



Budget explainer, 2 May 2023*

Indexation & the budget – long-term impacts

Overview

Indexation is a key tool used by governments to adjust the value of government programs for changes in the level of prices, living costs or wages. In general, indexation aims to maintain the relative value or real value of policy settings over time – for example, to ensure that recipients of the Age Pension can continue to afford the same amount of goods and services as prices increase.

Wages generally grow faster than prices. As a consequence, payments indexed to changes in wages increase more than payments indexed to a measure of prices. If prices grew faster than wages, the opposite would occur.

The choice of indexation parameter and how it operates is usually outlined in the enabling legislation for the program. While payment levels may be originally chosen relative to the payment levels of comparable programs, different indexation arrangements can result in significant divergences over time in both payment levels and overall program expenditure.

This has implications for program effectiveness, distributional outcomes and the overall budget bottom line. For instance, the difference between the single rate of Age Pension and the single rate of JobSeeker Payment has grown from a \$16 per week (10%) gap in 1998 to a \$174 (51%) gap per week in 2023, largely due to differing methods of indexation.¹

The majority of government revenue programs are not indexed. However, inflationary conditions may lead to improvements in the Commonwealth's fiscal position, as revenue received from the increase in taxable income, predominantly from 'bracket creep', is likely to more than offset the increase in payments from indexation.

Inflation can significantly affect the Budget. For more insight into the budget impacts of changes in indexation arrangements, the PBO's [Build your own budget](#) tool allows users to adjust indexation parameters to test their impact on the Commonwealth's fiscal position. For example, the tool estimates that if the Consumer Price Index (CPI) was one percentage point higher than forecast in each year total government expenses would be around \$29 billion higher over the 2022-23 forward estimates period, primarily due to the impacts of indexation arrangements.

* The contents of the explainer are the sole responsibility of the Parliamentary Budget Office.

¹ This will be explored further below. In March 2020 the Newstart Allowance was renamed the JobSeeker Payment.

Introduction

This Budget explainer is the second in our series looking at indexation and the budget. It explores the longer-term impact of different indexation arrangements on program expenditure and the recipients of government payments over time. Revenue and departmental indexation arrangements are also discussed, as is the impact of indexation on budget estimates.

The first paper, [Indexation & the budget – an introduction](#), explores the concepts and mechanisms of indexation, the ways in which programs and government agencies' budgets are indexed, and the limitations of the indexation process.

Indexation is used across both expenditure and revenue programs. Most examples in this paper explore the use of indexation in expenditure programs, as these are where indexation arrangements have the most significant fiscal impact.

Indexation is achieved through wage and price parameters

In general, indexation aims to maintain the relative value or real value of policy settings over time – for example, to ensure that Age Pension recipients can continue to afford the same amount of goods and services as prices increase. Indexation parameters can be broadly grouped into those which measure prices and those which measure wages. Common examples include:

- Price indexes, which include the CPI, a measure of price inflation faced by all households; and the Pensioner and Beneficiary Living Cost Index (PBLCI), a Living Cost Index that measures changes in the cost of living, by measuring price inflation in a basket of essential goods and services purchased by income support recipient households.
- Wages measures, which include Male Total Average Weekly Earnings (MTAWE); Average Weekly Ordinary Time Earnings (AWOTE); and Total Average Weekly Earnings (TAWWE).²

The choice of parameter and how it operates is usually outlined in the enabling legislation for the program. These arrangements may be adjusted on an ad hoc basis. Adjustments to indexation arrangements may not be significant in the short term but can become so in the longer term.

More information on these and other parameters is detailed in [Indexation & the budget – an introduction](#).

How do indexation parameters impact programs and the recipients of payment programs?

Programs that try to achieve similar outcomes can end up having divergent policy outcomes because of different choices in indexation parameters. Indexation parameters (for example, the CPI) have uncertain trajectories that can vary significantly over time.

The choice of indexation parameter also impacts the aggregate budget position which is also explored further below in the section: *What is the total impact of indexation on budget estimates?*

Key issues that contribute to a divergence in longer-term outcomes include:

1. The impact of different indexation arrangements on the level of payments
2. The respective growth of different indexation parameters over time
3. The implications of indexation arrangements with multiple parameters
4. The impact of pausing indexation arrangements

² AWOTE refers to earnings before overtime and bonuses.

1. The impact of different indexation parameters on the level of payments

While payment levels of new programs may have been originally chosen with reference to the payment levels of comparable programs, different indexation arrangements can result in significant divergences in payment levels and overall program expenditure over time.

For instance, the difference between wage and price growth in the economy has contributed over the longer-term to a significant difference in the level of two income support payments: the Age Pension single payment (the Age Pension) and JobSeeker Payment (and their respective levels using available supplements).³ In 1998, the Age Pension was around \$16 per week (10%) higher than the single rate of JobSeeker Payment.⁴ In 2023 the Age Pension was around \$174 per week (51%) higher (Figure 1).⁵

In contrast to pensions, which are indexed to multiple parameters, income support payments for the unemployed and payments for students are indexed to the CPI alone.^{6,7} During periods when wages rise faster than inflation (as has typically been the case historically), the JobSeeker Payment does not grow as fast, in relative terms, as incomes in the broader community.

Figure 1 compares the rate of the Age Pension and the JobSeeker Payment. For illustrative purposes, the diagram includes a hypothetical that shows what would have happened to Age Pension payment rates if the payment was indexed to CPI alone, highlighting the impact of different indexation arrangements over time.

Long-term, the impacts of indexation arrangements on payment levels can also contribute to distributional outcomes, as illustrated in Box 1.

³ The difference between the indexation arrangements of these two payments may reflect the differing theoretical characteristics of each payment. While both are forms of income support, pensions are provided to recipients who face permanent impairments to supporting themselves through work (and maintain relativity with a wage benchmark), while the JobSeeker Payment is provided to recipients who face temporary impairments (and maintains only its real value). However, as explored in the PBO report, '[JobSeeker Payment](#)', the share of longer-term JobSeeker recipients is rising.

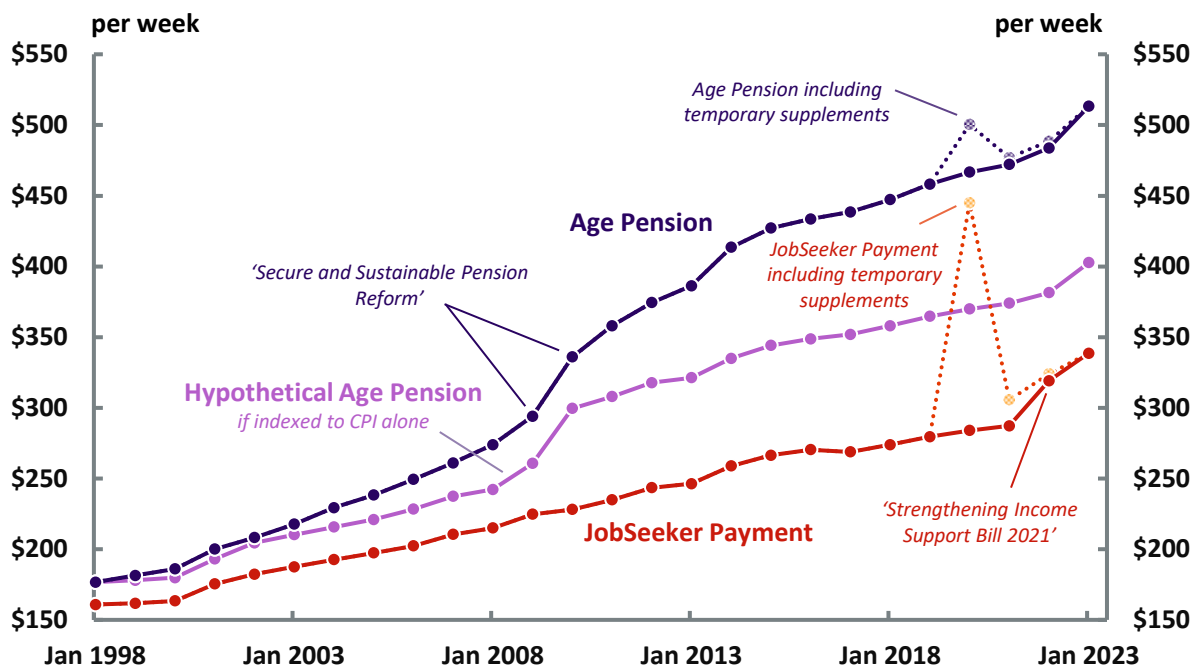
⁴ The Newstart Allowance was renamed the JobSeeker Payment in March 2020. See: D Arthur (2020), '[JobSeeker Payment: a quick guide](#)', Parliamentary Library, Parliament of Australia website.

⁵ Policy changes have also contributed to differences in the relative value of payments. The [pension supplement](#) was introduced in 2000 as part of the reforms associated with the introduction of the GST, and ad hoc increases to the basic rate of the Age Pension were included in the 2009 [Secure and Sustainable Pension Reforms](#).

⁶ The maximum single basic pension was benchmarked to 25% of MTAW until 20 September 2009. The 2009-10 Budget measure [Secure and Sustainable Pensions](#) reformed pension rate-setting and indexation arrangements: The indexation parameter was changed from CPI to the highest of CPI and the PBLCI and the maximum single basic pension was effectively benchmarked to around 27.7% of MTAW on 20 September 2009 (this increase captured the increase in the single rate of pension of \$30 a week). See: P Yeend, '[Welfare payments Reforms to pensions](#)', Budget Review 2009-10, Parliamentary Library, Canberra, May 2009.

⁷ Income support payments for the unemployed include the JobSeeker Payment and Youth Allowance (other). Payments for students include Austudy, and Youth Allowance (student or Australian Apprentice).

Figure 1: JobSeeker (formerly the Newstart allowance) and Age Pension weekly payments (1998 – 2023)



Note: The line 'Age Pension' represents the maximum single basic rate as at 1 January plus the value of the 'Pension Supplement', 'Energy Supplement', 'GST supplement', 'Pharmaceutical Allowance' and the 'Utilities Allowance'. The dotted line includes the value of the temporary 'Economic Support Payments' and the 'Cost of Living Payment' apportioned on a weekly basis.

The line 'JobSeeker Payment' represents the maximum single basic rate (no children) as at 1 January, plus the value of the 'Energy Supplement' and the 'Income Support Bonus'; figures prior to 2021 represent the Newstart allowance. The dotted line includes the value of the temporary 'Coronavirus Supplement', 'Economic Support Payments', and the 'Cost of Living Payment' apportioned weekly. The 'Social Services Legislation Amendment (Strengthening Income Support) Bill 2021' increased the maximum basic rate of working age payments (including the JobSeeker Payment) by \$50 per fortnight.

Source: ABS (Dec 2022), Consumer Price Index, Australia; Australian Government, '5.2.1.20 Single unemployment & sickness benefit - November 1984 to present date', Social Security Guide, 2022; Australian Government, '5.2.2.10 Maximum basic rates of pension - July 1909 to present date', Social Security Guide, 2022.

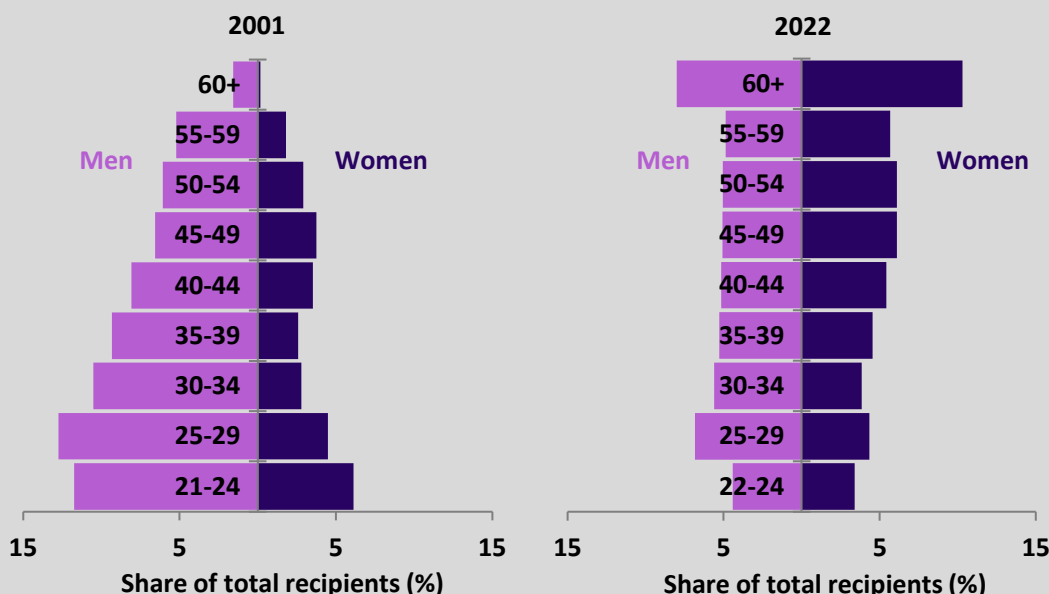
Box 1: Indexation and distributional effects

The impact of indexation parameters can also affect distributional outcomes.

For example, there has been a long-run structural shift in JobSeeker Payment recipients towards older women (Figure 2). This change is partially due to changing eligibility requirements of other income support payments, such as the Age Pension.

The difference between the indexation arrangements for these two income support payments contributes to an increasing gap between the amount of the Age Pension and the JobSeeker Payment. The relatively lower JobSeeker Payment rates, resulting primarily from slower indexation arrangements compounded over many years, are impacting older women disproportionately more than any other category.

Figure 2: Share of JobSeeker Payment recipients by gender and age group



Note: The '60+' category comprises women aged 60 to under 62 years and men aged 60 to under 65 years in 2001. For 2022, it comprises both genders aged 60 to under 66. The Age Pension age was 61.5 years for females and 65 years for males in June 2001 and 66.5 years for both genders in June 2022. On 1 July 2012, the eligibility age for the Newstart Allowance was increased from 21 to 22 years of age. Figures are as at 30 June.

The changes impacting the profile of JobSeeker Payment recipients are explored in ['JobSeeker Payment: Understanding economic and policy trends affecting Commonwealth expenditure'](#) and ['JobSeeker Payment: COVID-19, age & gender'](#).

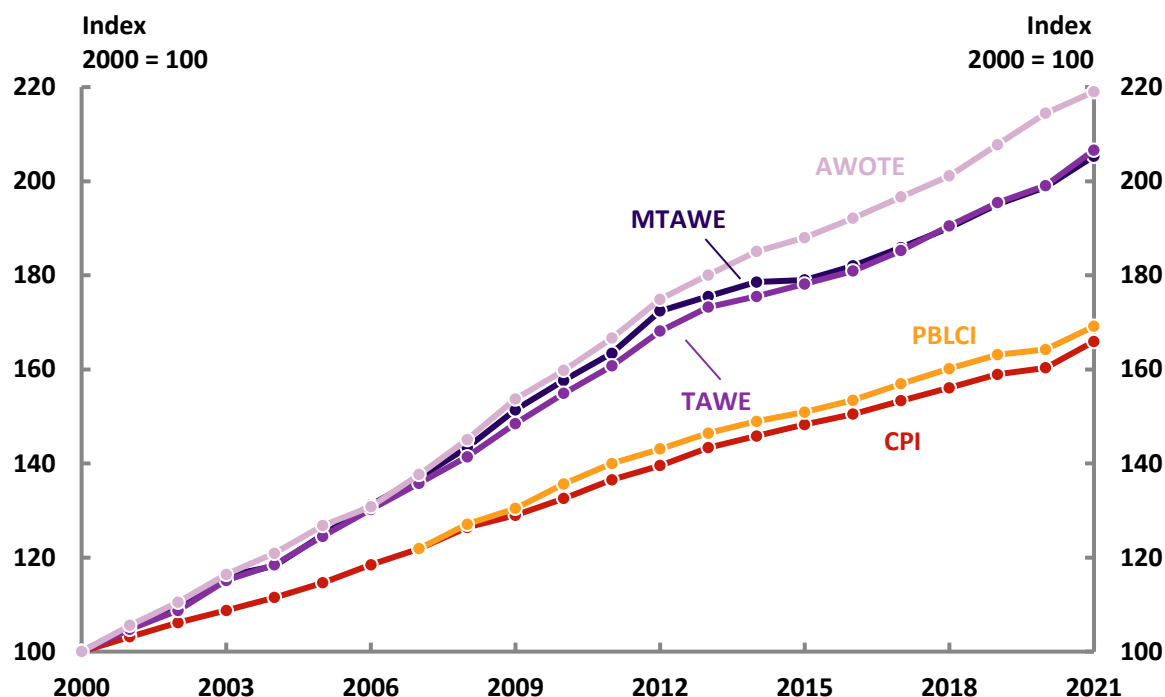
Source: PBO analysis of DSS data.

2. The respective growth of different indexation parameters over time

Across different time periods, wages and prices tend to grow at different rates, with wages generally growing faster. The impact of this is illustrated in Figure 3, which compares the growth of common indexation parameters over the past 20 years. As a consequence, payments indexed to changes in wages have increased by more than payments indexed to a measure of prices.⁸

⁸ For a discussion of the relationship between prices and wages, see: The Reserve Bank of Australia, ['Wage-price Dynamics in a High-inflation Environment: The International Evidence'](#), Bulletin, 15 September 2022.

Figure 3: Common indexation parameters over time



Note: The CPI, MTAWA, TAWA, and AWOTE parameter index values have a base of 100 in 2000. The PBLCI commenced in 2007 and its level was set at the index value of the CPI in that year.

Source: ABS (Reference Period June 2022), Consumer Price Index, Australia; ABS (May 2022), Average Weekly Earnings, Australia; ABS (June 2022), Selected Living Cost Indexes, Australia.

3. The implications of indexation arrangements with multiple parameters

Some programs are indexed to a combination of parameters. For instance, pensions are indexed twice a year to the highest preceding-period growth in either the CPI or the PBLCI, before the result is ‘benchmarked’ against a percentage of MTAWE.^{9,10} As discussed above, as this arrangement ensures pension payments keep pace with the changes in prices, changes in the cost of living, and changes in average earnings, it is more favourable to recipients than indexation to a single parameter.

An example of indexation to the highest of two parameters is demonstrated in Figure 4. Indexation to the highest growth rate of the CPI and the PBLCI results in an effective indexation rate greater than either parameter alone (before benchmarking to MTAWE is considered).^{11,12}

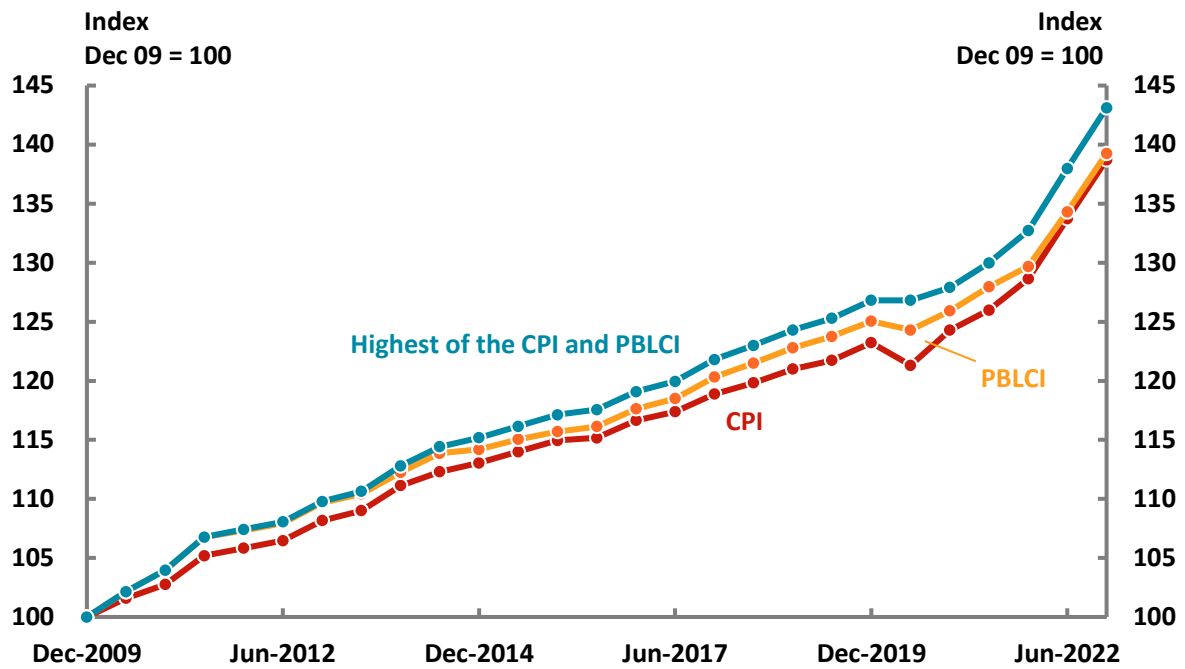
⁹ Note that all pensions (including the Age Pension, Disability Support Payment, and Carer Payment) are paid at the same rate, but are distinguished by their eligibility criteria and (to a smaller extent) means testing criteria.

¹⁰ This arrangement applies to the combined couple pension payment rate. If the combined couple rate is lower than 41.76% of MTAWE, the rates are increased to the benchmark level. The single rate of pension is set at 66.33% of the combined couple rate (which is equal to around 27.7% of MTAWE). Department of Social Services (DSS), ‘[Pension Indexation](#)’, DSS website, 2014.

¹¹ The driver of growth in pensions has been largely due to pensions being benchmarked to MTAWE up until September 2013. When the PBLCI was introduced into pension indexation arrangements in September 2009, it resulted in a higher pension indexation. However the PBLCI did not have a significant impact on pension payment rates from September 2009 to September 2013, where the benchmark to MTAWE resulted in a higher indexation adjustment.

¹² In the chart, the gap between the ‘highest of the CPI and PBLCI’ line and the underlying parameters grows with each period of indexation. In cases like the Age Pension, in a year where a benchmark to MTAWE is applied however, the impacts of indexation to dual indexes (as opposed to one or another) are effectively reset.

Figure 4: Index of the highest of the CPI and PBLCI



Note: CPI and PBLCI parameters, and an example of an index with a growth rate equal to the higher of the growth in either the CPI or the PBLCI, 2009 to 2022. Periods of negative growth have no impact on the index. Parameters have a base of 100 in September 2009.

Source: ABS (June 2022), 'Consumer Price Index', Australia; ABS (June 2022), 'Selected Living Cost Indexes', Australia.

4. The impact of pausing indexation arrangements

Governments may pause the indexation of payments rather than modifying payment levels directly. The indexation arrangements of different payments may be modified for several reasons:

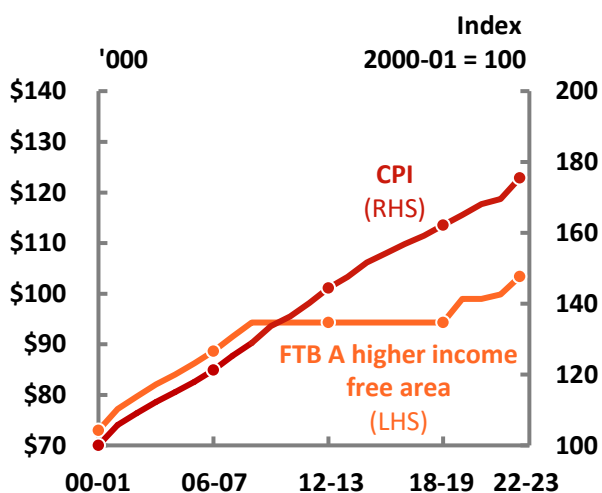
- Reducing the growth of budget expenditure: by pausing indexation, payment levels will not be increased in response to inflation or growth in economic parameters.
- Administrative simplicity: ad hoc changes to payment levels may require changes to legislation, which can be a time-consuming and complex process.
- Predictability: by pausing indexation, governments can provide a level of predictability for the budget. Program budgets can be determined without consideration for changes in economic parameters which may be volatile and difficult to predict.

Although indexation pauses may be temporary, the impact on payment levels and thresholds will be ongoing if there is no later 'catch-up' applied.

For example, indexation of the higher income threshold in the '[Family Tax Benefit Part A](#)' payment income test was frozen between 2009-10 and 2020-21. While indexation has resumed, the eligibility threshold is lower today than the level it would have been if the pause was never enacted (Figure 5).¹³

¹³ For the purposes of the Family Tax Benefit (FTB), the higher income free area is the amount of [Adjusted taxable income](#) an individual may have before their rate of FTB is affected by the [income test](#) for FTB Part A. See: Australian Government, '[3.1.1.20 Current FTB rates & income test amounts](#)' Family Assistance Guide, Department of Social Services website, 1 July 2022.

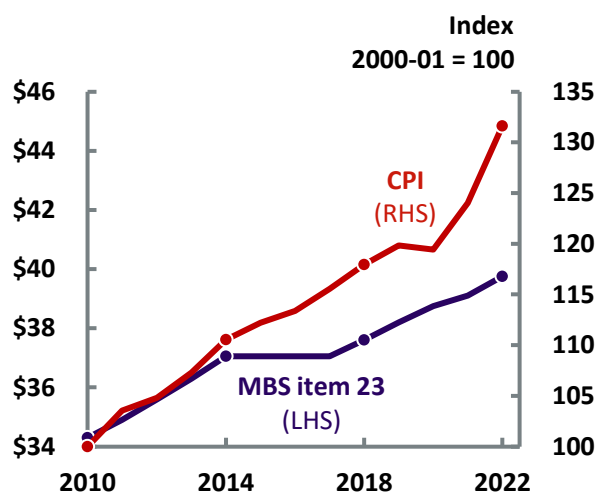
Figure 5: Family Tax Benefit higher income free area, CPI growth



Note: The FTB A higher income free area is indexed to 12 months growth in the CPI of the preceding year (Dec to Dec), effective 1 July each year. CPI index values have a base of 100 in December 1999, represented in 2000-01.

Source: PBO analysis of DSS data. ABS (June 2022), 'Consumer Price Index', Australia.

Figure 6: Medicare Benefits Schedule item 23, CPI growth



Note: [MBS item 23](#) represents the Medicare contribution towards a General Practitioner attendance lasting less than 20 minutes. MBS item 23 is indexed to WCI-5, which grows slower than the CPI. CPI index values have a base of 100 in June 2010.

Source: Medicare Benefits Schedule Book (July publication, 2010 to 2022), '[MBS historical data files](#)', MBS Online, Department of Health and Aged Care website. ABS (June 2022), 'Consumer Price Index', Australia.

In some cases, indexation arrangements may be paused without legislative change. For example, Medicare rebate indexation was paused on several occasions from 2013-14 to 2019-20.¹⁴ While indexation has now resumed, the rebate is lower as a result of the pauses than it otherwise would have been (Figure 6).

Revenue programs are not generally indexed

The majority of government revenue programs are not indexed. Australia's two largest sources of revenue, Personal Income Tax and Company Tax do not include a provision for indexation and apply fixed taxable income thresholds.¹⁵ Therefore, as average taxable incomes increase over time, higher taxation revenue is collected, all other things being equal. This effect, known as 'bracket creep', is examined in the Budget Explainer [Bracket creep and its fiscal impact](#).

¹⁴ The 2013-14 Budget introduced a pause of Medicare Benefits Schedule (MBS) indexation. A pause of indexation of GP services was included in the 2014-15 Mid-Year Economic and Fiscal Outlook (MYEFO) and then extended in the 2015-16 Budget. See: Government Factsheet, 'A Strong and Sustainable Medicare: What it means for doctors', Department of Health, December 2014, p. 2.

MBS Item 23 indexation is calculated based on the Wage Cost Index 5 (WCI-5), the current indexation factor is published in the [Health Insurance \(General Medical Services Table\) Regulations 2021](#), section 1.3.1.

¹⁵ Change to Personal Income Tax and Company Tax rates requires a legislative change to the *Income Tax Rate Act 1986*.

A small number of revenue program rates and thresholds are directly indexed to parameters associated with inflation. Examples include:

- Excise and customs duty rates for alcohol are indexed biannually by an indexation factor based on the CPI as are a range of other fees and charges for government services.¹⁶
- Customs duty rates for tobacco imports increase in March and September each year, based on changes in AWOTE.
- Luxury Car Tax is indexed on 1 July each year, based upon the motor vehicle purchase sub-group of the CPI (CPI-MV) for the March quarter of each year.¹⁷

Indexation also has implications for other government receipts, for instance in the case of HELP debt.

- Both HELP debt balances and the income thresholds that determine the repayment rate of an individual's accumulated HELP debt are indexed to the CPI. Over the longer-term, wages tend to grow faster than the rate of inflation. During periods of low wages growth but high prices growth, HELP debt balances will increase at a faster rate but the average rate of HELP debt repayments may be relatively lower, as the lower income brackets (at which lower compulsory HELP debt repayment rates apply) will represent a greater proportion of borrowers.

How does indexation interact with the efficiency dividend?

Government departmental expenditure is generally subject to the application of the efficiency dividend, which reduces agency budgets each year, followed by an annual indexation (supplementation) by one of the Wage Cost Indices (WCIs).^{18,19}

The rationale of the efficiency dividend is that as agencies become more efficient in carrying out government business by increasing productivity, improving administrative procedures, making better use of improvements in technology and in use of human resources, efficiency gains (savings) could be realised without compromising outputs.²⁰ The difference between the projected increase in agency costs and the smaller corresponding increase in agency budgets represents the applied efficiency or productivity gain.²¹

Over time, the size of the efficiency dividend has varied. The 1987-88 Budget introduced the efficiency dividend as an annual 1.25% reduction of agencies' departmental funding.²² In recent years it has been set higher, at up to 4.0% in 2012-13, which included application of a one-off efficiency dividend.

Figure 7 highlights the impact of the efficiency dividend on agency budgets since 2009-10. It splits out the effect of indexation to one of the WCI parameters, the efficiency dividend, and the net impact of these factors. The actual increase in departmental operating expenses is also shown.

¹⁶ The indexation factor is calculated by dividing the most recent June or December quarter CPI number (published by the ABS) by the previous highest June or December quarter CPI number occurring after the June 1983 quarter.

¹⁷ Federal Chamber of Automotive Industry, '[Statement to the Tax Forum](#)', n.d., Available at: <https://treasury.gov.au/programs-initiatives-taxation/tax-forum>

¹⁸ Wage Cost Indices are described in '[Indexation & the budget – an introduction](#)'.

¹⁹ The 2019–20 MYEFO noted Efficiency Dividend exemptions for several specific agencies, national collecting institutions, and agencies with an Average Staffing Level of less than 200; see: Philip Hamilton (April 2022), '[Public sector staffing and resourcing](#)', Budget Review April 2022-23, Parliamentary Library, Parliament of Australia website. Departmental expenditure for the National Transport Commission and Safe Work Australia is indexed to the CPI.

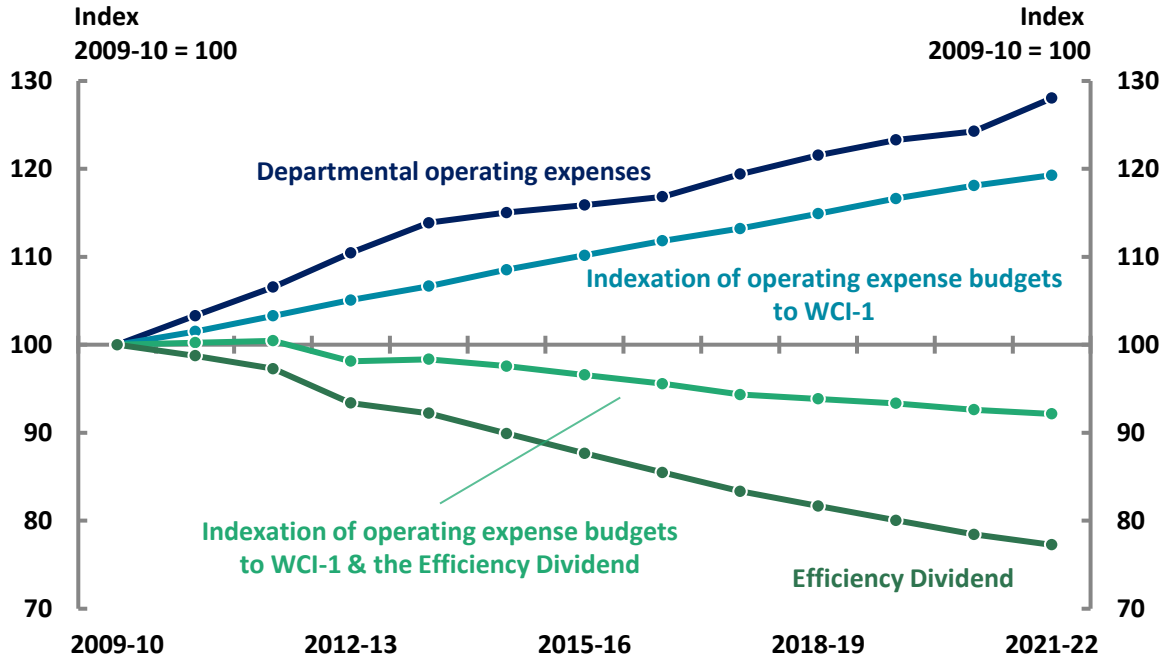
²⁰ N Horne, '[The Commonwealth efficiency dividend: an overview](#)', Parliamentary Library, Canberra, 13 December 2012.

²¹ Department of Finance and Deregulation, '[Review of the Measures of Agency Efficiency report](#)', Australian Government, 2011.

²² The Department of Defence and the Australian Broadcasting Corporation (ABC) were initially exempt. See: Joint Committee of Public Accounts and Audit, '[Report 413 The Efficiency Dividend and small agencies: Size does matter](#)', Parliament of Australia website, December 2008.

Noting that departments are subject to different WCI parameters, in Figure 7 the difference between the top two lines demonstrates that the indexation of agency budgets has not kept pace with the increase in costs faced by agencies. In addition, when the efficiency dividend is also applied it has more than offset the increases via WCI indexation, leading to a reduction in agency budgets.²³

Figure 7: Departmental budgets and the impact of indexation and the efficiency dividend



Note: 'Departmental operating expenses' represents a combination of average Australian Public Service Wage increases (60%) and the CPI (40%), assuming the mix of staff and other inputs remains unchanged. 'Indexation of operating expense budgets to WCI-1' represents the increase in agency appropriations if the WCI used is WCI-1, before the application of the Efficiency Dividend.

Source: WCI-1: PBO analysis of Budget Paper No. 1, from 2009-10 Budget to 2021-22 Budget; CPI: ABS (Dec 2022), 'Consumer Price Index', Australia; Australian Public Service average base salary: PBO analysis of Australian Public Service Employment Database (APSED) data, provided by the Australian Public Service Commission; Efficiency Dividend: PBO analysis of budget data provided by the Parliamentary Library.

²³ This issue was regularly raised in submissions to the *Inquiry into the effects of the ongoing efficiency dividend on smaller public sector agencies*; entitled 'Report 413: The Efficiency Dividend: Size does matter'. See: The Joint Committee of Public Accounts and Audit, 'Chapter 6 Conclusions, [Report 413 The Efficiency Dividend and small agencies: Size does matter](#)', Parliament of Australia website, 2008.

What is the total impact of indexation on budget estimates?

The net impact of indexation on overall budget estimates needs to be considered in conjunction with the impact of inflation. A higher rate of CPI will almost always be positive for the Budget. When CPI increases, the increase in receipts (via increases in taxable income) more than offsets the increase in payments (driven by indexation). Figure 8 uses PBO's [Build your own budget](#) tool to demonstrate this.

The impact of inflation on the Budget will depend on the relative movements of prices and wages in the economy. If average wages increase more than prices, the increase in revenue relative to expenses will be greater than if prices increase more than wages.

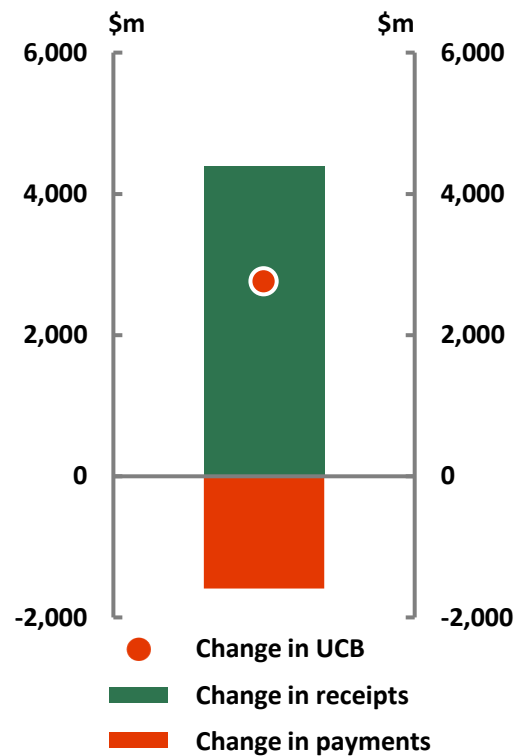
Figure 9 demonstrates this effect on the Underlying Cash Balance of the budget over the medium term, using the [Build your own budget](#) tool to compare the baseline forecast and two higher inflation scenarios – where CPI growth is 1 percentage point higher than the forecast in each year.

Scenario 1 - Higher profits: If the higher inflation only flows to business profits, and wage growth is unchanged, the Underlying Cash Balance (UCB) is estimated to be around \$18 billion higher by the end of the medium-term period in 2032-33 (due to higher receipts of around \$73 billion more than offsetting increased payments of around \$55 billion).

Scenario 2 - Higher wages: If the higher inflation leads to increased wages and no additional profits, the estimated total impact on the UCB would be around \$29 billion by 2032-33 (due to higher receipts of around \$96 billion more than offsetting increased payments of around \$67 billion).

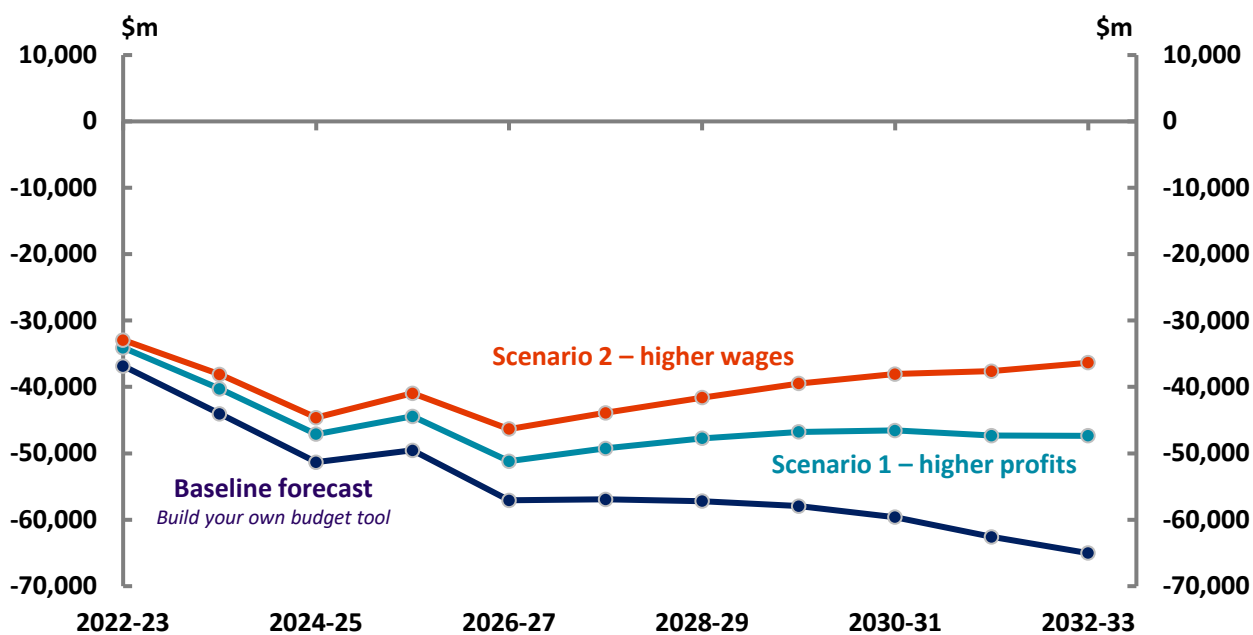
The effect of higher inflation on the UCB is greater in Scenario 2, primarily due to higher income tax receipts, as average marginal personal income tax rates are higher than average company tax rates.

Figure 8: Fiscal impact of higher inflation, 2022-23



Source: the PBO's [Build your own budget](#) tool; CPI 1 percentage point higher than forecast (wage growth is unchanged)

Figure 9: Estimated Underlying Cash Balance projections under higher inflation scenarios, 2022-23 to 2032-33



Note: Wage growth refers to the [Wage Price Index](#) published by the ABS.

Source: the PBO's [Build your own budget](#) tool: CPI 1 percentage point higher than forecast in each year.

The impact of changes in prices and wages parameters

The overall impact of prices and wages on the budget estimates can also be observed by looking at the extent to which budget estimates vary because of changes to forecast estimates of prices and wages. This is explicitly stated in the budget *reconciliation tables* under the heading of 'effect of parameter and other variations', 'prices and wages'.²⁴

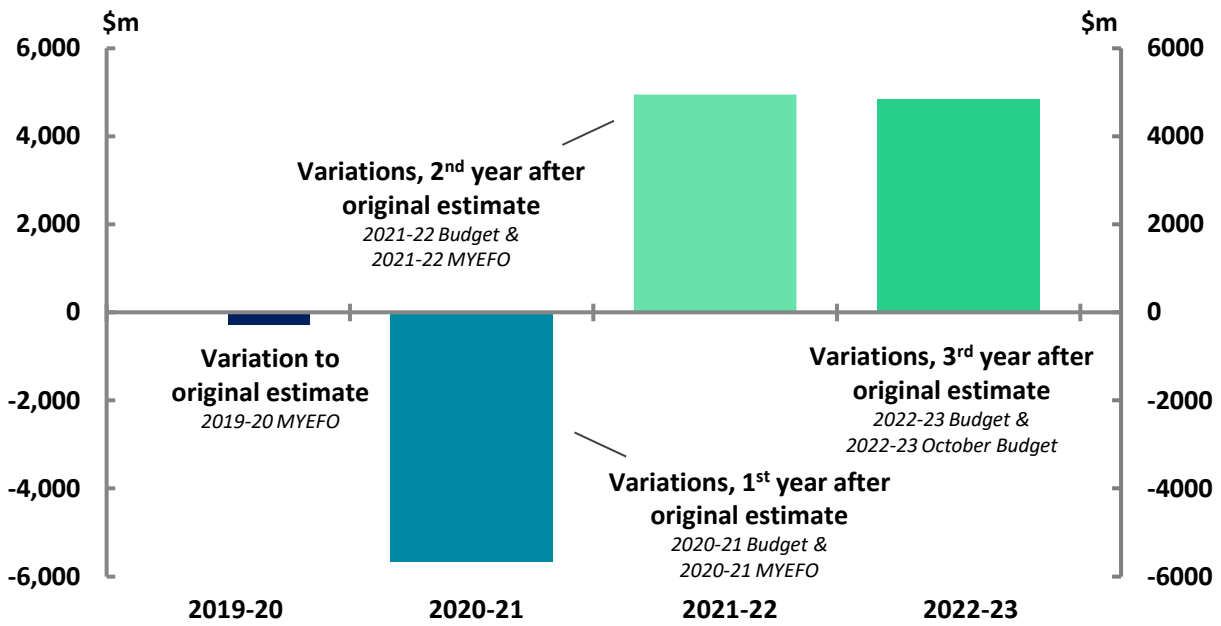
Figure 10 shows the value of variations to estimates of 2022-23 expenses, attributed to 'prices and wages' as presented in successive publications of the budget papers.²⁵ For example, expense estimates for 2022-23 were first published in the 2019-20 Budget. In the 2019-20 Mid-Year Economic and Fiscal Outlook (MYEFO), changes to forecasts for prices and wages parameters resulted in a \$292 million downward variation to expense estimates for 2022-23. The estimates further varied in each budget publication that followed, as inflation expectations evolved, with the latest estimate for 2022-23 being presented in the 2022-23 October Budget.²⁶

²⁴ For example, 'Table 3.4: Reconciliation of payments estimates', Statement 3, and 'Table 6.2: Reconciliation of expense estimates', Statement 6, Budget Paper No.1, 2022-23 October Budget.

²⁵ Including updates presented in respective publications of the Mid-Year Economic and Fiscal Outlook (MYEFO).

²⁶ Actual figures for the 2022-23 year will be presented in the 2022-23 Final Budget Outcome. The difference between the latest estimate and the actual figures for each year have not been included in Figure 10 and Figure 11, as the Final Budget Outcome does not disaggregate by the value of expenditure attributed to variations in prices and wages.

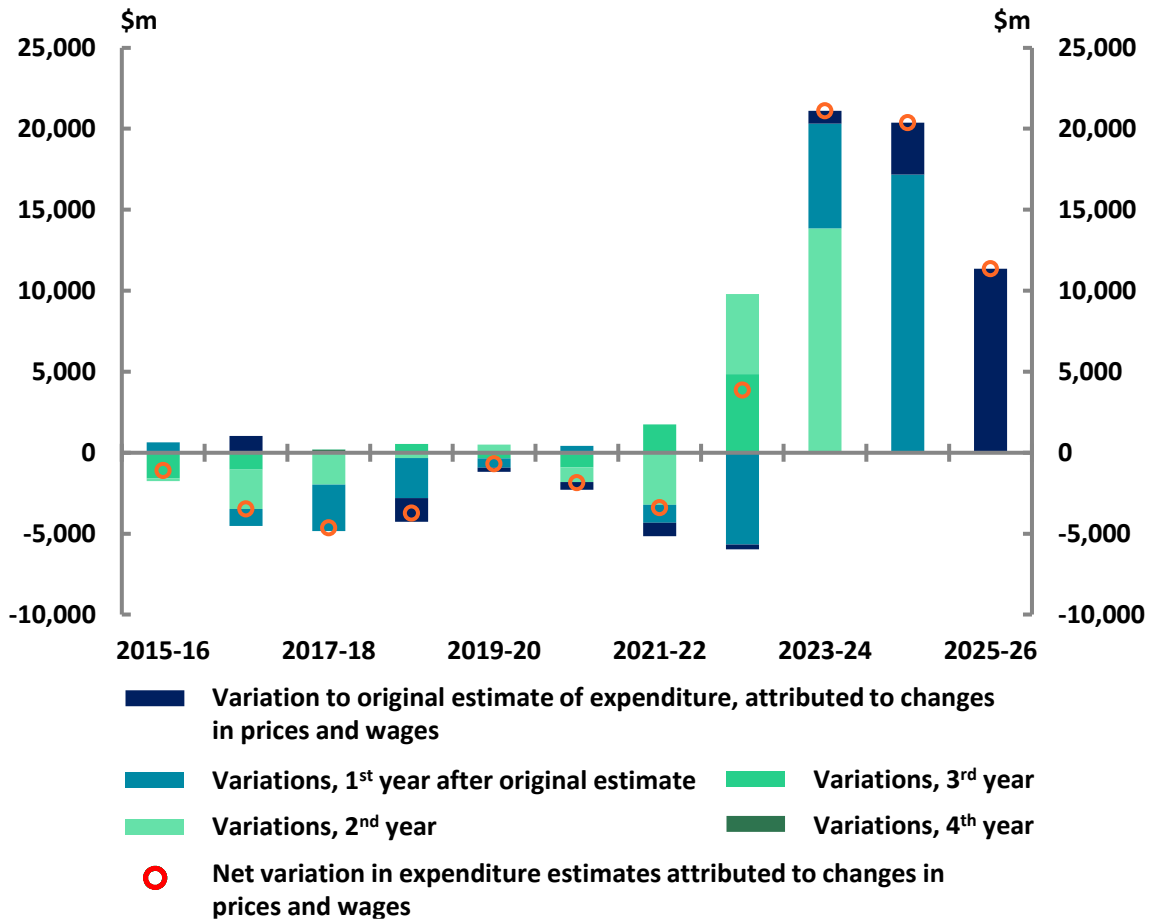
Figure 10: Variations to expenditure estimates for the 2022-23 financial year, due to changes in prices and wages forecasts in successive budgets



Source: PBO analysis of Budget Paper No. 1, from 2019-20 Mid-Year Economic and Fiscal Outlook to the 2022-23 October Budget, available at: Australian Government, '[Budget Archive](#)'.

The scale of the impact can vary significantly from year to year. During periods of relatively stable low inflation prior to 2021-22, variations attributed to changes in prices and wages parameters contributed less than \$5 billion to total variations in expenses in each year (Figure 11). With the sharp rise in inflation from 2022, government expenses for the years between 2022-23 and 2025-26 have been revised up in successive budgets by a total of over \$61 billion.

Figure 11: Variations to expenditure estimates due to changes in prices and wages forecasts in successive budgets



Note: Total variations to expenditure estimates in each financial year, due to changes in budget estimates.

Source: PBO analysis of Budget Paper No. 1, from 2013-14 Budget to the 2022-23 October Budget, available at: Australian Government, ['Budget Archive'](#).

Summary

This Budget explainer analyses the longer-term impact of indexation, focusing on the impact of different indexation arrangements on payment programs.

Changes in the relative level of payments can develop when programs are indexed to different parameters, while variations can be made to indexation arrangements to reflect changing economic conditions and policy priorities. The impact of indexation adjustments compounds over time and can present risks to the objectives of government programs.

Indexation parameters also have a considerable influence on the government's fiscal position. Indexation can result in significant changes to budget estimates and the level of payments received by program recipients.

Indexation arrangements and the respective levels of payments require monitoring over time, to ensure that policy and program settings continue to deliver as intended.