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THE BALANCE SHEET OF THE AUSTRALIAN FEDERATION

Some Tentative Estimates

Giorgio Brosio

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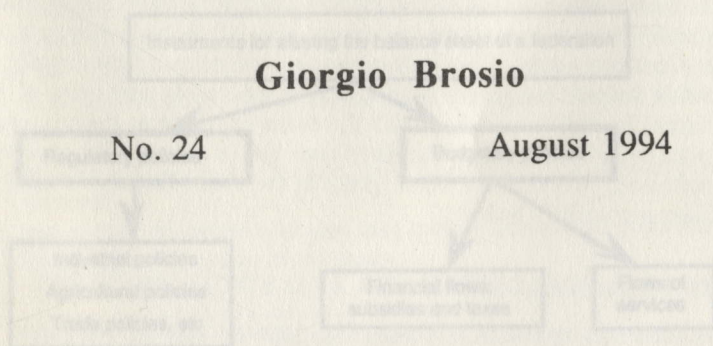
INTRODUCTION

From the territorial point of view, countries are held together by avoiding increasing differences in the standard of living and welfare produced in their various regions and in the standard of living and welfare of their residents. This is especially true for federations which rely on an explicit agreement between their constituent units as to the distribution of the dividends of the union. In both federal and unitary systems, geographical differences in wealth and welfare are less felt and more actively than interregional differences.

Regional equalisation is performed by national governments by means of two main instruments: budget policies and regulatory policies (see Figure 1). Budget policies are split in turn into the provision of services (direct or indirect) and the provision of financial flows (subsidies or taxes) that have an impact on regional development.

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Professor Brosio is from the Department of Economics, University of Turin, Italy. This paper was written whilst he was a Visiting Fellow at the Federalism Research Centre in 1992.

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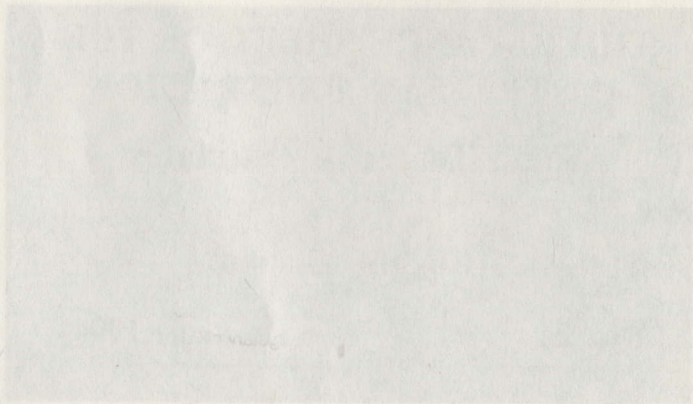
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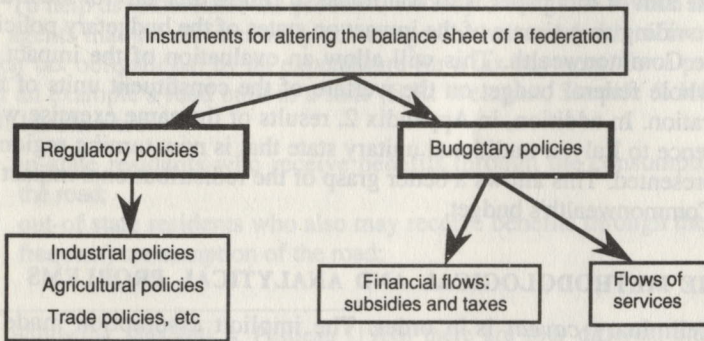
Giorgio Brosio*

INTRODUCTION

From the territorial point of view, States are held together by avoiding increasing differences in the level of wealth produced in their various regions and in the standard of living enjoyed by their residents. This is especially true for federal states since they rely on an explicit agreement between their constituent units as to the sharing of the dividends of the union. In both federal and unitary states geographical differences in wealth and welfare are now felt even more acutely than interpersonal differences.

Regional equalisation is performed by national governments by means of two main instruments: budget policies and regulatory policies (see Figure 1). Budget policies are split in turn into the provision of services (direct expenditure), both current and capital, and in financial flows (subsidies and taxes). Regulatory policies include all the measures that have an impact on the regional distribution of businesses.

Figure 1
Instruments for Regional Equalisation



* Professor Brosio is from the Department of Economics, University of Torino, Italy. This paper was written whilst he was a Visiting Fellow at the Federalism Research Centre in 1992.

Relationships between these policies are complex. For example, industrial policies may actually increase regional differences, so that more grants or more direct expenditure is needed to maintain the desired equilibrium.

Examining the effects of these policies requires the construction of what is called the *balance sheet* of a federation (or the 'regional balance sheet' of a unitary state), the observation of which allows a deeper view of the working of a federal (or unitary) state. The construction of this balance sheet is, however, quite difficult for both analytical and statistical reasons. Usually detailed information is available only for the financial flows (taxes, subsidies to state and local governments, and to individuals and firms), but relying on them alone can be misleading for analysis and political debate.

As previously mentioned, geographical differences in wealth and welfare are probably felt by citizens and politicians much more acutely than in the past. There are many explanations for this phenomenon, like the reduced inequalities in the distribution of personal incomes and the flatter social landscape brought about by public sector intervention. One could also add the increased awareness of geographical differences derived from the improved availability of statistical information on the regional distribution of incomes. In any case, studies of the balance sheet of federal and unitary states are on the increase (see for example, Bieri 1982, and Grosclaude & Schwab 1991 for Switzerland; Davezies 1984, and Prud'homme 1986 for France; Formez 1992 for Italy; Short 1978 for Britain; Whalley & Trela 1986 for Canada. Some countries, like the US, have started, on a yearly basis, the publication of official data on the distribution by states of federal expenditures and taxes.

The aim of this paper is to contribute to filling this gap for Australia by providing an estimate of the impact on states of the budgetary policies of the Commonwealth. This will allow an evaluation of the impact of the whole federal budget on the welfare of the constituent units of the federation. In addition, in Appendix 2, results of the same exercise with reference to Italy, a traditional unitary state that is now turning regional, are presented. This allows a better grasp of the redistributive impact of the Commonwealth's budget.

SOME METHODOLOGICAL AND ANALYTICAL PROBLEMS

A preliminary *caveat* is in order. The implicit assumption made in balance sheet exercises, which says that what one region gains from some policy instrument is necessarily lost by another region, is not necessarily true. A state, federal or unitary, is generally a non-zero-sum game, from the point of view of its constituent units. It should in fact be a positive-sum game, otherwise there is no point in keeping

it.¹ This *caveat* is made here to stress the point that regions that are net contributors to the balance sheet — that is they pay more than they get — are not *ipso facto* disadvantaged by their forming part of the state. For example, net donors to the budget of the European Community retain advantages from the increased volume of economic activity fostered by the existence of a unified market.

Data on the distribution by state of direct expenditure by central government are generally not available, except for a few, but important categories, such as, in the case of Australia, social security payments. But even when available their use presents some delicate problems. These problems refer to:

- a) The link to be established between the location (i.e. the state) where a payment is made and the location of its effective beneficiary. For example, a firm located in Victoria receives a payment from the Commonwealth Treasury for the sale of a personal computer to be used in Treasury headquarters in Canberra. Should this expenditure be allocated to Victoria, to the ACT or should it be divided on an equal per capita basis among all states and territories? Or suppose the computer is imported from Taiwan. Should we in this case put aside the expenditure since it has an almost 100 per cent imports content?
- b) The evaluation of advantages brought by the expenditures. To continue with the previous example: the purchase of a computer made in Victoria produces, on the one hand, pecuniary gains to the people involved in the computer industry in Victoria, but, on the other, in so far as it is used to speed procedures in Canberra it also confers benefits, which can be evaluated in terms of consumer surplus, to every resident of Australia. Which of the two has to be considered?

To help us understand the problem, we may distinguish several classes of agents that are differentially advantaged or harmed (with reference to their tax obligations) by an expenditure (or a tax payment) for a project, for an example a road built in a state (B.R. Weingast, Shepsle & Johnsen 1981). They are:

- a) in-state residents who receive benefits through the consumption of the road;
- b) out-of state residents who also may receive benefits through the (less frequent) consumption of the road;

¹ Following Maxwell & Pestieau (1980) there are four different elements that can create a surplus from the federation. They are: a) gains from free trade between regions; 2) the pooling of risk due to differing degrees of variability in economic activity across regions; c) third, comes the sharing of overheads, that is of public goods provided at the central level; d) increased international bargaining power.

- c) in-state factor owners — for example, manual workers — who obtain pecuniary gains (higher salaries than otherwise) in the construction of the road; in addition, they also obtain benefits as consumers;
- d) out-of state factor owners, who obtain pecuniary gains from the construction but do not benefit as consumers;
- e) in-state consumers who make factor market purchases — they benefit from the project as consumers, but can suffer pecuniary losses in the form of higher prices for factors they buy.
- f) out-of-State purchasers of factors who suffer from pecuniary losses derived from higher prices for factors and who obtain no consumer benefit because they do not reside in the state.

The above list of different advantages (and losses) suggests two main approaches to be followed in drawing a balance sheet of a federation. Let us call the first the 'welfare' or 'real income' approach and the second the 'monetary income support' approach. In other words, the first approach looks at the contribution made by the federation budget to the welfare of residents in each state. This contribution is made of the difference, for each state, between the benefit of the expenditure — calculated on the basis of its monetary cost — and the amount of taxes and other sources of revenue effectively paid for its financing. This difference will be called the fiscal residuum. The second approach concentrates on the contribution of the federal budget to the process of income creation in every state. The first approach is typical of public finance studies, the second of regional analysis, whereas cost-benefit analysis considers both points of view.

There is a strict complementarity between the two approaches, especially from a political point of view. I will give an example. During the post-World-War II period in Italy, massive flows of public funds were spent in favour of the depressed southern regions for sustaining family incomes, for building infrastructure, and for inducing firms to establish themselves in the most depressed areas. In terms of the first approach, southern regions were (and still are, as we will see) the net beneficiaries, whereas the northern and (to a smaller extent) the central regions were the net contributors. However, the latter were, at least partly, compensated in terms of the second approach, as many infrastructural projects were built by northern firms. Those regions also benefited from the expenditure of purchasing power created in the south by transfers to families and other kinds of public support. This contributed to create a 'regional' political agreement, that only recently shows signs of falling apart, as the advantages of the north are fading. In fact, firms created in the south by this policy are starting to reap the pecuniary benefits created by central government expenditures in their regions.

We will concentrate in this paper mostly on the first approach, which is analytically clearer and easier to build. A short attempt will also be made to estimate the fiscal residuum in the second approach.

THE WELFARE BALANCE SHEET OF THE AUSTRALIAN FEDERATION: THE BENEFIT APPROACH

The distribution of expenditure

As shown earlier, this approach requires the allocation of expenditure to the various states according to the creation of a welfare effect for their residents, and the distribution of taxes and other revenues according to their spatial incidence, that is, to the location where their burden is effectively felt.

The Commonwealth's budget statements and financial statistics do not provide information for this exercise. Happily, data produced by the Australian Bureau of Statistics for the construction of states accounts may be used, with some further adjustments, for the distribution by state of a large portion of Commonwealth general government expenditure. For a few other categories of expenditures I used my own criteria. As a result, I have been able to distribute close to 90 per cent of total expenditure. The main results of this exercise are shown in Table 1. The criteria used are briefly listed in Appendix 1. Expenditures included in the table amount to almost \$80.5 billion for the fiscal year 1990-91, out of a total of \$96 billion. The difference consists of interest on public debt (6.16 million) which is excluded from this exercise since it refers to a strictly market transaction; of contingency reserve (3.612 million) and of a few other minor items.

Table 1
Distribution by States of Commonwealth Expenditure,
1990-91 (benefit approach) (\$A millions)

	Final consumption expenditure	Transfers to families	Subsidies to firms	Capital expend- iture	Grants to non-profit institutions	Total net payments to states & terr.	Grants overseas	Total c'wealth expend- iture
NSW	5904	10840	857	321	392	8106	359	26779
Vic.	4336	7312	856	182	288	6158	272	19404
Qld	2784	5522	284	87	184	4675	167	13703
SA	1488	2584	275	43	101	2799	82	7372
WA	1381	2707	464	51	114	2369	101	7187
Tas.	459	953	86	16	31	910	25	2480
NT	310	281	18	21	29	1028	11	1698
ACT	580	370	3	250	12	639	19	1873
Total	17243	30570	2843	971	1152	26683	1036	80498

Sources: see Appendix 1.

The data in Table 1 are shown in absolute terms. Their observation is made easier in Figures 2 and 3.

Figure 2
Distribution by State and Territory of
Commonwealth own purpose expenditure and grants
1990-91 (\$ per capita)

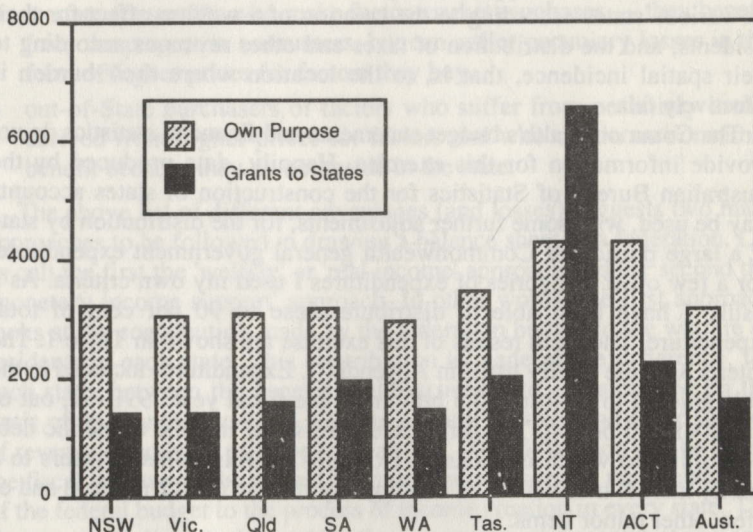


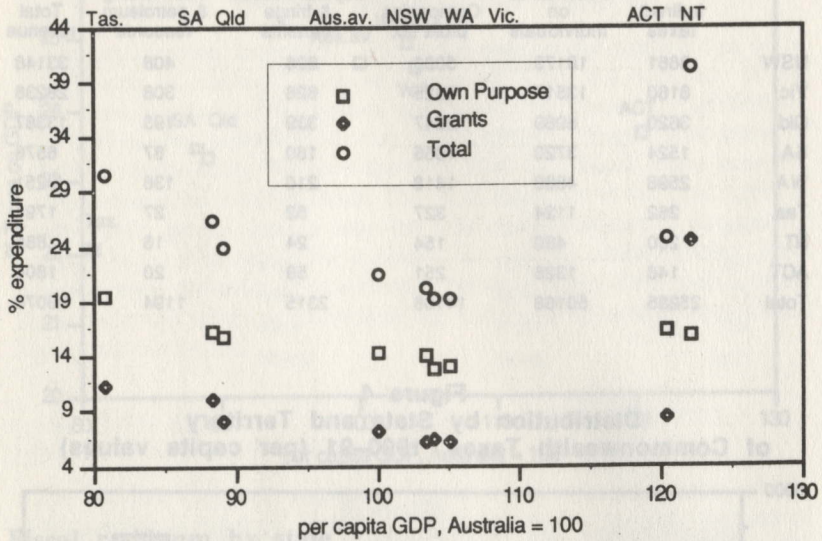
Figure 2 shows expenditures in per capita terms. As we can easily observe, their level is practically the same across the states, with two striking exceptions, namely the Northern Territory and the ACT.

Commonwealth final consumption expenditure being distributed on an almost equal per capita basis for the states produces a negative correlation with GDP which becomes stronger in the case of the two territories where indivisibilities play a clear role in their favour. Figure 3 shows the relationship between expenditure and GDP on a per capita basis.

This negative correlation with GDP is to be attributed to two important categories of expenditure, namely social security expenditure and the grants to the states and territories; as it is well known they are distributed in an inverse relationship to income and density.

A second remark concerns the strong similarity, as far as the relationship between expenditure and GDP goes, between the Commonwealth's own-purpose expenditures, and the grants to the states and local governments. This is due to the importance in the former of social security payments. The only difference in the pattern of distribution between the two categories concerns the order in which the two territories appear. Grants distribution benefits the Northern Territory, whereas the Commonwealth's own-purpose expenditures turns to the advantage of the ACT.

Figure 3
Incidence of Commonwealth's Expenditures on GDP
by States, 1991



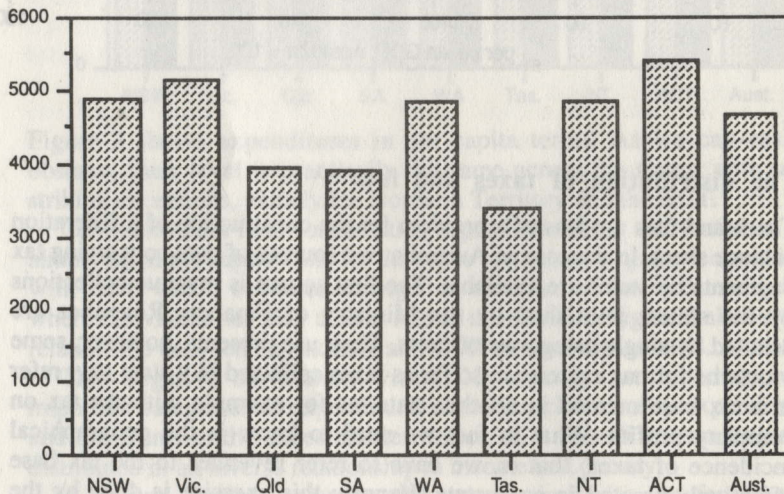
The distribution of taxes and fees

Taxes and fees are less of a problem for the construction of a federation balance sheet. In the case of Australia two sources of data concerning tax payments by states are available. The first source is revenue collections by the states, published by the Ministry of Finance. Revenues are detailed by single categories of taxes. Their use presents, however, some problems for our exercise in so far as taxes collected in a state may refer to a tax base created in another state, as for example with the tax on company profits. What in fact we need to know is the geographical incidence of taxes, that is, we have to refer revenues to the tax base effectively created in each state. Happily this exercise is done by the Australian Bureau of Statistics in the *State Accounts*. Only figures referring to the company tax, superannuation tax, fringe benefits tax, withholding tax and petroleum resources tax are lacking. I had to analyse their distribution by using the usual criteria of tax incidence found in the literature. (See Appendix 1 for their illustration.) The results of the exercise are shown in Table 2. In order to better observe the incidence of taxes by state the usual graphs (Figures 4 and 5) are presented, showing per capita tax payments and per capita GDP.

Table 2
Distribution by State of Commonwealth Taxes and Fees,
1990-91 (\$A millions)

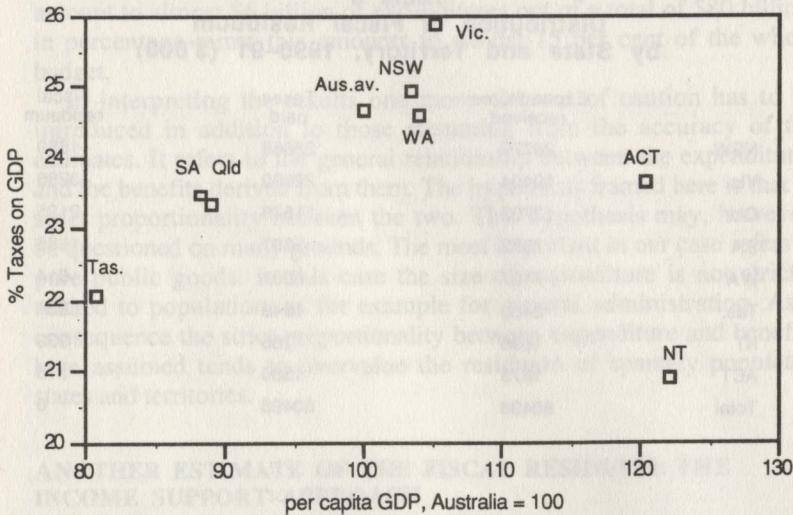
	Indirect taxes	Direct taxes on individuals	Companies profit tax	Superannuation & fringe benefits	Withholding & petroleum resource	Total revenue
NSW	8661	18173	5080	826	408	33148
Vic.	8160	13517	3625	626	308	26236
Qld	3620	6989	2247	339	193	13387
SA	1524	3720	1065	180	87	6576
WA	2598	4888	1418	210	136	9251
Tas.	262	1124	327	52	27	1791
NT	260	430	154	24	16	885
ACT	148	1326	251	59	20	1804
Total	25235	50168	14166	2315	1194	93078

Figure 4
Distribution by State and Territory
of Commonwealth Taxes, 1990-91 (per capita values)



Per capita levels of taxes are not very dissimilar among states and territories. When coupled with GDP values this distribution produces a clear pattern: federal tax incidence by state is slightly progressive (as shown in Figure 5), due to the relevance of direct taxes that provide exactly two-thirds of total revenue. There is only one exception to this trend: the Northern Territory, whose peculiar situation in terms of density of population may produce this result.

Figure 5
Distribution by States and Tax Incidence, 1990-91



Fiscal residuum by state

We are now ready to get the final result of this analysis. In order to obtain the fiscal residuum, we have simply to deduct tax payments from expenditure; a positive number then indicates that the state to which this number refers is a net beneficiary of the operation of the federal budget, whereas a negative number shows the position of a net contributor.

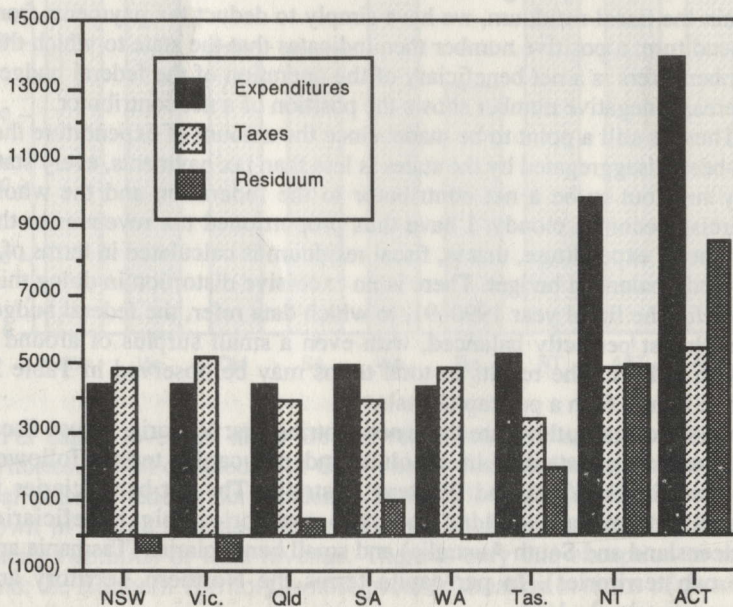
There is still a point to be made: since the amount of expenditure that has been disaggregated by the states is less than tax payments, every state may turn out to be a net contributor to the federation and the whole exercise becomes cloudy. I have thus proportioned tax revenues to the volume of expenditure, that is, fiscal residuum is calculated in terms of a perfectly balanced budget. There is no excessive distortion in doing this, since for the fiscal year 1990-91, to which data refer, the federal budget was almost perfectly balanced, with even a small surplus of around a billion dollars. The results in total terms may be observed in Table 3, and in Figure 6 on a per capita basis.

As we can see, there are three net contributors: Victoria, whose fiscal residuum is substantial in absolute and per capita terms, followed by New South Wales and Western Australia. The net beneficiaries in absolute terms are divided into two categories: big beneficiaries (Queensland and South Australia) and small beneficiaries (Tasmania and the two territories). In per capita terms the Northern Territory and Tasmania take the lead.

Table 3
Distribution of Fiscal Residuum
by State and Territory, 1990-91 (\$'000)

	Expenditures received	Taxes paid	Fiscal residuum
NSW	26779	28668	-1889
Vic.	19404	22690	-3286
Qld	13703	11578	2125
SA	7372	5687	1685
WA	7187	8001	-814
Tas.	2480	1549	931
NT	1698	765	933
ACT	1873	1560	313
Total	80498	80498	0

Figure 6
Beneficiaries and Contributors to the Balance Sheet
of the Australian Federation, 1990-91 (\$'000)



The total amount involved in the redistribution process is quite substantial: the resources transferred from contributors to beneficiaries amount to almost \$6 billion of expenditures out of a total of \$80 billion; in percentage terms this amounts to almost 15 per cent of the whole budget.

In interpreting the results one more element of caution has to be introduced in addition to those stemming from the accuracy of the estimates. It refers to the general relationship between the expenditures and the benefits derived from them. The hypothesis framed here is that of strict proportionality between the two. This hypothesis may, however, be questioned on many grounds. The most important in our case refers to pure public goods. In this case the size of expenditure is not strictly related to population, as for example for general administration. As a consequence the strict proportionality between expenditure and benefits here assumed tends to overvalue the residuum of sparsely populated states and territories.

ANOTHER ESTIMATE OF THE FISCAL RESIDUUM: THE INCOME SUPPORT APPROACH

The income support approach is more exacting in terms of the information it requires. One has in fact to know where the owners of production factors are located, and this presents great difficulties in the case of final consumption and capital expenditures. As for the former, information was directly available for public employee wages and salaries, but I had to resort to my own estimates using input-output and state account data for the distribution by state of expenditures for goods and services and for capital purposes. The estimates rely on strong assumptions that can be challenged. (See Appendix 1 for the criteria used.)

Results are shown in Table 4. It differs from Table 1 only as far as columns 1 and 4 are concerned. In other words, it is only a partial attempt to construct a complete income support approach, in so far as only the first round of the income-generating process is reported. As an example, wages and salaries are allocated according to where public employees are working. But employees can then spend part of, or all, their income in states different from those they live in, or for goods and services that are produced elsewhere. As a consequence, an even stronger caution is needed in interpreting the results.

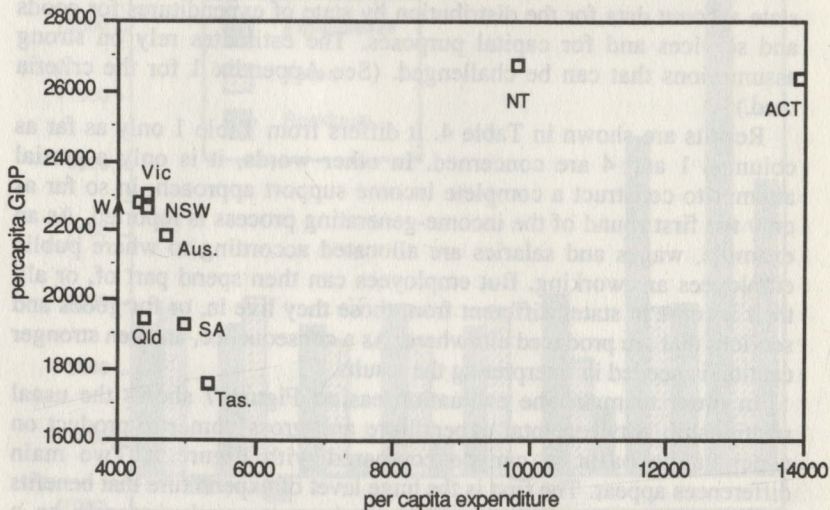
In order to make the evaluation easier, Figure 7 shows the usual relationship between total expenditure and gross domestic product on a per capita basis. It can be compared with Figure 2. Two main differences appear. The first is the huge level of expenditure that benefits the ACT. This is hardly surprising given its exclusive role as a government city, whose workforce is substantially made up of people on

the federal government's payroll. The second difference is a small worsening of Queensland's position due to the structure of its economy which relies mostly on the primary and tertiary sectors.

Table 4
Distribution by State of Commonwealth Expenditure,
1990-91 (\$'000)
(income support approach)

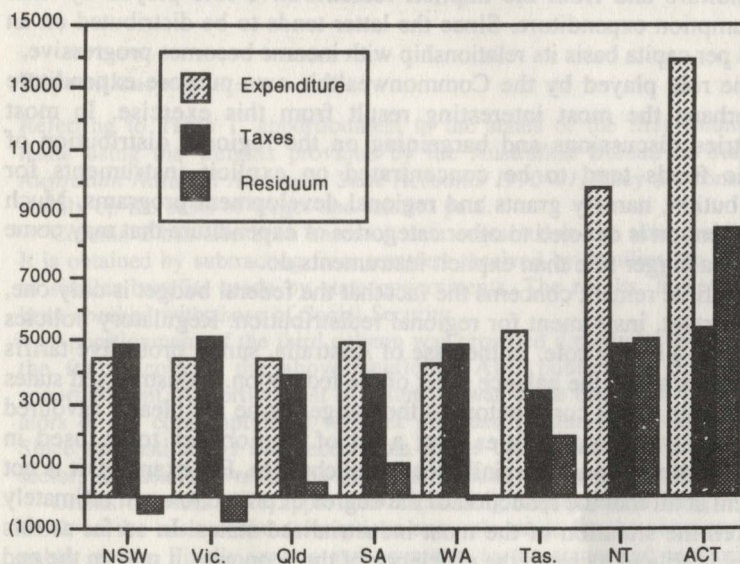
	Final consumption expenditure	Transfers to families	Subsidies to firms	Capital expenditure	Grants to non-profit institutions	Grants overseas	Own Purpose Cwealth expenditure	Total Net payments to state & territories	Total Cwealth expenditure
NSW	5049	10840	857	331	392	359	17828	8106	25934
VIC	4261	7312	856	245	288	272	13234	6158	19392
QLD	1890	5522	284	171	184	167	8218	4675	12893
SA	1278	2584	275	75	101	82	4395	2799	7194
WA	1223	2707	464	96	114	101	4705	2369	7074
TAS	405	953	86	21	31	25	1521	910	2431
NT	175	281	18	11	29	11	524	1028	1552
ACT	2962	370	3	21	12	19	3387	639	4026
Total	17243	30570	2843	971	1152	1036	53815	26683	80498

Figure 7
Distribution by State of Total Commonwealth Expenditure,
1990-91 (percentage points)
(income support approach)



The fiscal residuum calculated on this basis is shown in Figure 8. The distribution is quite similar to that emerging from the former approach. The only difference being the huge advantage enjoyed by the ACT.

Figure 8
The Balance Sheet of the Federation, 1990-91
(income support approach)



CONCLUSIONS

Due to the exploratory character of this paper, conclusions are provisional. I will limit myself to a few observations. First, one has to stress the important amount of redistribution between the states that occurs through the federal budget. One important feature of the Australian economy is the small disparities among states and territories in their level of produced and disposable income. There are many factors that can explain this fact. However, the role of federal finance is to further reduce the gaps.

The second observation refers to the fact that this distribution is performed both on the revenue and the expenditure side of the budget. That is, their incidence is progressive in respect of income. The progressivity among states of tax revenues is explained by the important role played by the personal income tax in the financing of the Commonwealth.

The third observation refers to the expenditures. Here the redistribution is performed both by the Commonwealth's own-purpose expenditure and by grants to the states. Their pattern is surprisingly similar, but since the Commonwealth's own-purpose expenditures are of a much bigger size, their impact turns out to be more substantial than that of grants, which are generally supposed to be the main instrument for regional redistribution. Here the explanation stems from the relevance of social security expenditure and from the implicit redistributive role played by final consumption expenditure. Since the latter tends to be distributed on an equal per capita basis its relationship with income becomes progressive.

The role played by the Commonwealth's own-purpose expenditure is perhaps the most interesting result from this exercise. In most countries discussions and bargaining on the regional distribution of public funds tend to be concentrated on explicit instruments for distribution, namely grants and regional development programs. Much less attention is devoted to other categories of expenditure that may come to play a bigger role than explicit instruments do.

The final remark concerns the fact that the federal budget is only one, if important, instrument for regional redistribution. Regulatory policies may play a bigger role. In the case of Australia, surely protective tariffs on imports affect the balance sheet of the federation. Industrialised states that appear as net contributors to the budget game are clearly favoured by protective import duties. But a lot of caution has to be used in drawing conclusions especially for future changes. For example, it is not evident at all that the reduction of the degree of protection will ultimately weaken the situation of the most industrialised states. In so far as this policy is able to increase the efficiency of the economy, it may in the end turn out to be to the advantage of those areas that initially felt its immediate consequences.

APPENDIX 1.

SOURCES OF THE DATA AND CRITERIA USED FOR THE
CONSTRUCTION OF THE BALANCE SHEET**Expenditure**

Referring to Table 1, apportionment to the states of the first column was made using the weights provided by the Australian Bureau of Statistics, *Australian National Accounts: State Accounts 1990-91*. They are constructed mainly on the basis of wages and salaries paid.

Column 2 has also been based on data contained in the same publication. It is obtained by subtracting from transfers received by families the payments of similar benefits made by state governments. The results, however, have been checked with those of Social Security.

Apportionment of the third column was provided directly by the ABS. For the fourth column the above-mentioned ABS publication provides the apportionment. Apportionment of column 5 was made using two proxy indicators of the consumption of services provided by non-profit organisations. Since the institutions that receive the grants operate mostly in the cultural sector, admissions to museums and to performing arts have been used.

Grants overseas were apportioned according to population and per capita GDP, on the basis of the assumptions currently made for the consumption of public goods. Finally, grants and payments to the states and territories are detailed in the *Budget Statements for 1990-91*.

Turning to Table 3, the main differences from Table 1 concern columns 1 and 4. Apportionment of column 1 has been made using, for the wages and salaries component, data from the ABS *Employed Wage and Salary Earners*, September 1991. Expenditures on goods and services were allocated according to the data referring to public sector intermediate uses contained in input-output tables for 1986-87 published by ABS, *Australian National Accounts. Input-Output Tables, 1986-87*. These were apportioned by state using weights provided for manufacturing by ABS, *Manufacturing Industry. Summary of Operations. Australia*, and for other sectors by ABS, *Australian National Accounts, State Accounts, 1990-91*.

Apportionment of column 4 has been made according to weights referring to the construction industry provided by ABS, *Australian National Accounts, State Accounts, 1990-91*.

Taxes

Column 1 of Table 2 was directly provided by the ABS. Apportionment of column 2 was made according to data from ABS, *Australian National Accounts, State Accounts, 1990-91*.

The distribution by state for column 3, company tax, was obtained with reference to the most commonly-shared view in the literature (see for example, Pechman 1986) about its incidence, namely, that this tax is partly shifted forwards onto the consumers and partly paid by profits. Total revenues have been disaggregated using, in equal weights, the distribution of private final consumption by state and that of gross operating surplus. Both sets of data are drawn from ABS, *Australian National Accounts, State Accounts, 1990-91*.

Apportionment of columns 4 and 5 was made according, respectively, to wages and salaries paid (column 4) and total gross operating surplus and gross operating surplus for chemical and petroleum sector (column 5). The three sets of data were from ABS, *Australian National Accounts, State Accounts, 1990-91*.

APPENDIX 2

THE BALANCE SHEET OF A REGIONAL STATE: ITALY

This author worked on a project on the fiscal residuum for Italy, which was based on primary data provided by the Italian Treasury (Formez (1992)). This study provides an opportunity for a short but meaningful comparison between the two countries, due to the similarity of methodologies used.

Italy since 1970 has been a regional state. Regions have legislative powers in a number of areas within the framework provided by national legislation. Most of the border regions (special regions) enjoy wider autonomy and bigger revenues. Like Australia, taxes in Italy are administered and collected mostly at the central level. Regional and local governments are financed almost completely by means of general and specific purpose grants from the central government. Regional differences in income are very wide and are scaled along the north-south direction. Per capita GDP of the richest region, Valle d'Aosta, is 2.5 times higher than that of the poorest region, Calabria. Public sector intervention tried, in the second World War period, to reduce the gap by means of industrial policies and massive transfers of funds in favour of the most depressed regions. Estimates of fiscal residuum allow us to quantify the net magnitude of these latter policies. One has to clarify, however, that policies in favour of the poorer regions have been only partially successful due mainly to the huge impact of the European Common Market, which greatly favoured the regions most central (to it), which are the already industrialised areas of Europe.

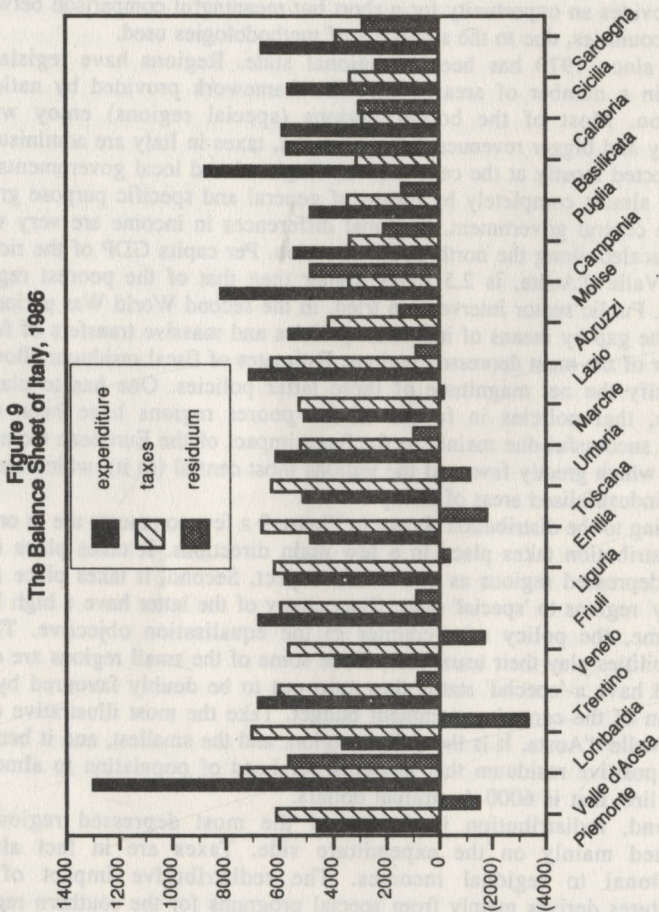
Turning to the distribution shown in Figure 9 a few comments are in order.

Redistribution takes place in a few main directions. It takes place from rich to depressed regions as one would expect. Second, it takes place from 'ordinary' regions to 'special' ones. Since many of the latter have a high level of income, the policy runs counter to the equalisation objective. Third, indivisibilities play their usual role. Since some of the small regions are quite rich and have a 'special' status they turn out to be doubly favoured by the operation of the central government budget. Take the most illustrative case, that of Valle d'Aosta. It is the richest region, and the smallest, and it benefits from a positive residuum that amounts per head of population to almost 6 million lire, that is 6000 Australian dollars.

Second, redistribution in favour of the most depressed regions is performed mainly on the expenditure side. Taxes are in fact almost proportional to regional incomes. The redistributive impact of the expenditures derives mainly from special programs for the southern regions implemented by the *Agenzia per il Mezzogiorno*, and from a general legislative provision that states that 40 per cent of every program has to be

spent in the southern regions (whose share of the total population is of this size). Social security payments have a lesser impact, since they are made mostly in favour of the secondary and tertiary sector workforce.

Third, the incidence of redistribution for net contributors is quite huge. The negative fiscal residuum for Lombardy — the richest big region and whose GDP amounts to 25 per cent of Italian GDP (that is, almost fifty per cent of Australia's GDP) — amounts to more than 50 per cent of the expenditure it receives. It is not surprising therefore that the 'Lombard League', a party that strongly favours an increase in regional autonomy under the slogan of a federal Italy, has become the first party in Lombardy in national elections.



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The following table lists the publications that were reviewed for this study. The table is organized into four columns: Author(s), Year, Title, and Journal. The entries include works by Skinner (1953), Ferster (1967), Gresham et al. (1976), and others. Some titles are partially obscured by bleed-through from the reverse side of the page.

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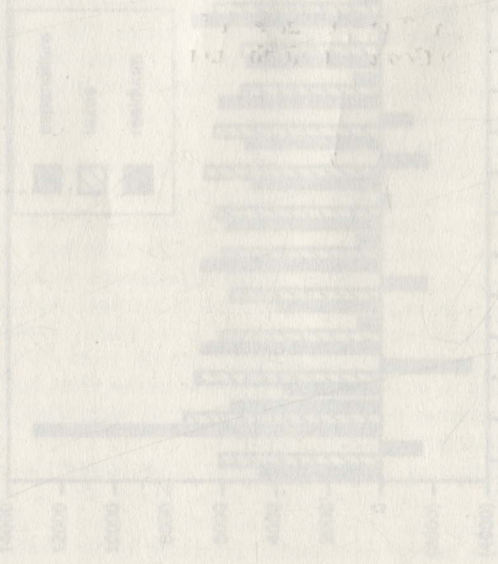
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Figure 6
The Skinnerian Revolution



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