



NATSEM Budget 2014-15 Analysis

May 26 2014

Introduction

Following the 2014-15 Budget, NATSEM undertook analysis of the impact of tax and benefit changes under the Coalition Government, commissioned by the Opposition. The work involved the estimation of the distributional impact on family incomes of the major changes to the tax and government benefit system under the Coalition Government as compared to under Labor, including the changes announced in this Budget. NATSEM's analysis was not to analyse the merits of measures in the budget – just the financial impact on households.

NATSEM is an independent economic and social research institute at the University of Canberra. NATSEM has a 21 year history of providing high quality and independent research to political parties, government, private sector and other universities without fear or favour.

The NATSEM modelling focuses on the major changes to the taxation and government benefit changes as they relate to family budgets.

This analysis is an independent summary of the results and an explanation of the underlying methods used and assumptions.

The NATSEM analysis does not include any potential 'second-round' effects such as behavioural changes to the policy measures. This is standard budget convention. The impacts of bracket creep are included in the NATSEM distributional modelling, however, as the tables below are a comparison between two sets of policies which both include bracket creep the overall impact from a 'comparison' standpoint is nil.

Methodology and Assumptions

NATSEM modelled 18 separate budget measures and also included some additional elements outside of the 2014-15 Budget. These measures differentiate the trajectory of previous Labor Government and that of the 2014-15 Budget. These measures included the School Kids Bonus, The Income Support Bonus and the removal of the Carbon Price. An

analysis of only the budget measures would provide larger estimates of the overall reduction in family incomes as the carbon price revenue loss is greater in absolute terms than the expenditure on the School Kids Bonus and the Income Support Bonus¹.

Each of these measures will be explained in brief below.

1. Family Tax Benefits (FTB) special supplement moved onto a lower special supplement of \$750 per child for maximum rate FTB A recipients from 2015.
2. FTB B \$100,000 income limit on primary income earner (reduced from \$150,000) from 2015
3. FTB B removed from families with children aged over five years (most grandfathered through 2015 and 2016 and not transferred to (1)
4. FTB payment freeze for two years
5. Remove higher income per child add-on for top income threshold for FTB A from 2015
6. Reduce FTB A and B supplements from 2015
7. Large family supplement – remove from families with three children only from 2015
8. Clean Energy Supplement freeze
9. Shift Newstart Allowance recipients under the age of 25 to the lower Youth Allowance from January 1 2015
10. Apply CPI indexation to pensions for single parents from 2014 and for other pensions from 2017
11. Maintain eligibility thresholds for income support payments from 2014 rather than indexing with CPI
12. Pension Education Supplement removed
13. Start-up scholarship removed
14. Senior Supplement removed
15. Dependent Spouse Offset removed
16. Mature Age Worker Tax Offset removed
17. Temporary Budget Levy introduced as 2 per cent for dollars earned above \$180,000 per annum for 2014 to 2016 only
18. Excise on automotive fuel indexed with CPI from 2014
19. Carbon price removed (assuming a 2014 transition to an Emissions Trading Scheme and Pre-election Fiscal Outlook assumed prices)
20. School Kids Bonus and Income Support Bonus removed from 2014

An important omission from this list is the *Stronger Participation Incentives for Job Seekers under 30* measure. This measure saves the government around \$2.1 billion over the forward estimates in Newstart Allowance payments but adds around \$0.9 billion in extra expenses to

¹ This result will vary by income distribution.

various government agencies. This policy would add significantly to the impact on low income families, mostly single persons. Such a measure requires careful modelling and time did not permit such an analysis. NATSEM estimates this measure would increase the household impact on families in this study by a further 13 per cent. If the measure has the desired effect of reducing unemployment the impact would be lower.

To analyse these measures NATSEM uses the STINMOD model of the Australian tax and benefits systems. This model is based on very detailed information from a sample of 44,000 actual families in the two latest ABS Income surveys (2009-10 and 2011-12) and further data on non-private dwellings from the 2006 ABS Census. The surveys are updated with respect to their population, price and income data to 2014-15 using appropriate assumptions around wages, prices, ATO taxation data and demographic population change. NATSEM developed this model for the Commonwealth of Australia and the model has been used by Treasury, Social Services, Employment departments and NATSEM for over 20 years.

The model is a 'static' model of policy change. It is budget convention that measures in the budget do not include 'second-round' effects. It would be expected that the savings listed in the budget papers would take the same approach.

NATSEM undertook two kinds of analysis. The first is the 'distributional' modelling. This modelling incorporates the full 20 modelled changes and includes assumptions around the timing of the removal of certain payments (grandfathering) which means that some existing 'customers' will be allowed to maintain their current payment (Family Tax Benefit Part B) until July 1 2017 while new customers will not be eligible for this payment beyond July 1 2015.

The second analysis undertaken by NATSEM is 'cameo' analysis which looks at the impact on example family types. This analysis does not account for grandfathering which is considered a special case and not a structural arrangement. NATSEM considered eight families and incremented their income from zero 'private' dollars to \$200,000. The analysis considers the tax paid and government benefits received as their private income varies.

For the analysis NATSEM used its standard version of STINMOD that has been updated using the most recent data available on wages, CPI, taxation data, unemployment statistics, population data and government sourced administration data for government benefits such as family payments and pensions. For the forward estimates, NATSEM makes a number of assumptions. The most important assumptions relate to the CPI and wages. For CPI we assume annual growth of 2.5 per cent and for wages we assume 3.5 per cent. For 2013-14 CPI (year-on-year) growth is expected to be 3.2 per cent. Unemployment is expected to continue at 5.8 per cent (the budget is moderately higher over the short-term and slightly

lower by 2017) while the participation rates is expected to remain at its current rate of 64.7 per cent².

Results – Distributional (2014-15 and 2017-18 only)

For the distributional modelling the STINMOD database has been split into income levels 'Q1' to 'Q5'. These relate to the bottom 20 per cent of 'equivalised' income up to the top 20 per cent of income³. The unit of analysis is the 'income unit' which roughly equates to families. There are further broken down into four types of families. The analysis provides an average for each group and the winner/loser thresholds determined by a comparison of a family's disposable income under the Labor and Coalition trajectories. The results do not include the significant likely reduction in income unemployed persons under the age of 30 will receive from having their unemployment benefits subject to much tougher restrictions and a waiting period of an extra six months before receiving the payment.

The burden on families for 2014-15 falls most heavily on low and middle income families with children. The impact on high income families with children is smaller in dollar terms and percent change terms. Across all families (including singles and couples without children) the dollar impact varies by income level without a clear pattern. In percentage terms, the impact is clearly felt by the low income families more than high income families.

The burden on families of the 2014-15 budget is quite clear by 2017-18 once all grandfathering arrangements are removed and the budget levy is removed. Low income couples with children (bottom 20 per cent) are worse off by around 6.6 per cent while single parents are worse off by around 10.8 per cent on average. High income families are marginally better off thanks to the carbon price removal.

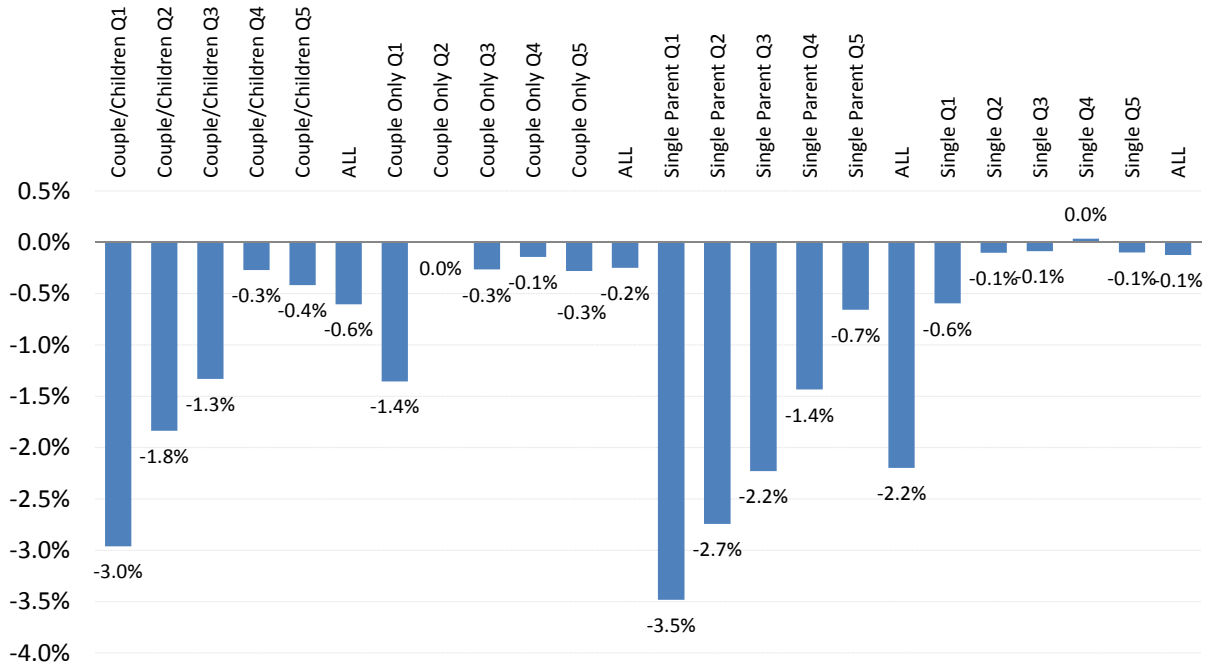
² The Budget forecasts a slightly higher unemployment rate projection of 6.25 for 2015 and 2016 and dropping to 5.75 by 2017. The budget participation rate is in the longer term 64.5 per cent. These differences would be expected to make little more than a 'rounding' error of difference to the NATSEM analysis.

³ NATSEM uses the 'modified-OECD scale' to adjust incomes for family size and composition.

2014-15				Sum	Mean	Mean		(Families)
Family Type	Income Quintile	% Loser	% Winner	millions Impact	Impact	Disposable Income	% Change	Income Units
Couple/Children Q1	1	95.6%	4.4%	-124	-1,138	739	-3.0%	109,261
Couple/Children Q2	2	94.7%	5.3%	-203	-1,082	1,133	-1.8%	187,129
Couple/Children Q3	3	90.2%	9.8%	-531	-1,018	1,470	-1.3%	521,558
Couple/Children Q4	4	37.8%	62.2%	-208	-272	1,933	-0.3%	764,761
Couple/Children Q5	5	33.1%	66.9%	-608	-727	3,351	-0.4%	836,963
ALL	ALL	54.5%	45.5%	-1,675	-692	2,208	-0.6%	2,419,672
Couple Only Q1	1	44.4%	55.6%	-82	-228	324	-1.4%	360,101
Couple Only Q2	2	12.6%	87.4%	-1	-1	712	0.0%	694,631
Couple Only Q3	3	23.5%	76.5%	-75	-132	957	-0.3%	570,580
Couple Only Q4	4	20.5%	79.5%	-57	-101	1,359	-0.1%	568,030
Couple Only Q5	5	21.7%	78.3%	-307	-360	2,486	-0.3%	850,622
ALL	ALL	22.4%	77.6%	-522	-171	1,329	-0.2%	3,043,964
Single Parent Q1	1	97.8%	2.2%	-134	-1,086	599	-3.5%	123,464
Single Parent Q2	2	99.0%	1.0%	-246	-1,099	770	-2.7%	224,002
Single Parent Q3	3	99.1%	0.9%	-233	-1,209	1,042	-2.2%	192,899
Single Parent Q4	4	92.7%	7.3%	-110	-979	1,313	-1.4%	112,438
Single Parent Q5	5	67.2%	32.8%	-19	-661	1,935	-0.7%	28,071
ALL	ALL	96.4%	3.6%	-742	-1,090	954	-2.2%	680,874
Single Q1	1	28.0%	72.0%	-142	-75	242	-0.6%	1,895,136
Single Q2	2	9.3%	90.7%	-33	-25	474	-0.1%	1,299,997
Single Q3	3	8.4%	91.6%	-33	-29	643	-0.1%	1,162,034
Single Q4	4	6.7%	93.3%	17	17	890	0.0%	1,000,862
Single Q5	5	9.4%	90.6%	-57	-79	1,530	-0.1%	730,989
ALL	ALL	14.5%	85.5%	-249	-41	629	-0.1%	6,089,018
Total Q1	1	36.8%	63.2%	-483	-194	294	-1.3%	2,487,962
Total Q2	2	25.2%	74.8%	-482	-201	621	-0.6%	2,405,760
Total Q3	3	36.5%	63.5%	-872	-356	924	-0.7%	2,447,070
Total Q4	4	23.6%	76.4%	-359	-147	1,345	-0.2%	2,446,092
Total Q5	5	22.4%	77.6%	-991	-405	2,490	-0.3%	2,446,645
Total	ALL	29.0%	71.0%	-3,187	-261	1,134	-0.4%	12,233,528

Source: NATSEM, STINMOD14

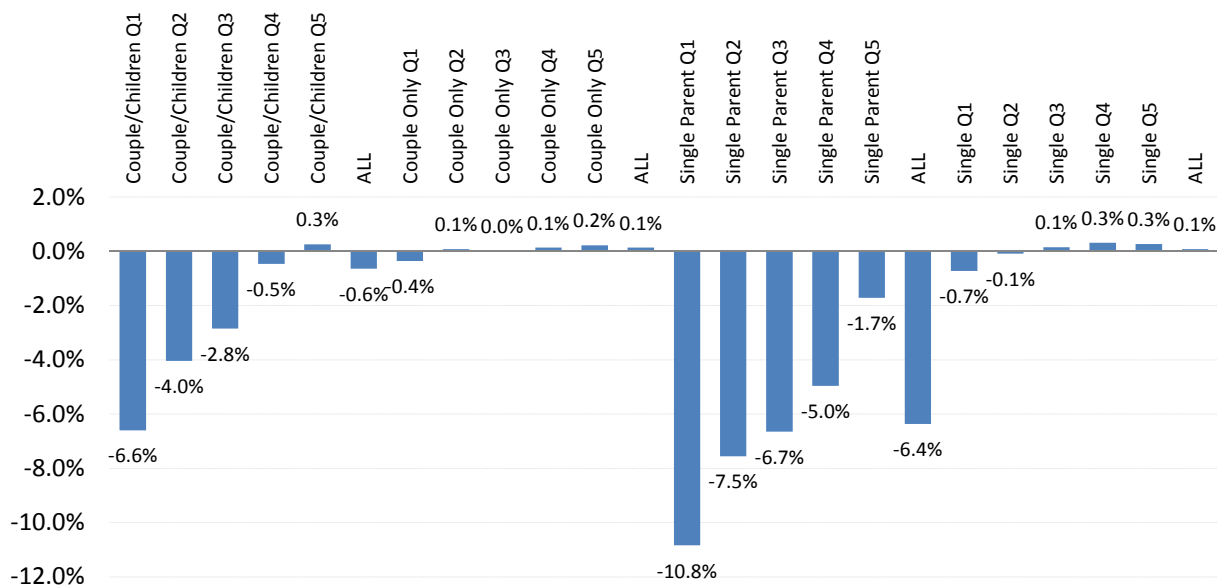
Budget 2014-15 % Change Disposable Income Impact of Tax/Benefit/Carbon Price/Excise 2014-15



2017-18				Sum	Mean	Mean		(Families)
Family Type	Income Quintile	% Loser	% Winner	millions Impact	Impact	Disposable Income	% Change	Income Units
Couple/Children Q1	1	94.8%	5.2%	-324	-2,780	810	-6.6%	116,621
Couple/Children Q2	2	91.6%	8.4%	-451	-2,559	1,220	-4.0%	176,165
Couple/Children Q3	3	88.4%	11.6%	-1,355	-2,356	1,591	-2.8%	575,056
Couple/Children Q4	4	32.9%	67.1%	-413	-507	2,108	-0.5%	814,830
Couple/Children Q5	5	3.4%	96.6%	442	478	3,641	0.3%	923,467
ALL	ALL	41.4%	58.6%	-2,102	-806	2,419	-0.6%	2,606,139
Couple Only Q1	1	40.5%	59.5%	-26	-61	328	-0.4%	424,569
Couple Only Q2	2	17.1%	82.9%	23	31	770	0.1%	751,162
Couple Only Q3	3	19.2%	80.8%	5	7	1,027	0.0%	629,610
Couple Only Q4	4	16.5%	83.5%	64	108	1,463	0.1%	588,643
Couple Only Q5	5	10.1%	89.9%	266	314	2,696	0.2%	848,828
ALL	ALL	18.6%	81.4%	332	102	1,392	0.1%	3,242,813
Single Parent Q1	1	96.4%	3.6%	-434	-3,747	665	-10.8%	115,749
Single Parent Q2	2	99.0%	1.0%	-702	-3,283	836	-7.5%	213,892
Single Parent Q3	3	98.9%	1.1%	-666	-3,824	1,106	-6.7%	174,145
Single Parent Q4	4	92.2%	7.8%	-464	-3,733	1,448	-5.0%	124,270
Single Parent Q5	5	62.2%	37.8%	-70	-1,916	2,142	-1.7%	36,337
ALL	ALL	95.2%	4.8%	-2,335	-3,515	1,063	-6.4%	664,394
Single Q1	1	34.7%	65.3%	-208	-100	262	-0.7%	2,087,096
Single Q2	2	22.0%	78.0%	-29	-22	512	-0.1%	1,335,919
Single Q3	3	13.0%	87.0%	64	52	687	0.1%	1,229,645
Single Q4	4	4.3%	95.7%	173	160	961	0.3%	1,083,543
Single Q5	5	4.1%	95.9%	187	234	1,656	0.3%	799,505
ALL	ALL	19.2%	80.8%	187	29	679	0.1%	6,535,708
Total Q1	1	40.8%	59.2%	-991	-361	313	-2.2%	2,744,036
Total Q2	2	32.1%	67.9%	-1,159	-468	668	-1.3%	2,477,139
Total Q3	3	36.9%	63.1%	-1,952	-748	996	-1.4%	2,608,455
Total Q4	4	20.2%	79.8%	-641	-245	1,455	-0.3%	2,611,287
Total Q5	5	6.6%	93.4%	825	316	2,704	0.2%	2,608,137
Total	ALL	27.4%	72.6%	-3,918	-300	1,134	-0.5%	13,049,054

Source: NATSEM, STINMOD14

Budget 2017-18 % Change Disposable Income Impact of Tax/Benefit/Carbon Price/Excise 2017-18



Hypothetical Modelling

NATSEM also undertook a range of ‘cameos’ which represent example families to compare the disposable income of each family under the previous trajectory of policy and the budget 2014-15 trajectory. The tables are provided on the NATSEM website as the information is too large to practically include in this research note. We include seven of the eight family types – excluding aged pensioners as the policy differences are mostly minor. We include results for 2014-15 and 2017-18. The years in between created some controversy in the media regarding the treatment of ‘grandfathered’ family payments customers who continue to receive FTB part B payments for 2015 and 2016 even though the rules applying to new customers mean the payment for some no longer exists. NATSEM considers the ‘grandfathering’ to be a special case and assumes all customers no longer receive the payment from July 1 2015. The distributional modelling takes a different approach and retains a large share of customers on the FTB B payment until 2017 when all grandfathered recipients are moved off the payment. The above follows accepted practice for the special case of grandfathering of payments.

NATSEM cameos compare like with like for the ALP and Coalition trajectory. We do not compare separate years. It is not reasonable to compare 2014-15 with 2017-18 due to cost of living increases which the social security system is designed to compensate for.

The cameo spreadsheets include the following information for each example family:

- 1) Family type;

- 2) Whether or not the family is a single or dual income family – where dual income split is 66.6%/33.4% between partners;
- 3) Couple status – single or couple;
- 4) Age 1 to Age 3 represents the age of any children;
- 5) Private income is the families earned income or income from other private sources. The income is in increments of \$5,000 per annum;
- 6) Disposable income is private income + government benefits – personal income taxation (unlike the distributional modelling, the carbon price/excise tax is not included here);
- 7) Percent Reduction in disposable income – which compares the ALP disposable income trajectory with that of the Coalition per annum;
- 8) Annual difference in disposable income between the ALP and Coalition;
- 9) A range of payments compared including FTB A, FTB B, School Kids Bonus, Allowances, pensions and personal income taxation;
- 10) Average Marginal Tax Rates for each \$5,000 increment in income = per cent increase in disposable income resulting from \$5,000 increase in private income.

The largest impacts on a percentage reduction in disposable income are for single income, low income couples and singles with children. Most of these families, where there is no private income will be worse off by between \$1,800 and \$2,400 per annum in 2014-15, increasing to \$4,200 to \$5,000 by 2017-18. For cases with private incomes between \$50,000 and \$110,000 per annum the losses are generally around \$6,000 per annum. In percentage terms, the largest 'loser' will be single parents on Newstart with two children with a loss of disposable income of 12.9 per cent. The single person (the cameo assumes an age of 23) who is shifted onto Youth Allowance will see their income drop by 19.2 per cent. Other singles will not be impacted in this way – unless they are shifted off the Newstart payment to a zero payment which is not a case NATSEM considered in either the cameo or distributional modelling.

Conclusion

The NATSEM analysis is a calculation of the impact on family budgets from most of the major 'hip-pocket' budget measures. The NATSEM analysis is a purely 'financial' analysis and does not seek to evaluate the relative merits of individual measures or the totality of the budget reforms.

The estimates should be viewed as an under-estimate of the family budget impact as we do not include the relatively large impact on unemployed persons under the age of 30 who will have to wait an extra six months prior to receiving Newstart or Youth Allowance for unemployed persons under 25.

The NATSEM analysis does not include any 'second-round' effects as is budget convention. The calculation of such impacts in any case would be subject to considerable debate and imprecision. Given the budget forecast of a relatively weak jobs market and the potential contractionary impact of measures that reduce disposable incomes of low income families (who tend to have a high propensity to consume) it is unlikely that the second-round impacts would improve the budget impacts for low income families.

The results clearly demonstrate that low income families with children are the main family group to be impacted by this budget. The budget impact is relatively moderate in 2014-15 but becomes more significant by 2017-18. High income families and singles and couples without children are shown to be largely unaffected by this budget either in the short or longer term⁴.

⁴ NATSEM did not model the impact on low income families from the removal/delay of the Newstart payment which will bring into scope just under 300,000 unemployed, low income families – mostly singles for a significant reduction in disposable income.