



BRIEFING

New Zealand Income Insurance - Levy Modelling Update

Date:	23 September 2022	Priority:	High
Security classification:	In Confidence	Tracking number:	2223-1130

Action sought	Action sought	Deadline
Hon Grant Robertson Minister of Finance	Discuss this briefing at the Joint Ministers meeting on Tuesday 27 September.	27 September 2022
Hon Carmel Sepuloni Minister for Social Development and Employment		

Contact for telephone discussion (if required)					
Name	Position	Telephone	1st contact		
Gerald Minnee	Policy Director, Employment, Skills and Immigration Policy	Privacy of natural persons	~		
Andrew Marshall	Principal Policy Advisor, New Zealand Income Insurance Policy				

The following departments/agencies have been consulted on the Cabinet paper

ACC and Treasury were consulted on the development of this paper. MSD and Inland Revenue were informed.

Minister's office to complete:	Approved	Declined
Noted	Needs change	🗌 Seen
Overtaken by Events	See Minister's Notes	U Withdrawn

Comment



BRIEFING

New Zealand Income Insurance - Levy Modelling Update

Date:	23 September 2022	Priority:	High
Security classification:	In Confidence	Tracking number:	2223-1130

Purpose

This briefing provides updated information on modelling of the NZII levy rate, along with initial modelling of financial implications of adopting various levy rates under different scenarios.

This paper does not propose that Ministers set an initial levy rate for the NZII Scheme at this stage. Rather it sets out some key considerations for setting the initial rate.

Recommended Action

The Ministry of Business, Innovation and Employment recommends that you:

1. **Discuss** this briefing at the Joint Ministers meeting on Tuesday 27 September 2022.

Agree / Disagree

Privacy of natural persons

Gerald Minnee **Policy Director Employment, Skills and Immigration Policy** Labour, Science and Enterprise, MBIE

23 / 09 / 2022

Hon Grant Robertson

Minister of Finance

...../...../.....

Hon Carmel Sepuloni
Minister for Social Development and Employment
..... /

Background

- 1. On 12 September 2022 joint Ministers requested updated modelling of the levy rate, including advice on whether there are feasible alternative levy rates that could be adopted.
- 2. In August and September 2021 the working group provided advice to Ministers on a range of levy rate options derived from different assumptions of different claims rates, durations and average income of claimants:
 - a. Method 1 based on New Zealand tax and Household Labour Force data¹ with adjustments based on international scheme experiences
 - b. Method 2 using the same New Zealand data as Method 1 as a starting point for redundancy but alternative assumptions for adjustments, and international benchmarks applied to New Zealand data for HCD
 - c. Method 3– based on international benchmarks applied to New Zealand data.
- 3. At the time the working group had very low confidence in method 1 and was split in its preference for methods 2 and 3. This gave rise to the recommendation of method 2.5, representing a compromise between the options.

Updated Modelling

- 4. ACC and Treasury have continued to advance the sophistication of modelling for NZII levy, but we caution that the specific numbers are only indicative at this stage. Modelling is still being refined and while there is reasonable confidence, it has not been peer reviewed. This work is advancing quickly and we expect to be in a position to express numbers with more confidence in the coming weeks.
- 5. As part of this work, ACC is continuing to develop sensitivity modelling. Various scenarios tend to fall within the parameters of the original methods 1-3, so for simplicity this paper focuses on those original modelled scenarios.
- 6. A number of adopted policy settings have been identified as having a bearing on the cost and levy rate, which were not factored into the original modelling, as outlined in the following table:

Upwards Pressures	Downwards Pressures		
 Income over a salary cap (aligned with ACC, currently ~\$136,000) would be exempt from levy Provision for unrecoverable bad debt for unpaid bridging payments (eg. in cases of liquidation) 	 Residency requirement for claiming from the scheme which will effectively exclude a large proportion of levy paying temporary migrants Six month contribution period (costs were modelled assuming a three month contribution period) Claims rates will reduce to the extent that ED and HC&D applicant populations overlap 		

¹ The starting point for Methods 1 and 2 is LEED and HLFS data. LEED data indicates there are approx. 873,000 job ends per year. HLFS data suggests that approximately 116,000 of these are due to redundancy. Of this group, approximately 52,500 (13%) have a gap between jobs of more than one month. The remainder have either no gap, or the gap is less than one month.

 ACC and Treasury have updated the modelling to take account of upwards pressures noted above, but further work is required to model and quantify the downwards pressures identified. The updated modelling is as follows:

	Original levy rate	Updated levy rate
Method 1	1.29%	1.32%
Method 2	1.57%	1.66%
Method 2.5 (currently proposed)	2.77%	3.01%
Method 3	3.74%	4.10%

Summary of combined HCD and redundancy total levy rates for all methods (i.e. employees and employers would each pay half of the levies shown here), showing figures provided in previous advice and their corresponding corrected rate. All figures include GST.

- 8. As mentioned, these numbers are preliminary and provided as a work in progress and we do not propose Ministers make decisions on levies at this point in time.
- 9. Given the change in timeframe for the establishment and go-live for the scheme (from December 2023 to 1 April 2025), it is now possible to undertake a public consultation on a proposed levy following passage of the legislation, prior to the scheme going live. This would enable officials to take full account of the most up to date data available, final scheme design, and the scheme funding decisions would be transparent and be well aligned with our funding principles.
- 10. A more fulsome consultation process would support public transparency. It would allow communication of the choice to support low, medium or high levies upon implementation and the inherent risks associated with that choice. It could test the key preference of low initial levies relative to lower levies over time.

Possible Implications of Different Levy and Experience Scenarios

- 11. Determining what is an appropriate levy to cover scheme cost is subject to inherent uncertainty given this is a new scheme and we have no domestic experience to underpin our assumptions. New Zealand's labour market data is subject to methodological limitations, and there are difficulties involved with applying evidence from overseas scheme experiences (given evidence relates to small changes to schemes which have existed for decades).
- 12. The preliminary sensitivity analysis indicates that scheme costs will be highly sensitive to small changes in assumptions. For example, a two week change in average claims duration would increase/decrease scheme costs by ~\$500 million per annum (an important observation in respect of scheme design of return-to-work levers and performance targets).
- 13. It is difficult to say definitively whether the currently proposed method 2.5 levy will overcharge levy payers, or underfund the scheme. However, particularly low or high scenarios each offer negative implications, on the one hand for economic efficiency and on the other scheme sustainability.

- 14. A key consideration therefore is to determine the relative risk preference for imposing additional cost on households and employers versus the Crown in the initial establishment phase (eg. 1-5 years). A lower levy would reflect a preference for Crown-owned risk at the outset, relative to levy payers overpaying. This could be more likely to result in levy rate increases should costs be higher, resulting in a longer period of higher rates to recover any shortfall. On the other hand, a higher levy would reflect a preference for avoiding Crown risk, and reducing the likelihood of future increases in levy rates, but this would put a higher impost on levy payers at the outset.
- 15. The funding policy agreed by Cabinet contemplates levy rates will need to be adjusted over time to fund the scheme in way that balances the objectives of:
 - a. sustainability, in the sense that the scheme is self-sustaining over the long-term
 - b. economic efficiency, such that levy setting avoids removing excess funding from the economy and operates in such a way as to support the countercyclical autostabilisation objective of the scheme
 - c. levy stability over the economic cycle.
- 16. The agreed funding policy contemplates levy reviews occurring at periods of at least three yearly. It is possible that levies will need to be adjusted sooner and more frequently (eg. annually) in the initial years as the scheme beds in given the inherent uncertainties, and this is enabled by the legislation. However, uncertainty will persist for a number of years, until experience over a full economic cycle is observed. Reviewing the levy sooner and more frequently could lead to over or under shooting in the levy adjustments which may impact confidence in the scheme.
- 17. ACC has undertaken initial modelling of the possible financial implications of adopting the updated levy rates to illustrate the potential magnitudes of funding over- or undercollection that could occur. This assumes no levy review is undertaken in the intervening period (which is unrealistic), so deficits would be possible even in a neutrally priced scenario.
- 18. These numbers account for economic cycle effects and assume a starting point at the beginning of an economic upswing. The year 1 and 3 numbers would differ and either be more stressed or appear more favourable if the start point was at a different part of the cycle. It should be noted also that the numbers are still subject to review and officials expect to have more settled numbers over the coming month.

	sce Using	ow claim enario (\$ Method	bn) 1 claim	sce Using	/ claims enario (\$ Method 2 ssumptio	i bn) 2 claim	claims Usin	inal expo s cost so (\$bn) ng Metho n assump	enario d 2.5	sce Using	n claims enario (\$ Method : ssumptio	i bn) 3 claim
Levy Rate Charged	1 year	3 years	10 years	1 year	3 years	10 years	1 year	3 years	10 years	1 year	3 years	10 years
Method 1 1.32%	0.4	0.7	-1.3	0.1	-0.4	-8.3	-1.2	-5.6	-35.3	-2.2	-9.5	-56.2
Method 2 1.66%	0.8	2.1	5	0.6	1	-1.3	-0.8	-4.1	-28.4	-1.8	-8	-49.3
Method 2.5 3.01%	2.6	8	31.3	2.3	6.9	24.9	1	1.9	-0.6	0	-2	-21.2
Method 3 4.10%	4	12.8	52.4	3.8	11.7	46	2.4	6.6	20.5	1.4	2.8	1

Expected Cumulative Surplus/Deficit Scenarios

Note: a positive number represents a scheme surplus (an over-collection) and a negative number a scheme deficit (under-collection). Different levy tracks are colour coded to broadly illustrate the extent that relative levy neutrality is maintained over the short-long term under different scenarios. For example, levy tracks maintaining surpluses or deficits of around \$1 billion in the short term and less than \$10 billion over the long term would be a more favourable levy track (noting that adjustments would still need to be made reasonably quicky to avoid such a large departure from neutrality) than one which accumulates large amounts of over or under funding, particularly in a short timeframe.

- 19. According to the Cabinet agreed funding policy there will be an array of choices available to Ministers for managing situations of over or under funding, for instance levy adjustments reliance on Crown lending or Crown funding injections over varying lengths of time to smooth corrections.
- 20. Once the scheme goes live it will generate an evidential base on which to revise levies. The legislated funding policy calls for levy setting to be undertaken in a transparent way which should help to build confidence in the scheme. Over time levy rates would progressively better reflect the true cost of income insurance, rather than modelling assumptions.
- 21. However, at start up it is necessary to rely on assumptions, and make trade-offs between competing objectives.
- 22. Potential implications of starting towards the lower end of the modelling methods include that this would:
 - a. Reduce the initial impact of levies on employees and employers in the establishment phase of the scheme, but increase the potential exposure to levy rate increases
 - b. Leave more fiscal risk with the Crown in the establishment phase, if levies are not sufficient to cover actual scheme costs

- c. Recognise that the Crown is better placed than employees and employers to manage the financial risk in the establishment phase in the event that actual scheme costs are higher than forecast
- d. Recognise that accumulated financial liabilities can escalate rapidly (as illustrated in the table above). As a consequence, the lower the initial levies are set, the more flexibility the Crown would need to reset levies in line with actual claims experience (eg. speed and scale of levy adjustments).
- 23. The implications of setting initial levies at the higher end of the modelling methods are that it would:
 - a. Shift fiscal risk from the Crown while increasing the prospect of employers and employees over funding the scheme in the establishment phase
 - b. Reduce the likelihood of the scheme calling on Crown funding and having to meet the financing charges associated with any underwrite
 - c. Reduce the likelihood of employees and employers facing future increases in levy rates, including optionality to maintain a small, net surplus in the scheme for greater efficiency over time
 - d. Increase the likelihood that levy rates may fall over time; falls in levy may be more acceptable for overall public confidence than repeated increases or levy rate volatility.
- 24. The analysis highlights the importance of rapid correction of the levy rates if they are initially set too high or low (to avoid unnecessary cost on firms and workers or the Crown carrying too much fiscal risk).

Treasury Comment on Updated Modelling

- 25. While Method 1 estimates a lower cost impost on levy payers, it risks underestimating the true cost of the scheme and thus requiring both additional Crown funding and significant levy increases, which would undermine the intention for the scheme to be self-funding. Advice from the working group to Ministers on levy options in August 2021 has previously highlighted these risks.
- 26. Method 1 assumes low behavioural change from the introduction of NZIIS, and we consider that a better starting point for consideration would be Method 2. This method assumes a higher level of behavioural change from workers towards claiming from the scheme. As such, Method 1 remains an option that the Treasury has very low confidence in.
- 27. There is still considerable uncertainty as to what the "correct" levy rate is. While noting that a headline levy rate was included in the consultation earlier this year, Treasury agrees with MBIE that there should be a more fulsome process for setting the initial scheme levy, including public consultation of the assumptions and considerations. This process could be similar to what the proposed legislation

envisages for future levy reviews. This would promote transparency and public confidence in the scheme.

Next Steps

28. Subject to your feedback at the Joint Ministers' meeting on Tuesday 27 September, officials will provide talking points for you to discuss these issues at DEV and Cabinet in October as part of deliberations on the Cabinet paper planned for submission next week.

Annexes

Annex A: Methods for estimating the cost of the economic displacement scheme

Annex B: Methods estimating the cost of the scheme covering work loss due to HCD

Annex A: Methods for estimating the cost of the economic displacement scheme

	Method 1 – Iow behavioural change (Jobseeker benchmark)	Method 2 – medium behavioural change (Jobseeker benchmark)	Method 3 – behavioural change based on international experience
Claims	There are approx. 873,000 job ends per year. HLFS data suggests that approximately 116,000 of these are due to redundancy. Of this group, approximately 52,500 (13%) who have a gap between jobs of more than one month. The remainder have is either no gap, or the gap is less than one month. Assuming 80% of them take-up SUI, ² this provides approx. 42,000 claims for SUI from those who we know currently have a gap of more than one month between jobs. To this group we add a portion of those who previously had a short or no gap between jobs after being made redundant. ³ This results in a total number of claims for the scheme of approx.: 61,400 claims	The starting point is as per Method 1. But this method assumes 100% of this group will take-up SUI. To this group we add a portion (higher than Method 1) of those who previously had a short or no gap between jobs after being made redundant. ⁴ This reflects that many people are not eligible for Jobseeker (i.e. they receive \$0 per week). This results in a total number of claims for the scheme of approx.: 90,443 claims	This method implies a claims rate using the Massachusetts unemployment insurance scheme. In Massachusetts they experience a claims rate of approx. 6.3% of employees per year. Applied to New Zealand with adjustments for generosity, this results in a total number of claims for the scheme of approx.: 138,000 claims
Duration	Two durations are used to reflect the two different groups entering the scheme; those who already experience a gap (greater than one month) after redundancy, and those with a gap of less than one month. For those who already experience gaps of greater than one month, a behavioural response is applied to produce average durations of: ⁵ - 3.4 months, For those who currently have a small/no gap between employment, a shorter duration of 1 month is applied.	 Two durations are used to reflect the two different groups entering the scheme; those who already experience a gap (greater than one month) after redundancy, and those with a gap of less than one month. For those who already experience gaps of greater than one month, a behavioural response is applied to produce average durations of:⁶ 4.2 months, For those who currently have a small/no gap between employment, a shorter duration is applied, at 50% the rate of the above group. 	The average duration of workers on the Massachusetts scheme is 4.5 months, and this is adjusted to account for New Zealand's proposed SUI scheme being more generous. This results in durations of approx.: - 5 months
Income	Apply average monthly income of \$ 3913	Apply average monthly income of \$ 3913	Apply average monthly income of \$4756

² Some may choose not to take it up because they are moving abroad or they are unwilling to accept job search obligations (for instance because they are retiring).

³ These workers are responding to the behavioural effect of the relative generosity of SUI compared to the existing Jobseeker rate. The comparison rate used is \$360 per week, which is the average level of Jobseeker (plus other benefits) received.

⁴ These workers are responding to the behavioural effect of the relative generosity of SUI compared to the existing Jobseeker rate. The comparison rate used is \$280 per week (different to Method 1). \$280 is the base Jobseeker rate without additional benefits, and is used to reflect the fact that many people who are made redundant are not eligible for any Jobseeker support.

⁵ The base rate for duration is taken from the historical average unemployment spell (absent SUI). A behavioural response is then added to this duration to reflect the relative generosity of the SUI scheme compared to existing Jobseeker support (using the \$360 per week rate).

⁶ A behavioural response is then added to this duration to reflect the relative generosity of the SUI scheme compared to existing Jobseeker support (using the \$280 per week rate).

Annex B: Methods estimating the cost of the scheme covering work loss due to HCD

	Method 1 – Jobseeker HCD	Method 2 – International A (low behavioural change)	Method 3 – International B (high behavioural change)
Claims	 Based on current data, there are approx. 36,700 job ends due to health conditions or disabilities every year, who experience a gap in employment. Taking this as the base figure, we apply a behavioural adjustment to this to account for a difference in generosity (payment level) between the Jobseeker-Health Conditions and Disability payment (\$375) and the proposed SUI scheme. This provides an estimate of the number of claims, of approx.: 54,200 claims who experience a gap in employment. On top of this, we estimate a further approx. 29,200 do not experience a gap in employment. 	This approach uses an international benchmark (Denmark) to estimate an annual take-up rate of HCD, as a proportion of the total number of New Zealand employees. This method calculates the take-up rate by only looking at the number of claims in the Danish system that are 30 days or more (to match the proposed design of the New Zealand scheme). This provides an estimate of approx.: - 103,400 claims	This approach uses an international benchmark (Denmark) to estimate an annual take-up rate of HCD, as a proportion of the total number of New Zealand employees. This method calculates the take-up rate by including some claims which are between 8 – 30 days, as well as all claims which are 30+ days. This provides an estimate of approx.: - 204,600 claims
Duration	 Based on current data we can calculate the average gap between jobs for those with HCD. A behavioural adjustment is then applied to this to account for a difference in generosity (payment level) between the Jobseeker-Health Conditions and Disability payment (\$375) and the proposed SUI scheme. 4.2 months For the group without existing gaps in employment (i.e. the additional people who decide to take a gap as a result of the scheme) we apply a rate of 50% of the above group group 	Based on the Danish benchmark, we can estimate the average duration spent on the Danish scheme, and adjust it to account for the generosity (payment level, and duration) of the proposed New Zealand scheme. The Danish average duration is approx. 10.5 weeks (for those with HCD over 30 days). This is then increased to give an average duration of 2.8 months.	Based on the Danish benchmark, we can estimate the average duration spent on the Danish scheme, and adjust it to account for the generosity (payment level, and duration) of the proposed New Zealand scheme. The Danish average duration is approx. 7.5 weeks (for those with HCD 8 days and over). This is then increased to give 2.1 months
Income	Scale all claimants to the Household Economic Survey (HES) earnings distribution observed for HCD (mean = \$2781)	Scale all claimants to the HES earnings distr bution observed for HCD \$2781	Scale all claims to all- jobs distr bution (mean = \$4756)