

Treasury Submission to the Inquiry into the Treatment of Census Forms

On 7 May 1997 the Treasurer, the Hon. Peter Costello, M.P., referred for consideration by the House of Representatives Standing Committee on Legal and Constitutional Affairs the current practice of destroying name-identified forms collected in population censuses. The Treasury's submission to the Committee sketches some of the uses made of census data by the Treasury and other major users, and notes the importance of maintaining the integrity of information collected in the census.

INTRODUCTION

This submission has been prepared in response to the Inquiry by the House of Representatives Standing Committee on Legal and Constitutional Affairs into the Treatment of Census Forms. Its main purposes are:

- to note the importance of the Census of Population and Housing to the provision of the statistical information central to monitoring and understanding trends in the Australian economy and society, and to a wide range of public and private decision-making;
- to indicate the range of data used by the Treasury which are dependent on information derived from the census, and the uses to which the data are put; and
- to state the importance of maintaining the quality of data obtained from censuses.

SOME USES OF DATA FROM THE CENSUS

The census is fundamental to the Australian social statistics system in providing socio-economic and demographic data which are important for the development and implementation of a range of policies at all levels of government, and for business planning and investment decisions. The census questionnaire is compiled after consultation with major users of statistics, community groups and the public at large, and with a view to its relationship to other statistical series compiled by the Australian Bureau of Statistics (ABS). Because the census covers the Australian population as a whole it avoids sampling error, and for many purposes it provides more reliable information than that derived from sample surveys. Also, obtaining data from the census may be the only practicable means of providing reliable information in respect

of matters affecting only a small proportion of the population, or in cases where 'small area data' are needed for the country as a whole — for example, figures for each local government area, or smaller. Compilation of statistics for small areas and small population groups is thus a major function of the census, and as such statistics are relatively volatile, timely, high-quality data are particularly important for effective decision-making.

It is important also to recognise that the accuracy of a wide range of intercensal household surveys conducted by the ABS on such matters as health, housing and crime, as well as basic economic information, depends on census data. For example, the design and allocation of the samples used by the ABS for household surveys is based on population data from the census, and the census also enables 'benchmarking' of surveys — such as the Labour Force Survey — which are conducted regularly on sample populations. The 'benchmarking' involves comparison of results of the survey sample with independent estimates of the whole population based on the census (adjusted for births, deaths and migration between the time of the census and the survey). Such comparisons help to ensure the reliability and comparability of the regular sample surveys. Accurate census data thus underpin the reliability of many other important statistical series compiled from sample population surveys.

The information collected in the census reflects needs of governments and other users. A major purpose is to establish the populations of the States, Territories and local government areas. Australia's population growth has been much faster than that of most developed countries, and it has had high rates of immigration and of internal (eg interstate) migration. One important reason for obtaining regular and accurate census information on population is the constitutional requirement that the number of members of the House of Representatives chosen in the several States be in proportion to the respective numbers of their people.

Other major uses of census data are related to the transfer of revenue from the Commonwealth to the States (and Territories), and to local government, in the context of the high degree of vertical fiscal imbalance between the various levels of government in Australia. For example, Financial Assistance Grants (which account for the bulk of general revenue assistance from the Commonwealth to the States) for 1997-98 will amount to around \$16 billion, and their allocation among the States is based on the States' populations and their per capita relativities, as assessed by the Commonwealth Grants Commission for the purpose of promoting horizontal fiscal equalisation. Census data are necessary for accurately determining the populations of the States, as well as for examining demographic, geographic and economic factors which enter into the determination of their per capita relativities. The Treasury portfolio is responsible for making general purpose payments to the States and Territories flowing from decisions of the annual Premiers' Conference and Grants Commission Relativities. Specific purpose payments to the States and local government are also very substantial, and census data are important for

determining their allocation in such important fields as education and hospitals.

More generally, census data underpin a range of significant decisions by different levels of government and by the private sector. Census data can be used to establish the needs of the community and enable services and any necessary infrastructure or other investment to be targeted appropriately. A few examples are:

- by enabling cross-matching of factors such as age, income, ethnicity, type and ownership of housing and residential location, the census data help to identify social and economic trends and problems, and where to target action to address community needs: for example, the census yields data on internal migration patterns which assist planning for aged care services;
- the emphasis on questions relating to housing reflects the census's importance in the analysis of financial and other aspects of home-buying and renting in relation to specific categories of people;
- a particular application concerns services for minorities, such as Aboriginal and Torres Strait Islander people. The census provides information on where these people are, and on aspects of their housing, educational attainment, family size, income and labour force experience. Such information enables the estimation of current needs and the projection of future needs, and where service delivery should be concentrated. It thus facilitates the development and implementation of measures to improve the access of Aboriginal and Torres Strait Islander people to adequate housing, workforce training, education more generally and a wide range of other services (such as health care);
- similarly, the census facilitates measures to direct settlement assistance to migrants, the planning of multilingual information programmes, provision of interpreters and translation services, and other migrant welfare services;
- the census data assist analysis of urban planning issues involving transport and land use, through the information they provide on car ownership, modes and routes of journeys to work, and areas where residential or commercial/industrial demand for land is growing. This helps determine when and where land should be made available for development and where extra transport capacity will be required, enabling forecasts of public transport patronage and planning of new transport routes. It also helps in planning parking facilities and provision of amenities and services for the working population near their places of work; and

- census data on education, occupation, labour market participation and place of work are vital for the analysis of a range of important labour market issues, including the demand and supply of skills; trends towards part-time work; estimating child care needs; providing the required level of labour market services, and matching them to specific areas; monitoring the employment experience of minorities. A particular application has been the analysis of the demographic and labour force characteristics of employees in industries and in locations facing structural change.

Census-related data are thus integral to the formulation of a broad range of government policy, the allocation of resources between different tiers of government, and the efficient implementation of government policy. Reliable census data are necessary to meet a range of community needs, including the promotion of equity objectives through the identification of special needs of particular groups in specific locations, which may require government policy measures, and to ensure the efficient use of the very substantial resources employed by all levels of government, and by the private sector, to meet those needs.

Census-related data are also important inputs to decision-making by businesses in the transport, land development and housing construction sectors, which have an obvious interest in the data indicating where there will be increased demand for their services. Equally, such data can assist businesses in locating close to potential customers — even to customers with particular characteristics, such as income or age — or to potential employees; moreover, businesses operating beyond the regional scale can be helped in gauging the potential national market for their products or services, and in projecting feasible rates of growth. Census-related data facilitate increased efficiency in a range of significant private sector investment decisions.

USE OF CENSUS-RELATED DATA BY THE TREASURY

Because of the Treasurer's broad responsibilities, including resource allocation and the formulation of the Commonwealth Budget, many of the above applications are of interest to Treasury. The following examples, however, relate to the use of census-related data in the areas for which Treasury has prime responsibility. The information used includes both data derived directly from the census, and data from ABS household surveys which use census data for construction of samples and for benchmarking.

Retirement Incomes

The census is a primary source of data in respect of the distributional analysis undertaken in relation to retirement incomes.

Models have been developed by the Retirement Income Modelling Task Force (RIM) — now part of the Financial Institutions Division of Treasury — to project the comparative adequacy, equity, costs and benefits of alternative retirement income policies. These policy impacts are modelled at the individual, couple and population level and include the effects of policy on taxation revenue, on social security outlays, on retirement income, on private saving and on national saving. Apart from the importance of these issues in terms of Commonwealth Government policy, the models' projections of superannuation are used by many private sector analysts.

The operation of RIM depends on detailed statistical information from ABS household surveys, including the income and housing survey, the Household Expenditure Survey (HES), the Labour Force Survey and its supplementary surveys (superannuation, retirement intentions, labour force experience). In this analysis, the most important applications of the census are the updating of the household survey sampling framework and the provision of information on persons in non-private dwellings.

- The reweighting, or dynamic ageing, of ABS data is undertaken to provide current estimates of various distributions. Parameters from the census — such as age, sex, family status, labour force status and location — are used in the reweighting of ABS sample survey datasets.
- ABS household surveys generally exclude persons in non-private dwellings (such as nursing homes and retirement villages). At any given point in time, a significant proportion of the aged are in such dwellings. Census information (non-private dwelling type cross-classified by age and sex) is the source used most frequently to reconcile estimates of these sample surveys with population estimates.

Taxation

Another use of ABS household survey data in the analysis of the effects of alternative revenue and expenditure measures is in relation to taxation. For example, using HES data, Treasury's Price, Revenue, Incidence, Simulation Model (PRISMOD) is able to estimate the impact on differing household types of changes in commodity prices (including through indirect tax changes), income tax and government transfer payments. Although valuable information on income and other variables is available to the Australian Taxation Office (ATO) from analysis of taxpayers' tax returns, the ATO information is organised in relation to the taxpaying unit — for individuals, the individual taxpayer — rather than to households (which may include more than one

taxpayer). Analysis of the effects on households gives a fuller picture of the impact of tax policy alternatives.

Macroeconomic Forecasts and Policy Advice

Accurate economic statistics are central to the conduct of macroeconomic policy. It is clearly important to measure accurately the economic variables which are of concern to the community, and which form the objectives of macroeconomic policy, including economic activity, inflation and unemployment. The successful conduct of policy also relies on a sound understanding of the relationships between many economic variables as these relationships form the basis of economic forecasts and assist in assessing the impact of changes in policy. While many factors affect these judgements, the task is made easier if the underlying economic statistics are sound.

Treasury therefore relies heavily on the accuracy of ABS statistics in formulating its advice on macroeconomic conditions and the conduct of macroeconomic policy. For example, projections and forecasts for economic variables such as inflation, economic activity and employment growth form a key input into calculating the budget forward estimates, and hence are of critical importance to the Department's advice to the Treasurer on fiscal policy. While the use of census data for macroeconomic analysis is generally indirect, there are many data sources important to Treasury that are linked to the census.

Economic Activity

The quarterly National Accounts data provide key information about current economic conditions, and are the foundation for forecasting developments in the year ahead. Important areas where the National Accounts figures depend on census data for benchmarking include:

- private consumption expenditure on rent — this accounts for almost 20 per cent of private consumption expenditure and 12 per cent of Gross Domestic Product (GDP);
- estimates of the value of total wages, salaries and supplements — this accounts for around 50 per cent of the income based measure of GDP (GDP(I)), which in turn has a weighting of a third in the ABS's recommended measure of GDP (GDP(A) — the average of the income, expenditure and production based GDP measures); and
- estimates of GDP per employee/head.

In addition, the estimates of government consumption expenditure (such as expenditure on the provision of education or health services) by State in the State Accounts make use of census population data.

Developments in the dwelling sector have a significant impact on total economic activity in Australia. Census data on factors that determine future levels of dwelling construction (including household formation, estimates of the housing stock, structure of dwellings) are inputs to the forecasting processes for this sector. Although a relatively small proportion of GDP, dwelling construction tends to be particularly volatile and can make a significant contribution to changes in GDP.

Labour Market

Reducing unemployment is a prime Government objective, and a principal aim of economic policy. The level of unemployment also has consequences for government expenditure, just as the level of employment has consequences for government revenue. Reliable data on levels of unemployment and employment, and other aspects of the labour market, are central to macroeconomic analysis, forward estimates of revenue and expenditure, and policy development in the Treasury portfolio, as well as to specific labour market policy issues in other relevant departments.

Census data provide benchmarks for the Labour Force Survey in a number of areas which are important for Treasury in monitoring, explaining and forecasting labour market developments. These include:

- gross flows data — that is, data on flows between various labour market categories — are integral to monitoring developments in the labour market;
- disaggregated data by industry and occupation which show the relative strength of employment in different industries, sectors and occupations; and
- statistics showing unemployment by educational attainment which provide an indication of the degree of mismatch of skills in the economy. The extent to which there is mismatch between the demand and supply of labour is important in analysing both macroeconomic conditions and structural factors.

Inflation

The Consumer Price Index (CPI) is an important measure of price change in the economy and is used directly to adjust a range of Commonwealth payments, including payments to the States and personal benefits. The CPI is also used to derive the underlying measure of inflation which is targeted by the Reserve Bank when setting monetary policy. The CPI is reweighted every five years to ensure that it continues to reflect household spending patterns and hence remains an accurate measure of price change. CPI weights are based on the HES. The next reweighting of the CPI will be for the March 1998 quarter, to be published in April 1998, based on the 1993-94 HES survey.

DATA QUALITY AND THE DESTRUCTION OF CENSUS FORMS

The issues to be considered by the Committee include the costs and benefits of changing from the current system of destroying census forms — so as to remove links between the information recorded on the forms for statistical purposes and the names and addresses of the individuals who provided the information — to retaining census forms. The benefits which we have seen claimed in respect of retention of the forms are of little direct relevance to Treasury's functions, and we do not propose to comment on them: we could add nothing to the discussion in the ABS's annual report for 1995-96.

There are at least three possible costs from retention of census forms:

- monetary costs of storage (or of microfilming and storage of the microfilms) and of subsequently providing access to researchers. The ABS (in its 1995-96 annual report) has quoted an estimate made in 1988 for storage costs, of between \$2 million to \$9.4 million, in 1988 prices;
- possible conflict with the objectives of policy relating to individual privacy;
- possible adverse public reaction to perceived privacy problems, leading to reduced cooperation with ABS and the consequences that may have for census and other statistical data.

The range of costs given for storage would in themselves put the onus on proponents of retention to substantiate claims as to the value of retention. The costs of storage are considerably less than the cost of planning and undertaking the census and processing and making available the results, but the cost of the census is amply justified by the manifold important applications of census data.

While consistency of policy on privacy matters is an important issue, it is not in itself an area on which Treasury has particular expertise. Treasury nevertheless notes that a survey carried out in 1996 on behalf of the ABS found that a high proportion of the community would have strong concerns about privacy if it were decided that census forms would be retained. Furthermore, a substantial proportion of interviewees indicated that perceived threats to privacy, and in particular, retention of census forms with names and addresses of respondents, would make them less likely to provide full and accurate information when participating in the census.

Treasury's main interest is in the possible impact that a decision to retain census forms may have on the quality of ABS statistics. The particular value of statistical information from the census derives in large measure from the completeness in its coverage, and even relatively small reductions in the level of cooperation could have a substantial adverse effect on the quality of the census data, which could not be fully remedied by post-evaluation surveys. Any reduction in cooperation would not be randomly distributed and could introduce significant bias in data derived from some census questions.

A high quality statistical database is necessary for efficient and effective decision-making by both the government and private sectors. Any reduction in the quality of census data would affect the sample basis for a range of other surveys, as well as detracting from the ability to check and adjust series based on samples through benchmarking against census data. The importance of census-related data to a wide range of government and private activities has been noted above. Another consideration is that if people's perceptions of the ABS are adversely affected in relation to the census, their level of cooperation in other surveys conducted by the ABS is also likely to decline.

As regards Treasury's functions, a reduction in the quality of census data and sample survey data used by Treasury could increase the difficulty of modelling and developing retirement income policies, assessing economic conditions and processes, and economic forecasting. This has the potential ultimately to reduce the effectiveness of a range of economic policies in achieving their objectives.

Because good decisions require good information, Treasury would be concerned by any reduction in cooperation by the public with the ABS in the conduct of the census, and would envisage that consideration of the impact of retention of census forms on public cooperation with the ABS would be central to the Committee's investigations and deliberations.

SUMMARY AND CONCLUSIONS

The objective of this submission has been to emphasise the role of the census in maintaining the integrity of data collected by the ABS. ABS data underpin decision-making by all levels of government and the private sector. Treasury is a heavy user of data for policy purposes.

Although we are not in a position to assess the extent to which retention of census forms would impair the integrity of ABS data, the risk of a material reduction of data quality appears to be a very real one.