

**THE IMPACT OF PERMANENT MIGRANTS
ON THE COMMONWEALTH BUDGET**

SUMMARY REPORT

2001-2002 ENHANCEMENT

Prepared for the

**Department of Immigration and
Multicultural and Indigenous Affairs**

by

ACCESS ECONOMICS

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EXECUTIVE SUMMARY

Access Economics was commissioned by the Department of Immigration, Multicultural and Indigenous Affairs (DIMIA) to update and enhance a model of the impact of new permanent migrants on the Commonwealth Budget. The model was originally developed by (the then) Department of Immigration and Multicultural Affairs and the Department of Finance and Administration. Access Economics updated all information to the latest available with a base year for costs of 2001-02, introduced greater detail into the age structure used in the model, allowed for migrants to 'age' over time, and incorporated labour force entry and exit into the model.

The Commonwealth Budget model provides an estimate of the impact an additional 1,000 migrants have on Commonwealth Budget outlays and receipts. The additional migrants arrive in Year 1 (configured to a base year of 2001-02), and the model tracks those migrants over ten years. There are no additional flows of migrants in future years. Migrants are classified according to their visa groups.

The migrant profile used in the model has been updated to reflect the 2000-01 migrant intake. Over recent years there has been a relative shift in Australia's migration program towards the Skill Stream (particularly the independent category) and away from the Family Stream. The model indicates that this shift is likely to be delivering higher benefits to the Commonwealth in terms of net revenue, largely through higher incomes and tax payments.

Data on the English proficiency of migrants on arrival has also been updated to the 2000-01 intake. In recent years there has been a rise in the overall English proficiency of new migrants, which shows up positively in the Commonwealth Budget model as it means less expenditure is required on programs to improve English skills.

Outlays and revenue information in the Commonwealth Budget model has been updated to a base year of 2001-02. Outlays shown in the Commonwealth Budget model are those where there would be direct additional expense to the Commonwealth as a result of the additional migrants, as well as those areas of expenditure where additional demands do not necessarily result in an immediate increase in expenditure, but in the longer term are likely to do so (that is some programs may be cash limited in the short term).

In addition, a more detailed age structure has been included in the model. That has allowed a number of take-up rates for services to be re-specified. Migrants have also been allowed to 'age' over time, with allowance for labour force entry and exit. In general, retirement from the labour force means a reduction in tax revenue from labour income, as well as effects on benefits – more age pension benefits and less unemployment and family type benefits. Entry to the labour force means more revenue from labour income to the Commonwealth from those individuals, and less expenditure on the likes of schools, full time tertiary education and the youth allowance, though more spending on unemployment and family type benefits.

Those exiting the labour force are likely to have higher incomes (and therefore contribute higher direct tax payments) than those entering the labour force. While this has been allowed for in the Commonwealth Budget model, incorporating labour force entry and exit generally produces higher direct tax receipts. This is because, based on the 2000-01 migrant intake, for the 10 years after arrival there are many more entrants to the labour force than there are

retirees. This reflects the age structure of the migrant intake, with a much higher proportion on arrival of an age close to entering the labour force than the proportion close to exiting.

Overall, the effects of higher direct tax receipts and lower spending on education are largely offset by higher health and social security payments as migrants 'age'.

Table 1 provides a summary of the impact on the Commonwealth Budget per 1,000 migrants, following the changes incorporated as part of this update. It shows benefits to the Commonwealth Budget from year 1, with improving returns over time. The strongest benefits come from migrants under the independent and business skills categories within the Skill Stream, largely due to high incomes and therefore, direct tax payments. For the Family and Humanitarian Streams, expenses outweigh revenues, though balance is reached for migrants in the Family Stream by year 10.

Table 1: Impact on the Commonwealth Budget per 1,000 Immigrants

Net Operating Surplus (deficit) \$m	Year 1		Year 4		Year 10	
Family, per 1,000	\$	(1.9)	\$	(1.1)	\$	0.0
<i>Skilled Aust. Sponsored (SAS), per 1,000</i>	\$	(0.6)	\$	0.7	\$	1.8
<i>Business Skills, per 1,000</i>	\$	10.5	\$	11.9	\$	16.6
<i>Independent, per 1,000</i>	\$	4.0	\$	12.1	\$	19.4
Skilled Total, per 1,000	\$	4.1	\$	9.7	\$	15.1
Humanitarian, per 1,000	\$	(10.4)	\$	(5.5)	\$	(5.9)
Total, per 1,000	\$	0.3	\$	4.4	\$	7.6

Chapter 1. INTRODUCTION

Access Economics was commissioned by the Department of Immigration, Multicultural and Indigenous Affairs (DIMIA) to update and enhance a model, which estimates the impact of new permanent migrants on the Commonwealth Budget. The model was originally developed by (the then) Department of Immigration and Multicultural Affairs and the Department of Finance and Administration. Access Economics has previously undertaken a revision and update of the Commonwealth Budget model, completed in March 2001 (the 2001 update).

For this update, Access Economics was asked to refine the existing Commonwealth Budget model in a number of respects:

- Adjust the population age profile to allow for ageing, and to integrate this throughout the model (previously ages were ‘static’ in the Commonwealth model – the age of migrants did not change from that at arrival)
- Expand the age profile so that it covers five year cohorts (previously the Commonwealth model used age brackets of 5-14, 15-44, 45-64 and 65+)
- Review information on the unit cost of outlays and expand this to reflect greater detail in age brackets where possible
- Update all information to the latest available with a base year of 2001-02
- Incorporate retirement from the labour force in revenue estimates and benefit calculations

This report outlines the changes made to the Commonwealth Budget model in a series of stages. At each stage, the bottom line results are reported to ascertain the changes to those results due from the various updates. Table 2 reports key results from the Commonwealth Budget model prior to this update.

Table 2: Impact on the Commonwealth Budget per 1,000 Immigrants – results prior to current update

Net Operating Surplus (deficit) \$m	Year 1	Year 4	Year 10
Family, per 1,000	\$ (1.3)	\$ (0.3)	\$ 1.3
Skilled Aust. Sponsored (SAS), per 1,000	\$ (0.0)	\$ 1.2	\$ 2.6
Business Skills, per 1,000	\$ 8.1	\$ 11.0	\$ 17.1
Independent, per 1,000	\$ 3.4	\$ 10.1	\$ 16.9
Skilled Total, per 1,000	\$ 3.4	\$ 7.8	\$ 12.9
Humanitarian, per 1,000	\$ (9.7)	\$ (4.1)	\$ (4.0)
Total, per 1,000	\$ 0.1	\$ 3.7	\$ 7.0

The remainder of this report is organised as follows. Chapter 2 provides an overview of the Commonwealth Budget model. Chapter 3 updates the migrant profile to reflect the 2000-01 intake, including an update of English proficiency information. Chapter 4 updates information to a base year of 2001-02. Chapter 5 updates migrant age on arrival data to reflect the 2000-01 intake, and discusses adjustments to estimated take-up rates from using a more detailed age structure. This chapter also reports key results incorporating the changes up to that point. In Chapter 6 these results are compared with the situation where migrants are allowed to 'age' over time.

Chapter 2. MODEL OVERVIEW

The Commonwealth Budget model provides an estimate of the impact an additional 1,000 migrants have on the Commonwealth Budget, in terms of outlays and receipts. The additional migrants arrive in Year 1 (which following the update is configured to a base year of 2001-02), and the model tracks those migrants over a period of ten years. There are no additional flows of migrants in future years.

Migrants are classified according to broad visa groups. The visa groups used in the model are:

- Family
- Skilled Australian Sponsored (SAS)
- Business Skills (includes Employer Nomination Scheme)
- Independent
- Humanitarian.

The Commonwealth Budget model has been configured with a series of base assumptions. These provide a projection of the likely net impact on the Commonwealth Budget of additional migration. These assumptions can be changed by the user to provide alternate projections. They can also be changed to conduct scenario or ‘what if’ analysis.

The following sections describe some of the key drivers of results in the model.

2.1 TAKE-UP RATES

The Longitudinal Survey of Immigrants to Australia (LSIA) provides the main source of information in estimating new migrants’ usage of Commonwealth funded services. The survey tracks migrants who arrived in Australia in 1994-95 at points in time around one, two and four years after arrival. It is used as the basis for estimating new migrants’ use of a range of social security allowances and pensions, their call on unemployment benefits (where eligible), as well as their use of Commonwealth funded higher education. Usage of some other Commonwealth services, such as health care and school education, is related to the age of the migrant.

Beyond four years after arrival, no further information is available from the LSIA as to migrants’ usage of Commonwealth services. The model is set up so that take-up rates converge to an Australian average by year 10. Where possible, that average is age-weighted, to be equivalent to the age structure of the migrant group.

2.2 OUTLAYS

Estimates of outlays in the model are driven by take-up rates and information on the cost of providing Government services. Unit costs in the model have been updated to a base year of 2001-02, using information provided in Budget documents and by Commonwealth Departments. Where projections of costs for future years were available, these were also

inserted into the model. Where these were not available, unit costs have been linked to relevant price indices on the parameters sheet.

The base assumption for prices is growth of 2.5% a year, though for pensions the escalation rate is 3.5%, reflecting their benchmark to 25% of male total average weekly earnings.

2.3 RECEIPTS

Estimates of receipts in the model are driven by LSIA information on incomes from which average direct tax payments are calculated. Receipts of indirect tax are also driven by LSIA income information, combined with information from the Household Expenditure Survey on propensities to consume taxed goods out of income.

A wage index drives migrant incomes beyond year 4 (the last year of LSIA information). This is set at a base rate of 3.5%, reflecting a projection of average economy-wide wages growth.

Base assumptions of 3.5% wages growth and 2.5% prices growth reflect migrants delivering productivity improvements, compensated by real wage growth. This productivity improvement helps to deliver an improved bottom line to the Commonwealth Budget over time (as expenses are mostly linked to the CPI, but revenues are mostly linked to wages).

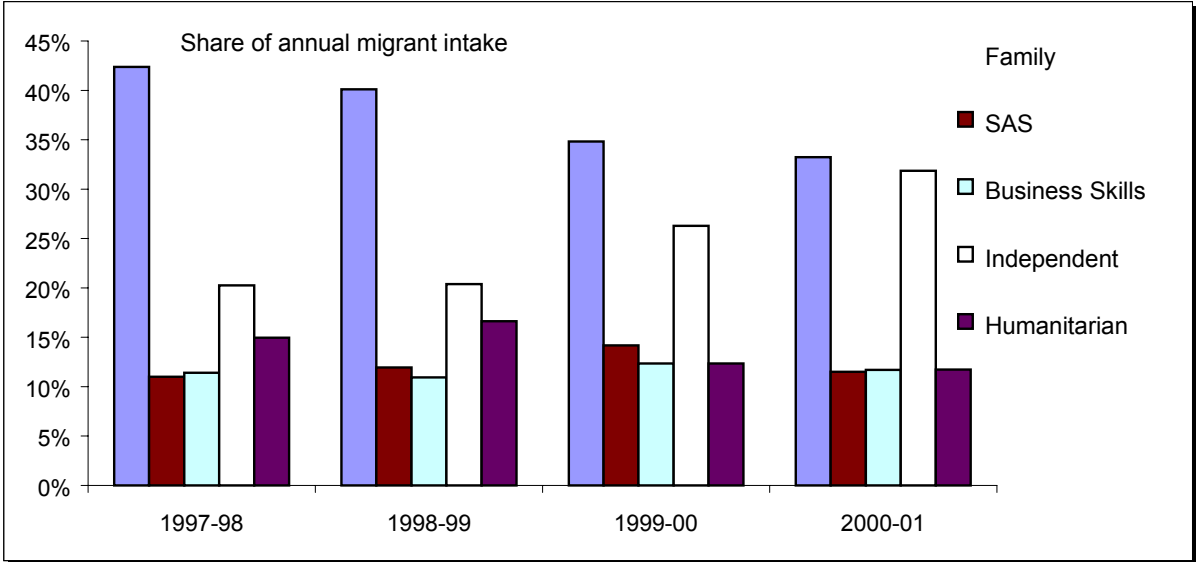
Chapter 3. UPDATING THE MIGRANT PROFILE

The migrant profile used in the model has been updated to reflect the 2000-01 migrant intake, rather than the 1999-00 intake as used previously. Data on the English proficiency of migrants on arrival has also been updated to the 2000-01 intake.

3.1 UPDATE OF IMMIGRANTS PER VISA CLASS

Over the last three years there has been a relative shift in Australia's migration program towards the Skill Stream and away from Family and Humanitarian. In particular, as seen in Chart 1, the independent category of the Skill Stream is now only just below the Family Stream as accounting for the largest share of Australia's migrant intake, whereas three years ago the Family Stream was more than double the independent category. From 1999-00 to 2000-01 the trend towards more migrants under the independent category and fewer under the Family Stream continued, though there was also a minor fall in the Skilled Australian Sponsored (SAS) category.

Chart 1: Australian migrant intake by visa group



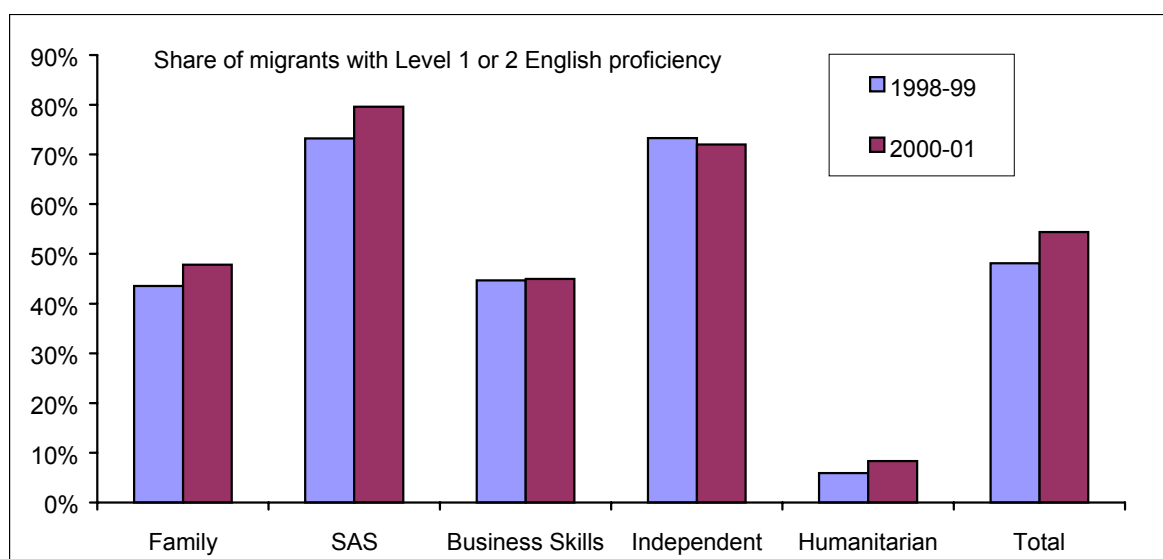
The Commonwealth Budget model indicates that migrants from the independent category provide a far greater contribution to Commonwealth net revenue than do migrants from the Family Stream, largely through higher incomes and tax payments. Therefore, the change in relative importance, towards the independent category and away from the Family Stream, is likely to be delivering higher benefits to the Commonwealth in terms of net revenue.

Within the Skill Stream, particularly the independent category, there has also been a shift towards principal applicants making up a higher share of each group (the group being the sum of principal applicants and dependants, including other adults). This is also significant for Commonwealth net revenue, with the LSIA showing that principal applicants have significantly higher personal incomes than other adults within the same visa group, and therefore contribute much more to direct tax payments.

3.2 UPDATE OF ENGLISH PROFICIENCY DATA

Chart 2 shows the share of migrants with Level 1 or Level 2 English proficiency (the highest levels) for 2000-01 and for 1998-99 (the year previously used for English proficiency data in the Commonwealth Budget model). The chart shows that in total there has been a rise in the English proficiency of new migrants over the past two years (from 48% to 54%), with greater English proficiency in all visa streams (only the independent category within the Skill Stream has shown a marginal reduction in its share of English proficient migrants since 1998-99).

Chart 2: Australian migrant intake by English proficiency



The definition of 'English speaking' used in the Commonwealth Budget model is those migrants who have Level 1 or Level 2 English proficiency. This covers migrants from those countries where at least 80% of recent arrivals indicated they spoke English well (as reported in the 1996 Census). Previously the Commonwealth Budget model used a different classification of English speaking, based on a self-assessment process. The change in definition has resulted in a higher level of English proficiency being recorded in the Commonwealth Budget model.

A rise in English proficiency in total shows up positively in the Commonwealth Budget model as it means less expenditure is required on programs to improve English skills – English as a Second Language (ESL) funding in schools and the Adult Migrant English Program (AMEP). Less expenditure is also required on translating and interpreting services.

Note that one might expect an improvement in the English proficiency of new migrants to also lead to higher rates of employment, higher incomes, and therefore higher tax revenues to the Commonwealth. This effect is not shown directly in the Commonwealth Budget model, as it is not possible to separately attribute income which is due to greater English proficiency, but is worth noting as a likely benefit from the higher English proficiency of new migrants in recent years.

Chapter 4. UPDATING TO 2001-02 BASE YEAR

For this review, Access Economics has updated all information in the Commonwealth Budget model to a base year of 2001-02. Most of these changes are to information on the outlays side used in calculating relevant unit costs, though there has also been some update of information on the revenue side and other parameters.

4.1 SCOPE OF THE COMMONWEALTH BUDGET MODEL

Outlays shown in the Commonwealth Budget model are those where there would be direct additional expense to the Commonwealth as a result of the additional migrants, as well as those areas of expenditure where additional demands are generated by the additional migrants (though programs may be cash limited in the short term).

The model allows a switch between examining the impact of new migrants on an ‘average cost’ basis to an ‘avoided cost’ basis. An average cost basis apportions all relevant costs over all migrants and can be used to analyse any change in the level of migration (not just an additional 1,000 migrants). An avoided cost basis shows the impact on the Commonwealth Budget of a marginal increase in migration, where cash limited programs do not receive extra funds. In effect, current funding where it is cash limited would be distributed over a wider base (which may result in increased queuing, decreased quality of service etc.) An avoided cost basis may be a more useful short term measure of the impact of new migrants on the Commonwealth Budget. The model’s default is that the impact of migration is shown on an average cost basis.

The model does not take into account ‘public good’ type expenditures like defence, roads, industry development and general administration. For these areas of activity, it is less obvious how additional migration affects expenditures, at least over the short term.

Similarly on the receipts side, the receipts shown are those directly attributable to additional persons. It does not include the tax levied on corporations and other non-person bodies which are not directly attributable to individuals, though over time would be affected by additional migration.

The default in the Commonwealth Budget model is that all data is shown on a nominal or current price basis. The model contains a switch so that outlays and revenues can alternatively be presented in constant 2001-02 prices.

4.2 OUTLAYS BY TYPE

The following discusses the main outlays by type recorded in the Commonwealth Budget model, and notes any significant changes as part of this update. Generally, recorded outlays shown in the Commonwealth Budget model have increased with updating to base year 2001-02 as they are measured in nominal terms, though most categories have also increased in real terms. Changes resulting from using a more detailed migrant age structure are discussed in Chapter 5.

4.2.1 General revenue assistance

Data on per capita general revenue assistance from the Commonwealth to the States was updated using information provided in the Commonwealth Government Budget. GST revenue is assumed to accumulate to the Commonwealth, and then be distributed to the States in the form of general assistance grants (in place of the former financial assistance grants).

4.2.2 Health

Additional migration imposes a cost to the Commonwealth via provision of Medicare benefits, pharmaceutical benefits and funding to the States under Australian Health Care Agreements (public hospitals). Funding for these health services is not cash limited (that is, the cost to the Commonwealth will grow along with higher population).

The cost of pharmaceutical benefits per capita has increased markedly since the last update, with total Budget outlays 12.2% higher in 2000-01 than was estimated in the in the 2000-01 Budget. Forward estimates in the Budget papers also factor in growth of around 6.6% per annum in real terms, driven primarily by the increased availability and utilisation of newer and more expensive drugs. The Commonwealth Budget model uses as a proxy for concessional patients under the pharmaceutical benefits scheme (who are a higher cost to the government) those migrants in receipt of social security payments (other than family allowance payments).

Some revenue for health services is received via the one-off migrant health services charge, now known as the second instalment of the visa application charge. However, modelling the number of new migrants required to pay this charge is quite complex, and the number paying this charge is very small (only some 415 from the whole 2000-01 migrant intake). Accordingly, this revenue measure is now excluded from the model.

4.2.3 Education

Additional migration imposes a cost to the Commonwealth via use of schools, vocational education, tertiary education (universities) and study assistance. Commonwealth funding for vocational education and some schools funding is cash limited, while for other areas of education it is not.

While some Commonwealth funds provided for education are earmarked for capital projects, they do not form part of the Commonwealth's capital stock, so in attributing the impact to the Commonwealth they are the same as a recurrent grant.

The unit cost for higher education funding assumes the student is full-time and not full fee paying. For vocational education, where the vast majority of students are undertaking part-time courses, unit cost is calculated in terms of an average student load (in 2000 this was 167 hours).

We have altered how ESL (English as a Second Language) funding is applied. As ESL funding is granted as a one-off payment per eligible student, the only outlay is in year one, even if language training is delivered to the student over more than one year (the model previously showed some ongoing payments in years two and three). This change increases school outlays in year one and reduces them in years two and three compared with that shown previously.

4.2.4 Settlement services

Additional migration imposes a cost to the Commonwealth via provision of settlement services for Humanitarian migrants, use of translation and interpreting services (TIS) and use of the Adult Migrant English Program (AMEP). The latter two recover some costs through user charges. User charges for both TIS and AMEP are separately identified. These are shown on the receipts side of the model, with gross costs on the outlays side.

The full amount of expenditure under the Integrated Humanitarian Settlement Strategy (IHSS) is assumed to be spent on the incoming group of migrants in the first year, thus it now does not appear beyond year one in the Commonwealth Budget model.

Information on the registration rate (as a share of those without Level 2 English), and average number of hours used of the AMEP by visa category stated in the 2000-01 DIMA annual report, has been used to estimate take up rates and the cost per migrant of using this program.

4.2.5 Social security

Additional migration imposes a cost to the Commonwealth via payment of benefits, pensions and allowances, as well as the administration of such payments through Centrelink.

The unit cost of family payments has increased significantly on that previously reported, with the model now including average payment of Family Tax Benefit A and B (introduced as part of the July 2000 tax changes) for those who receive family type benefits.

4.2.6 Labour market services

Additional migration imposes a cost to the Commonwealth via provision of labour market services. It is largely via the Job Network program, but now also includes Work for the Dole and some other labour market service programs. Commonwealth funding for Job Network and other labour market services is distributed to a number of providers. It is cash limited.

The unit costs of labour market services are difficult to ascertain, given that a number of different services are provided (job matching, job search training, intensive assistance, community support programmes and the new enterprise incentive scheme). The current number of unemployment benefit recipients is used as a proxy for the number of people accessing labour market services. This proxy is reasonable given that the take-up rate used in the model for labour market services is the estimated number of new migrants who are eligible for unemployment benefits.

4.3 UPDATE OF REVENUES

Revenue estimates have also been updated to a base year of 2001-02, reflecting additional wages growth over the previous base year of 2000-01. This in itself increases all revenue estimates in the Commonwealth Budget model.

Average rates of indirect taxes have also been recalculated on the basis of the latest estimated indirect tax revenue and consumption of taxed goods. For tobacco taxes this has led to a reduction in the estimated tobacco tax rate, because of a significant upward revision by the ABS of consumption of tobacco products (the denominator in this calculation).

4.4 UPDATE OF OTHER PARAMETERS

Parameters in the Commonwealth Budget model have been updated where possible. This includes an update of Australian population projections and the relevant Australian population take up rates for many services. Migrant take up rates for several services/payments are assumed to converge to these Australian averages by year 10, save for age differences as discussed in Chapter 5.

The 'Parameters' sheet now allows for different year by year price and wage growth, though the default setting is for price growth of 2.5% per annum, and wage growth of 3.5% per annum (pensions also grow by this rate). The latter reflects the rate used in the latest Commonwealth Budget Statements. Previously this parameter was set at 4.0% per annum. Importantly, the lower rate implies less productivity growth driving the revenue growth underlying the Commonwealth net operating surplus over time than previously reported.

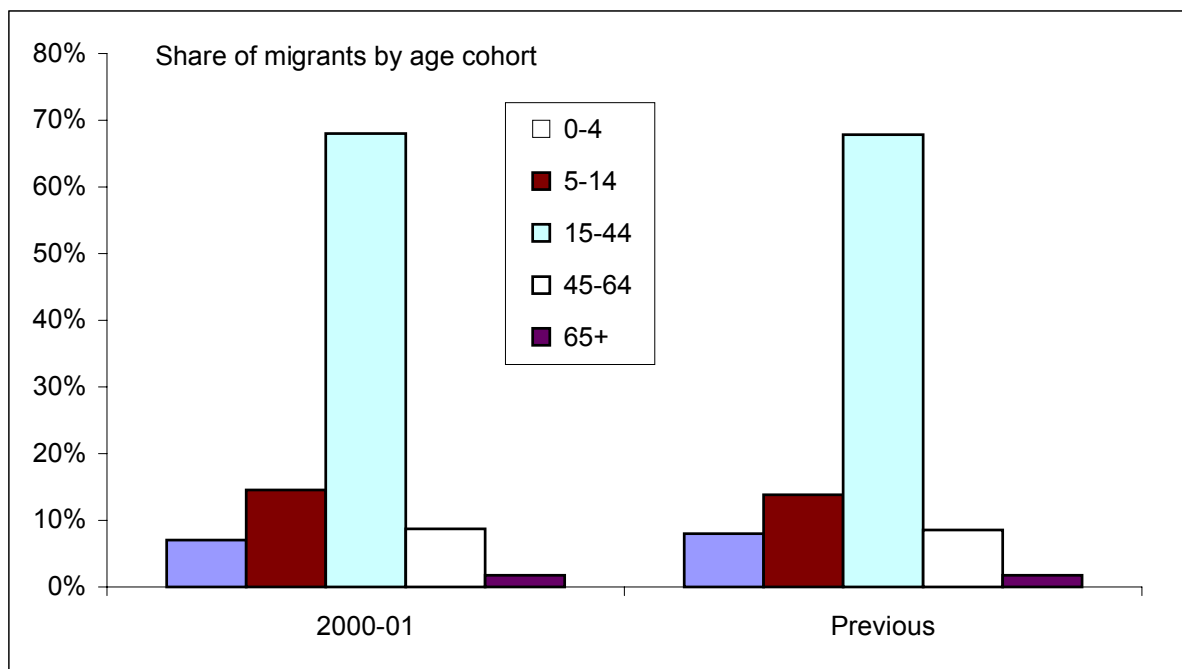
Chapter 5. UPDATING THE AGE STRUCTURE

The migrant profile used in the model has been updated to reflect the age structure of the 2000-01 intake. A more detailed age structure has also allowed a number of take-up rates for services to be re-specified.

5.1 AGE STRUCTURE OF THE 2000-01 INTAKE

Chart 3 shows the age structure of the 2000-01 migrant intake by broad age cohort compared with the age structure previously used in the Commonwealth Budget model (the average age structure for the three years ending 1999-00). It shows very little difference between the age structure of the 2000-01 migrant intake with that previously used in the model. There has been some change within visa groups, with a higher share of Family migrants being children, though in the Skill Stream migrants are on average a little older than previously, resulting in very little change across the whole migrant intake.

Chart 3: Australian migrant intake by broad age cohort



5.2 ADJUSTING TAKE UP RATES

The Commonwealth Budget model has also been enhanced to include greater detail in those take-up rates which are sensitive to age. In the areas of health, education and some social security payments, we have expanded the age profile of unit costs used in the Commonwealth Budget model to match the greater detail available from the age profile of migrants. Previously the Commonwealth Budget model used age brackets of 5-14, 15-44, 45-64 and 65+.

5.2.1 Health

In the area of health, we have been able to differentiate the usage of services by both age cohort and gender, matching these to the migrant age and gender profile included in the model. This is possible for public hospital funding provided under Australian Health Care Agreements, where per capita funding is based on weights given to males and females from different age groups. It is also possible in the usage of Medicare services, where per capita usage information from 2000-01 is available by age and by gender.

For public hospitals, per capita funding increases with age, is higher for females than males for ages 20-40, but beyond age 60 is higher for males than females. Increased funding with age will show up more in the later years estimated within the Commonwealth Budget model as the initial migrant group gets older.

For Medicare services, per capita usage tends to increase gradually with age and tends to be significantly higher for females than for males. Increased usage with age will also show up more in the later years estimated within the Commonwealth Budget model as the initial migrant group gets older.

5.2.2 Education

Enrolments in school have been changed to reflect the greater age detail now in the Commonwealth Budget model. All new migrants from age 6 to 12 inclusive are enrolled in primary school, while migrants from age 13 to 18 inclusive are enrolled in secondary school, save for those who don't complete year 11 and 12. The model uses the Australia wide year 12 retention rate of 72.4% (previously all migrants from age 5 to 14 inclusive were enrolled in school, with no differentiation between primary and secondary school).

Tertiary education (university) take up rates have been changed to be recorded on the basis of migrants' age, rather than from information gathered from the LSIA. As over 60% of tertiary education students are between the ages of 15 and 24, the share of migrants in this age group will be a very important factor in estimating their call on higher education. However, this change makes little difference to Commonwealth recorded outlays on tertiary education. For vocational education enrolments, where there is both a much broader age spread and less good data on usage by age cohort, we have retained usage information from the LSIA.

5.2.3 Social security

In the area of social security we make use of the LSIA take up rates, as these reflect the income of migrants, which in most cases is a better gauge for receipt of social security payments than the age of migrants. Beyond year 4, after which there is no further LSIA information available, take up rates converge to an exogenously set rate in year 10 (generally the Australian average take up rate).

For the youth allowance and age pension, for which age is clearly a relevant factor (youth allowance is generally only available to those under 25, while the age pension is available for men over 65, and currently for women over 62, with that being phased to 65 over time), take up rates converge to an Australian average, weighted by the age group of the migrants. For the age pension, that means a lower take up rate than the Australian average, as the new migrant group contains a much lower share of people who are of age pension age compared to the general population.

5.3 KEY RESULTS

Table 3 shows the net operating surplus reported by the Commonwealth Budget model by visa class following incorporation of the changes discussed so far.

Table 3: Impact on the Commonwealth Budget per 1,000 Immigrants – results following update of migrant profile, base year and age structure

Net Operating Surplus (deficit) \$m	Year 1		Year 4		Year 10
Family, per 1,000	\$	(1.9)	\$	(1.0)	\$ 0.2
<i>Skilled Aust. Sponsored (SAS), per 1,000</i>	\$	(0.6)	\$	0.9	\$ 2.4
<i>Business Skills, per 1,000</i>	\$	10.5	\$	11.6	\$ 17.1
<i>Independent, per 1,000</i>	\$	4.0	\$	12.0	\$ 19.0
Skilled Total, per 1,000	\$	4.1	\$	9.6	\$ 15.1
Humanitarian, per 1,000	\$	(10.4)	\$	(5.1)	\$ (4.7)
Total, per 1,000	\$	0.3	\$	4.4	\$ 7.8

Table 3 shows that skilled migrants, particularly from the business skills and independent categories, contribute significantly to Commonwealth net operating surplus. Over time, migrants from the Family Stream contribute marginally, while direct expenses exceed outlays for those from the Humanitarian Stream.

Compared with Table 2, the above now shows a more positive results across all years for the total migrant group. The more positive results come from the business skills and independent categories, particularly the latter. An important factor is the higher share of principal applicants within the independent category, and the resultant higher direct tax revenues. As the independent category now makes up a higher share of the total migrant intake, their contribution drives up that total also.

The improvement in year 1 in part reflects the improvement in English proficiency (and the use of a broader benchmark), reducing the usage of programs targeted for non English speakers.

Expenses are higher for most visa groups for most years, reflecting the change of base year, and re-estimation of take-up rates for many benefits. That helps to drive less positive results for the Family, SAS and Humanitarian groups in comparison with Table 2. The Family Stream is the only one to show consistently lower revenues over time, largely due to a reduced share of principal applicants within that visa stream (the reverse effect of that for the independent category). All groups see lower revenue growth from the assumption of slower productivity/real wage growth (that is, wages growing at 3.5% instead of 4%).

Chapter 6. ALLOWING MIGRANTS TO ‘AGE’

The results from Chapter 5 were on the basis of a static age profile – migrants remained at their initial age. We now change the age profile of migrants over time to reflect normal ageing.

Many Commonwealth Budget expenses are sensitive to the age of the migrant (or indeed, the age of the general population). Reflecting the actual ages of migrants over time (rather than the age cohort they were in on arrival) provides a more accurate assessment of their demand for government services.

Generally in the Commonwealth Budget model, retirement means a reduction in revenue from labour income, as well as effects on benefits – more age pension benefits and less unemployment and family type benefits. Entry to the labour force means more revenue from labour income from those individuals, and less expenditure on the likes of schools, full time tertiary education and the youth allowance, though more spending on unemployment and family type benefits.

6.1 LABOUR FORCE ENTRY AND EXIT

Labour force data from the ABS shows that the rate of labour force participation rises quickly between the ages of 15 and 24, is then reasonably constant until the age of 54, and then falls away to 6.2% of those aged 65 and over. This data (reflecting Australia wide average labour force participation rates by age), is used to construct labour force entry and exit profiles for the new migrant group as they age. These profiles are shown in Chart 4.

Chart 4: Net labour force entry (new participants less retirees) as migrants age

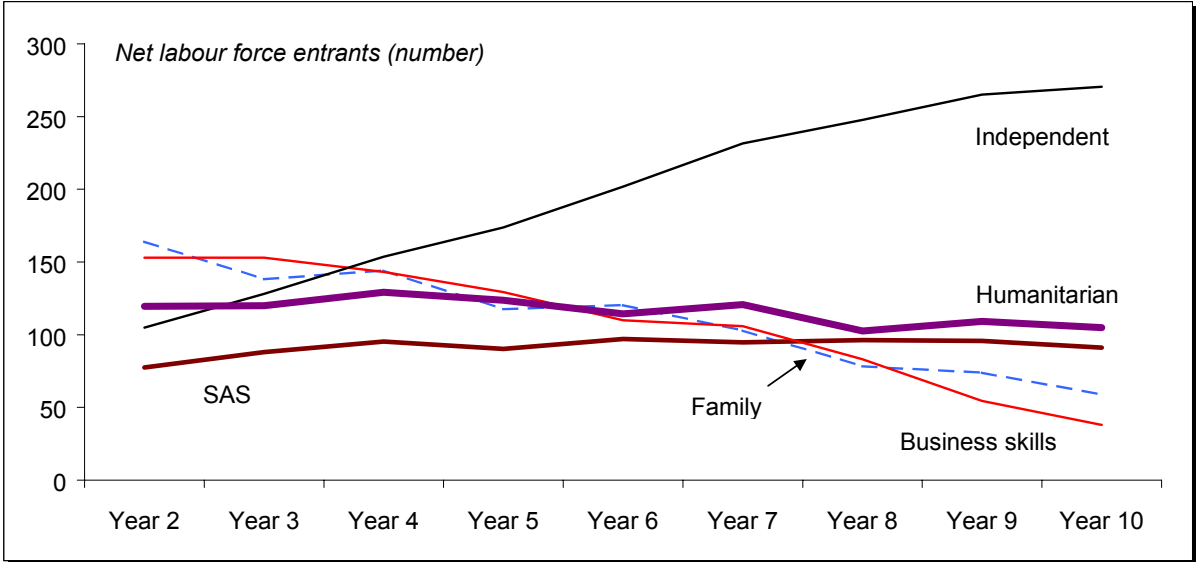


Chart 4 shows that for each year after arrival for all visa streams there are more entrants to the labour force than there are retirees. This reflects the age structure of the migrant intake with a much higher proportion on arrival close to entering the labour force than the proportion close to exiting.

Note that those exiting the labour force are likely to have higher incomes (and therefore contribute higher direct tax payments) than those entering the labour force. The proxy within the Commonwealth Budget model is to have new entrants receive 50% of the average migrant wage (averaged across principal applicants and spouses), and to have retirees paid 150% of their average migrant wage, classed by principal applicants and spouses. These relativities to the average migrant wage are illustrative and can be varied by the user of the Commonwealth Budget model. Despite these relativities, incorporating labour force entry and exit generally produces higher direct tax receipts, given the larger number of people entering.

Indirect tax receipts may also change as a result of labour force entry and exit. Quantifying this is difficult as consumption expenditure tends to change much less than income, and such receipts are based on household income within the Commonwealth Budget model rather than individual income. Accordingly, no change is allowed for in the model, but it is worth noting that the higher incomes in aggregate through incorporating labour force entry and exit should allow higher consumption over time, and therefore indirect tax receipts may be understated in the model.

Income growth for migrants for years 5 to 10 after arrival is linked to economy wide average wage growth. However, this does not allow for the effect of rising seniority for a particular group of migrants over time, where wages rise faster than the average in accordance with rising experience and skill levels. The Commonwealth Budget model includes a ‘seniority’ parameter through which such an effect can be included, though quantifying the impact is difficult. With the ‘seniority’ parameter at its default setting of zero, revenue to the Commonwealth is likely to be underestimated.

6.2 KEY RESULTS

Table 4 shows the net operating surplus reported by the Commonwealth Budget model by visa class following allowance for migrants’ ‘ageing’.

Table 4: Impact on the Commonwealth Budget per 1,000 Immigrants – results following allowance for ‘ageing’

Net Operating Surplus (deficit) \$m	Year 1		Year 4		Year 10	
Family, per 1,000	\$	(1.9)	\$	(1.1)	\$	0.0
<i>Skilled Aust. Sponsored (SAS), per 1,000</i>	\$	(0.6)	\$	0.7	\$	1.8
<i>Business Skills, per 1,000</i>	\$	10.5	\$	11.9	\$	16.6
<i>Independent, per 1,000</i>	\$	4.0	\$	12.1	\$	19.4
Skilled Total, per 1,000	\$	4.1	\$	9.7	\$	15.1
Humanitarian, per 1,000	\$	(10.4)	\$	(5.5)	\$	(5.9)
Total, per 1,000	\$	0.3	\$	4.4	\$	7.6

In total, the results in Table 4 are a little lower than those in Table 3, with the same net operating surplus for year 4, though a little lower by year 10. By visa class, allowing for ageing produces more positive benefits for the independent category, while producing a less positive outcome for the other groups. In year 4, benefits are stronger than in Table 3 for the business skills category with a considerable number of migrants entering the labour force, though by year 10 the benefits are lower than in Table 3, as the number of migrants exiting the labour force has increased.

Looking at year 10 total expenditure (based on the 2000-01 total migrant intake rather than per 1,000 migrants) the main differences (in 2010-11 nominal terms) from the ‘static’ age scenario are:

- More expenditure in the health area, because of greater usage of Medicare services and public hospitals (an additional \$8.1 million in health outlays).

- Reduced expenditure in the area of education, as migrants progress out of the school and tertiary education cohorts and into the workforce (\$4.5 million less in education outlays).
- An increase in social security outlays of \$23.9 million, and labour market service outlays of around \$0.7 million, due to more people entering the working age cohorts than leaving them. Other things equal, this means more payments for unemployment and family type benefits, only partially offset by reduced payments for youth allowance. There are also increased payments for the age pension.
- An increase in direct tax revenues of some \$17.1 million due to the number of new entrants to the labour force outweighing the number of retirees leaving the labour force, despite the higher wages of the latter. This is likely to be an underestimate of direct tax revenues as migrants ‘age’, because the model doesn’t take into account higher wages through rising seniority.

Table 5 provides a summary of year by year results for each of the visa groups from the Commonwealth Budget model incorporating all the changes discussed.

Note that this model does not – as do some others in the ageing field – allow for health care prices to rise at a faster rate than general prices in the economy. Allowance for the latter could reduce the net operating surpluses seen in Table 3.

6.3 RELATIONSHIP TO PREVIOUS AGEING STUDY

The fiscal impact of an ageing migrant population has been examined in the draft report prepared by Access Economics, ‘The relationship between the age of permanent migrants at arrival and their net impact over their expected lifetimes on the Commonwealth Budget and State/Territory Budgets’.

That study reports on the lifetime fiscal impact of migrants using a dynamic micro simulation technique to trace how migrants affect Budget outlays and receipts based on their individual characteristics. It includes characteristics of individuals such as marital status, education and labour force status. In addition to allowing for ageing, that study took some account of demographic processes such as births, deaths and couple formation and dissolution.

This study is focused more on the fiscal impact of migrants over the short term, and is based on a spreadsheet analysis which uses average group characteristics (rather than tracing individual characteristics).

Note that no account is taken of births or deaths in this study, in order to keep the focus directly on the migrant group. To the extent there is ‘attrition’ of the migrant population, this is due to remigration (migrants returning to their original home) as estimated from the LSIA.

Table 5: Impact on the Commonwealth Budget per 1,000 Immigrants by Migration Group (\$m)

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Family, per 1,000										
Revenue	\$ 2.9	\$ 3.9	\$ 4.2	\$ 4.6	\$ 4.8	\$ 4.9	\$ 5.1	\$ 5.3	\$ 5.5	\$ 5.6
Expense	\$ 4.8	\$ 4.4	\$ 5.5	\$ 5.7	\$ 5.7	\$ 5.7	\$ 5.7	\$ 5.7	\$ 5.6	\$ 5.6
Net Operating Surplus (deficit)	\$ (1.9)	\$ (0.4)	\$ (1.3)	\$ (1.1)	\$ (0.9)	\$ (0.8)	\$ (0.6)	\$ (0.4)	\$ (0.1)	\$ 0.0
Skilled Aust. Sponsored (SAS), per 1,000										
Revenue	\$ 3.7	\$ 4.4	\$ 4.7	\$ 5.3	\$ 5.5	\$ 5.7	\$ 5.9	\$ 6.1	\$ 6.4	\$ 6.6
Expense	\$ 4.3	\$ 4.0	\$ 5.0	\$ 4.5	\$ 4.6	\$ 4.6	\$ 4.7	\$ 4.7	\$ 4.8	\$ 4.8
Net Operating Surplus (deficit)	\$ (0.6)	\$ 0.3	\$ (0.3)	\$ 0.7	\$ 0.9	\$ 1.0	\$ 1.2	\$ 1.4	\$ 1.6	\$ 1.8
Business Skills, per 1,000										
Revenue	\$ 14.9	\$ 12.5	\$ 12.9	\$ 13.7	\$ 14.2	\$ 14.7	\$ 15.2	\$ 15.7	\$ 16.0	\$ 16.3
Expense	\$ 4.4	\$ 3.1	\$ 2.6	\$ 1.8	\$ 1.4	\$ 1.1	\$ 0.7	\$ 0.4	\$ 0.0	\$ (0.3)
Net Operating Surplus (deficit)	\$ 10.5	\$ 9.3	\$ 10.3	\$ 11.9	\$ 12.8	\$ 13.6	\$ 14.5	\$ 15.3	\$ 16.0	\$ 16.6
Independent, per 1,000										
Revenue	\$ 8.0	\$ 11.0	\$ 12.6	\$ 14.7	\$ 15.3	\$ 15.9	\$ 16.5	\$ 17.2	\$ 17.9	\$ 18.7
Expense	\$ 4.1	\$ 3.6	\$ 3.6	\$ 2.6	\$ 2.1	\$ 1.6	\$ 1.0	\$ 0.5	\$ (0.1)	\$ (0.7)
Net Operating Surplus (deficit)	\$ 4.0	\$ 7.4	\$ 9.0	\$ 12.1	\$ 13.2	\$ 14.3	\$ 15.5	\$ 16.8	\$ 18.1	\$ 19.4
Skilled Total, per 1,000										
Revenue	\$ 8.3	\$ 9.9	\$ 11.0	\$ 12.5	\$ 13.0	\$ 13.5	\$ 14.0	\$ 14.6	\$ 15.1	\$ 15.6
Expense	\$ 4.2	\$ 3.6	\$ 3.7	\$ 2.8	\$ 2.5	\$ 2.1	\$ 1.7	\$ 1.3	\$ 0.9	\$ 0.5
Net Operating Surplus (deficit)	\$ 4.1	\$ 6.3	\$ 7.3	\$ 9.7	\$ 10.5	\$ 11.4	\$ 12.3	\$ 13.2	\$ 14.2	\$ 15.1
Humanitarian, per 1,000										
Revenue	\$ 1.5	\$ 2.1	\$ 2.2	\$ 2.7	\$ 2.8	\$ 3.0	\$ 3.1	\$ 3.2	\$ 3.3	\$ 3.4
Expense	\$ 11.9	\$ 8.5	\$ 8.1	\$ 8.3	\$ 8.2	\$ 8.4	\$ 8.7	\$ 8.9	\$ 9.1	\$ 9.3
Net Operating Surplus (deficit)	\$ (10.4)	\$ (6.4)	\$ (5.9)	\$ (5.5)	\$ (5.3)	\$ (5.5)	\$ (5.6)	\$ (5.7)	\$ (5.8)	\$ (5.9)
Total, per 1,000										
Revenue	\$ 5.6	\$ 7.0	\$ 7.7	\$ 8.7	\$ 9.1	\$ 9.4	\$ 9.8	\$ 10.1	\$ 10.5	\$ 10.9
Expense	\$ 5.3	\$ 4.4	\$ 4.8	\$ 4.4	\$ 4.2	\$ 4.1	\$ 3.9	\$ 3.7	\$ 3.4	\$ 3.3
Net Operating Surplus (deficit)	\$ 0.3	\$ 2.6	\$ 2.9	\$ 4.4	\$ 4.8	\$ 5.4	\$ 5.9	\$ 6.5	\$ 7.1	\$ 7.6