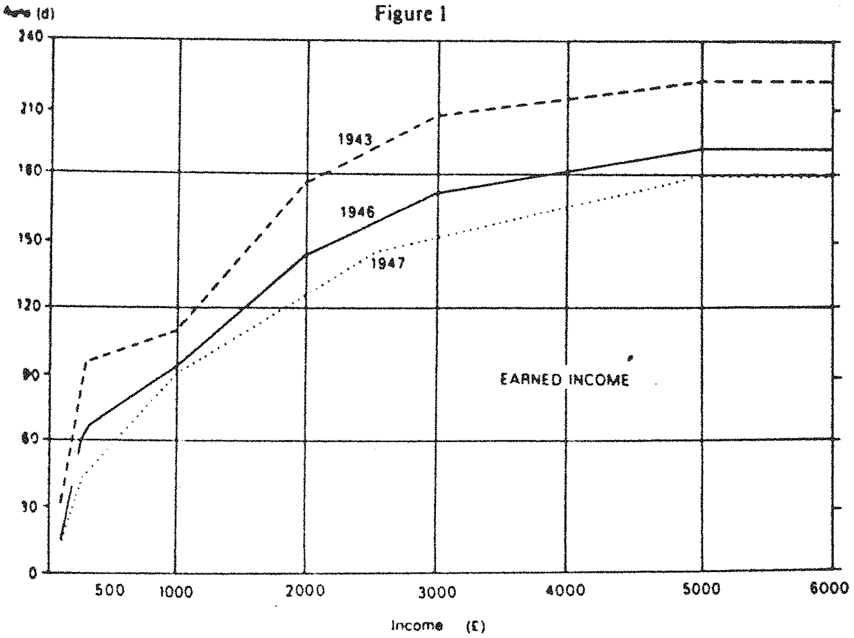


Figure 2

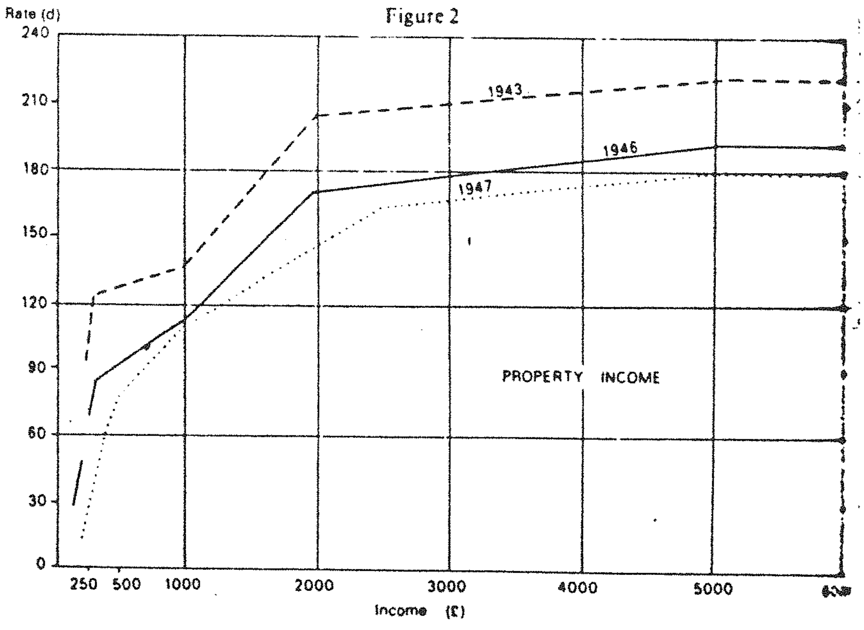


FIGURE 3

Personal Income Tax Rates in Australia: 1949-50 and 1962-63

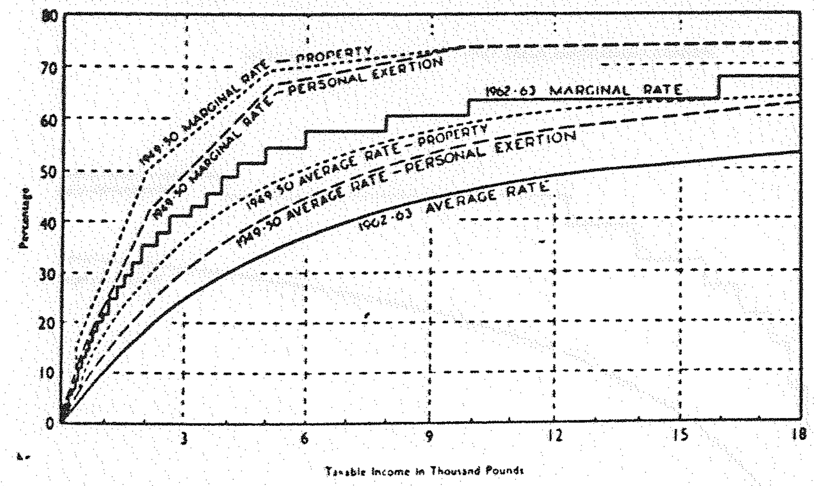
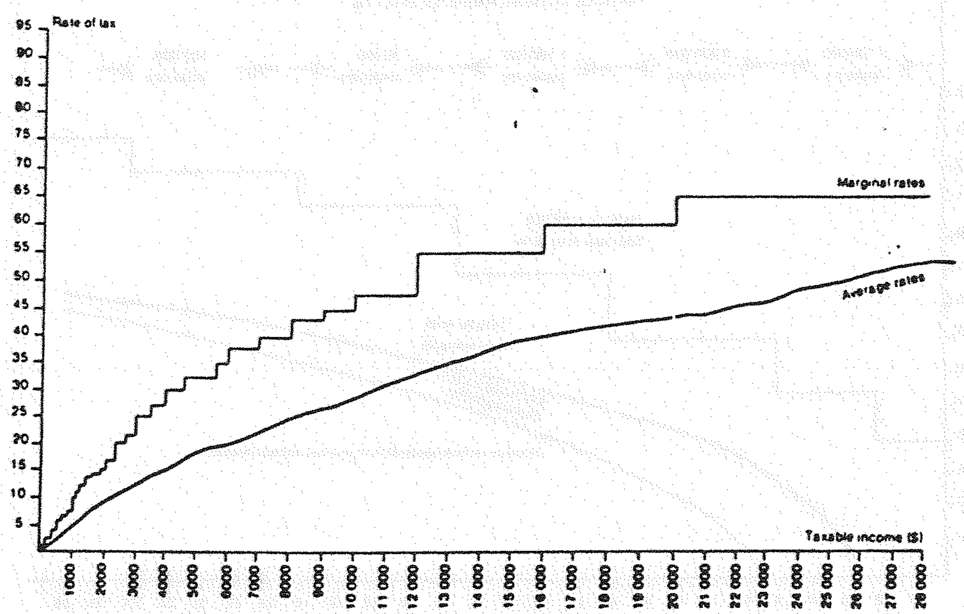


FIGURE 4

AVERAGE AND MARGINAL RATES, 1973-74



Source Treasury Taxation Paper No 4, *Personal Income Tax. The Rate Scale*, Appendix A, p 38

FIGURE 5

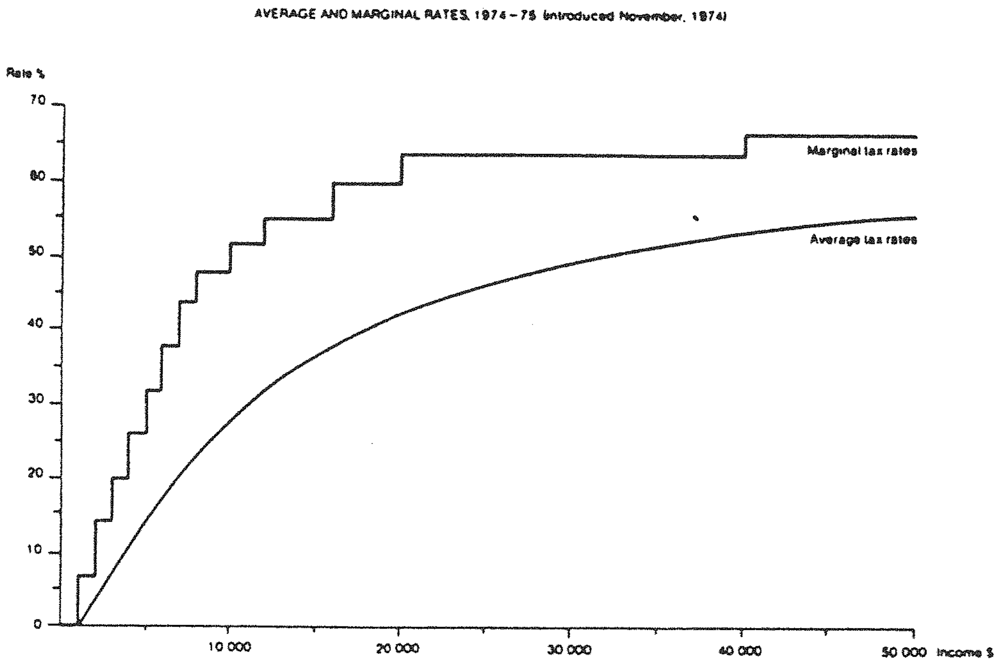
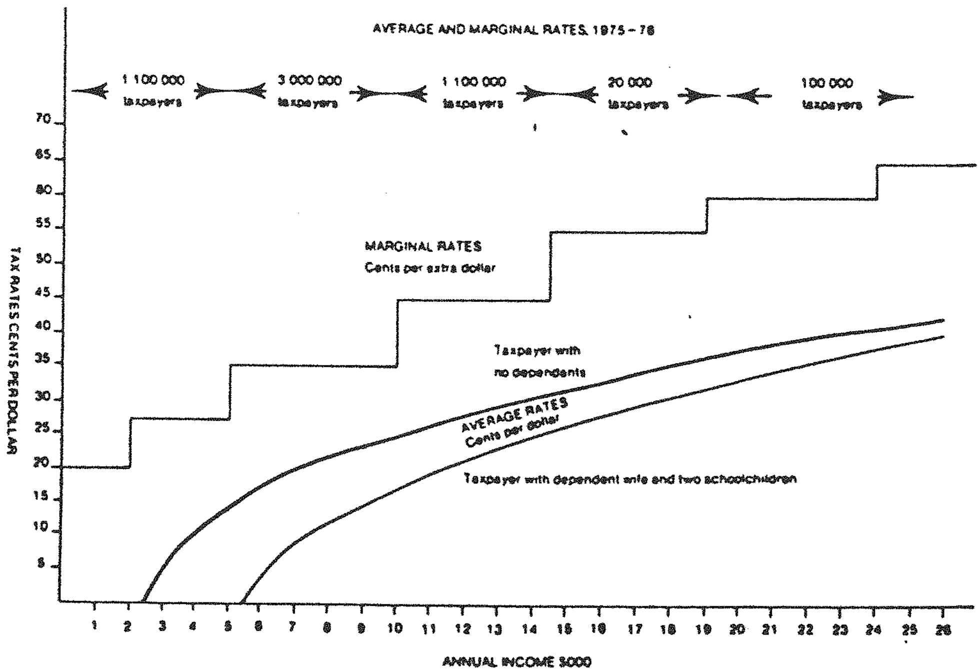


FIGURE 6



Source Budget 1975 – 76 *The New Personal Income Tax* (19 August, 1975).

FIGURE 7

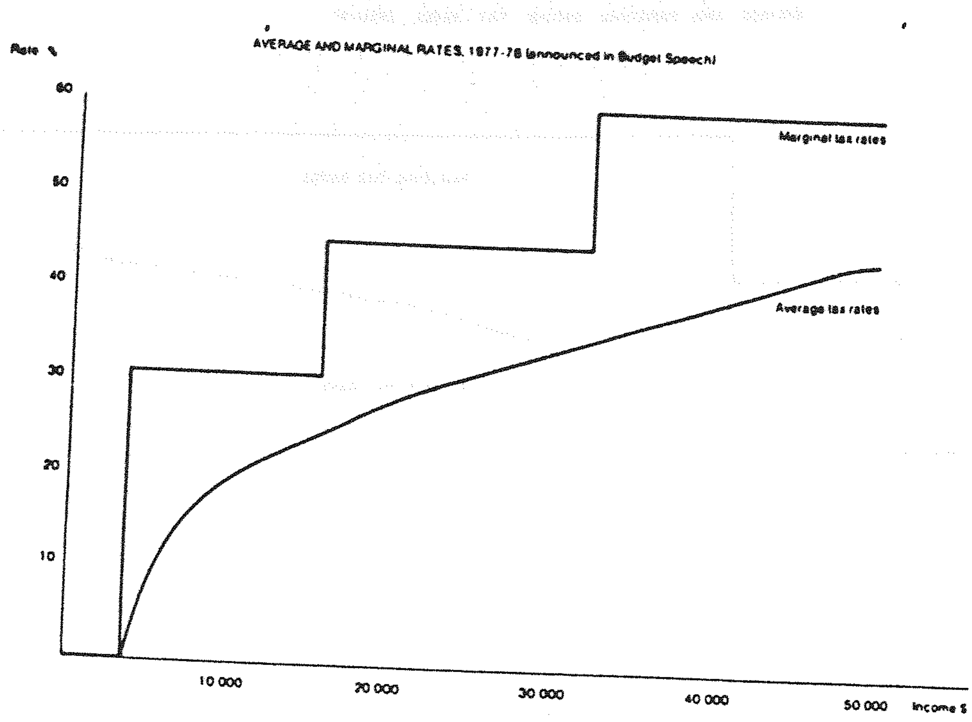


FIGURE 8

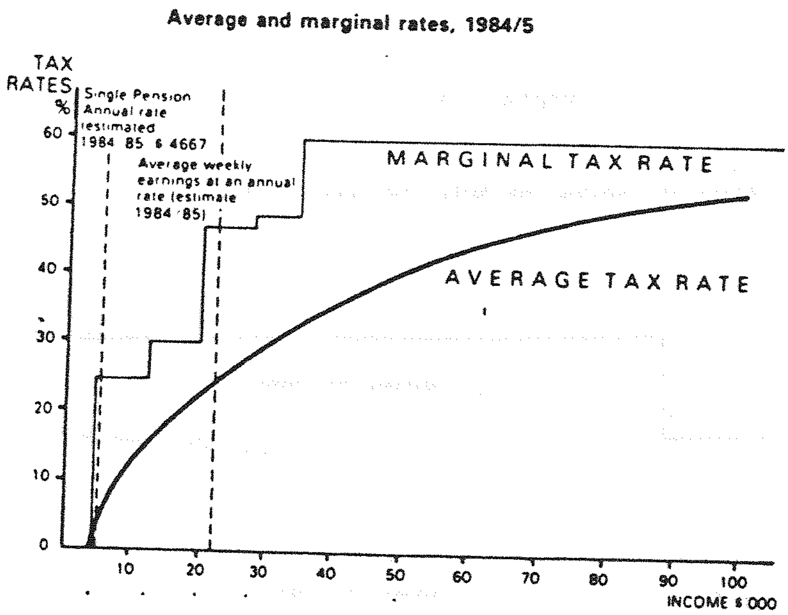


FIGURE 9

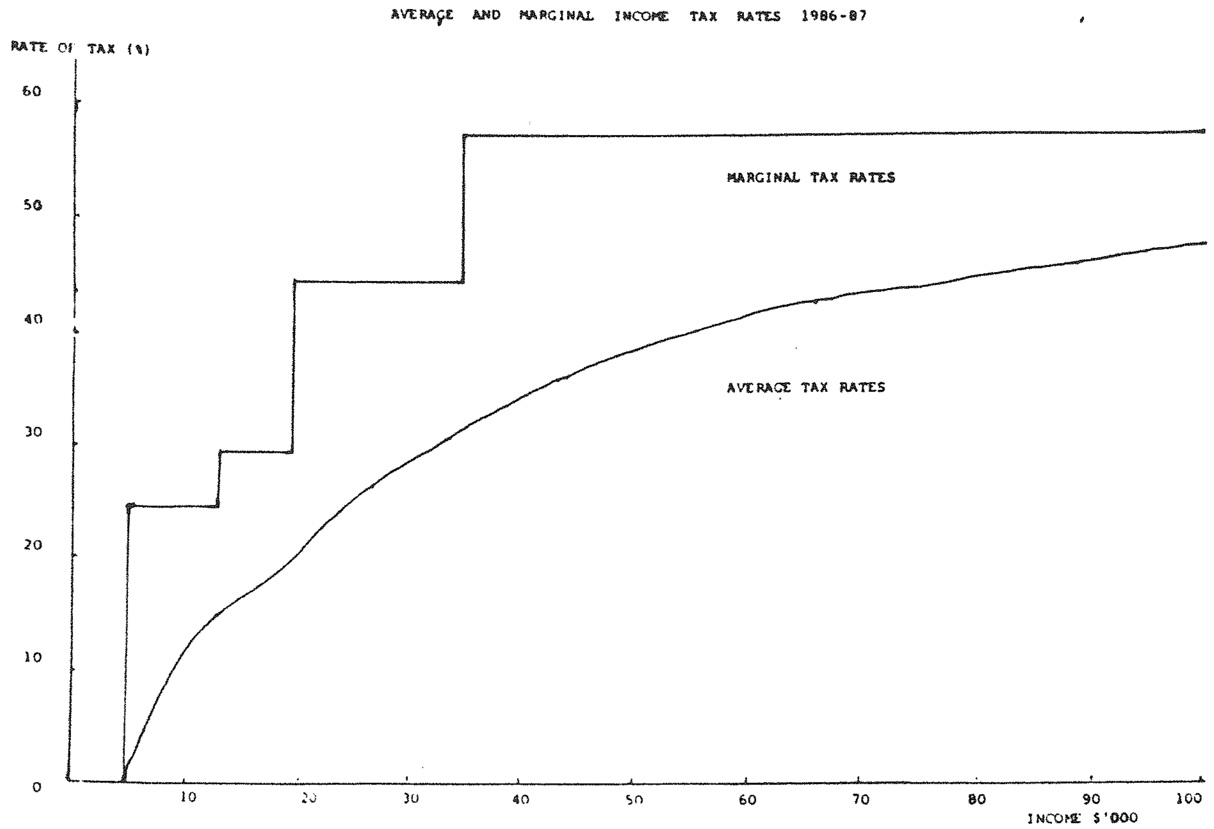
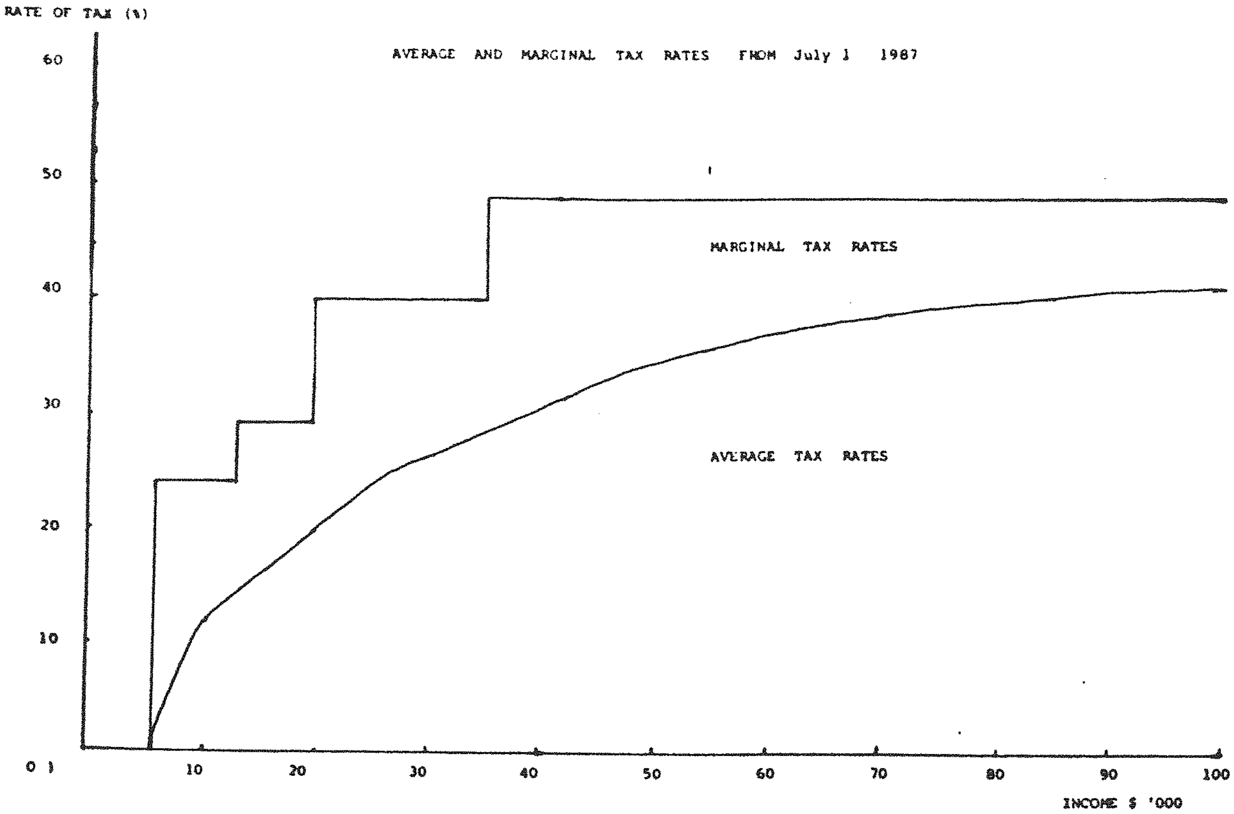


FIGURE 10



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