

TE TAI ÕHANGA THE TREASURY

Reference: 20220019

16 March 2022

Dear

Thank you for your Official Information Act request, received on 18 January 2022. You requested:

I refer to the Government's work programme on Social Unemployment Insurance (SIU) https://budget.govt.nz/budget/2021/wellbeing/budget-investments/reforms-intergenerational-wellbeing/social-unemployment-insurance.htm

Under section 12 of the Official Information Act (OIA) 1982, I request the following information:

• All official advice, forecasts, assessments, cost/benefit analyses, risk assessments, reports and recommendations (not publicly available) Treasury have produced or received regarding Social Unemployment Insurance not previously released to me under the Act or are subject to another request I've lodged.

Please note this is not a specific request for briefings you have provided Government Minister's, but for all such information Treasury holds within the scope of the request.

Where information is withheld, please provide the reason for refusal and the grounds in support of that reason as required by section 19(a)(i) and (ii) of the Official Information Act.

On 9 February 2022 I wrote to notify you that an extension was required because your request necessitated a search through a large quantity of information, and consultations were needed before a decision could be made on your request.

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https://treasury.govt.nz

## Information being released

Please find enclosed the following documents:

Item	Date	Document Description	Decision	
1.	3 July 2020	T2020/2216: Social Insurance Items for EET	Release in part	
2.	21 April 2021	TR 2021/1049: Social Insurance Benchmark Cost Estimates	Release in full except phone numbers	
3.	24 June 2021	T2021/1596: Automatic stabilising role of Social Unemployment Insurance (SUI) policy	Release in full except phone numbers	
4.	22 July 2021	Joint Report T2021/1815: The interaction between social unemployment insurance and the COVID-19 Wage Subsidy Scheme	Redactions for telephone numbers and out of scope	
5.	13 August 2021	T2021/2074: Social Insurance Updated Costing Scenarios	Release in full except phone numbers	
6.	3 September 2021	T2021/2246: Social Insurance Working Group Costings	Release in full except phone numbers	
7.	6 September 2021	SUI analysis report HCD	Release in full except phone numbers	
8.	8 September 2021	SUI analysis report Redundancy	Release in full except phone numbers	

I have decided to release the documents listed above, subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- contact details of officials, under section 9(2)(g)(ii) to maintain the effective conduct of public affairs through protecting Ministers, members of government organisations, officers and employees from improper pressure or harassment,
- sensitive information, under section 9(2)(ba)(i) to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely to prejudice the supply of similar information, or information from the same source, and it is in the public interest that such information should continue to be supplied, and
- direct dial phone numbers of officials, under section 9(2)(k) in order to reduce the possibility of staff being exposed to phishing and other scams. This is because information released under the OIA may end up in the public domain, for example, on websites including Treasury's website.

Some information has been redacted because it is not covered by the scope of your request. This is because the documents include matters outside your specific request.

We note that this advice shows how our costing estimates have evolved over time and the estimates in the earlier reports should not be read in isolation.

## Information publicly available

The following information is also covered by your request and is publicly available on the Ministry of Business, Innovation and Employment website:

Item	Date	Document Description	Website Address
9.	5 March 2020	Joint MBIE/Treasury report 2334 19-20: Future of Work Ministers' meeting – 12 March 2020	Will be publicly available soon https://www.mbie.govt.nz/abo ut/open-government-and-
10.	16 July 2020	Joint MBIE/Treasury report 3749 19-20: Future of Work Tripartite Forum Meeting, 27 July 2020	official-information/release- of-information/
11.	16 November 2020	Joint MBIE/Treasury/MSD/IR/DPMC report T2020/3457: Enhancing support for displaced workers, and other people who lose their jobs	
12.	2 September 2021	Briefing: Supplementary advice on estimating the cost of social unemployment insurance	

Accordingly, I have refused your request for the documents listed in the above table under section 18(d) of the Official Information Act:

• the information requested is or will soon be publicly available.

Some relevant information has been removed from documents listed in the above table and should continue to be withheld under the Official Information Act, on the grounds described in the documents.

In making my decision, I have considered the public interest considerations in section 9(1) of the Official Information Act.

Please note that this letter (with your personal details removed) and enclosed documents may be published on the Treasury website.

This reply addresses the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

Thomas Parry Manager Communities Learning and Work

# OIA 20220019 Information for release

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Reference: T2020/2216 SH-11-1-10-8

Date: 3 July 2020

To: Minister of Finance (Hon Grant Robertson)

Deadline: 6 July 2020

#### Aide Memoire: Social Insurance Items for EET

This aide memoire updates you on the social insurance items at the Employment, Education and Training (EET) Ministerial Group meeting on 6 July and Future of Work Tripartite Forum meeting on 27 July. It supplements advice that MBIE is putting up for both the EET and Forum meetings.

Given the scale of work required to progress social unemployment insurance and other redundancy support options, we suggest future commissioning beyond that we previously advised (T2020/310 refers).

#### Background

- The EET Ministerial Group meeting on 6 July is an opportunity for Ministers to discuss the high-level objectives, potential design and the benefits and costs of a social insurance system compared to alternative options (including other ways of enhancing income support).
- The Future of Work Tripartite Forum is meeting on 27 July to discuss support for displaced workers with a focus on social unemployment insurance and EET Ministers need to agree at the 6 July meeting on how to take this discussion forward in that forum.
- The multi-year welfare overhaul work programme, including income adequacy and support for unemployed people, is being reconsidered in light of COVID-19 with advice being prepared separately for the Social Wellbeing Committee.
- This aide memoire outlines the objectives and design choices regarding social insurance and alternative mechanisms for supporting displaced workers. It suggests EET Ministers consider the forthcoming forums and related support materials and meet in late 2020 to discuss a 6-12 month work programme.

#### Talking points for meeting

- I support the continued progression of the social insurance discussion given our objectives to find more permanent options to smooth income and reduce wage scarring.
- A key question for us is the scope of a potential social insurance scheme and whether it should be designed to be narrowly targeted at particular displaced workers or cover a wider range of reasons for joblessness.

- As Ministers we will need to be clear on the objectives and outcomes to be achieved. Motu's work on wage scarring and MSD's costings will be helpful guides for our thinking about the benefits and costs of alternative designs of social insurance.
- The introduction of social insurance would overlap with other policy levers, such as welfare and ACC, and we need to take a systems view to minimise complexity and avoid mixed objectives. This will take time to do.
- We need to be clear about objectives and how those can be met by alternative approaches. To complement the specific modelling work being done on social insurance options by MBIE, I propose we discuss the relative merits of alternative approaches including:
  - other welfare overhaul options including individualising main benefits to allow those experiencing redundancy to access support (even if they have an earning partner) and/or increasing the level of support
  - an expansion of ACC to cover sickness, disability, and injury not tied to an accident
- As Ministers, there are a number of questions we should be considering as this work progresses. These include:
  - How social insurance mechanisms may interact with existing systems, and the extent to which problems can be addressed through improving existing systems compared with new support options such as social insurance and redundancy provisions?
  - Should ALMP provision be considered separately from questions of income support and income smoothing?
  - What financing mechanisms (e.g. designated payroll tax or levy, general taxation) are preferable and consistent with our objectives elsewhere in the tax and benefit system?
  - Is income support during job search or retraining better addressed through ACC, the welfare system, or something new?
  - Where should this work be progressed and who needs to be involved?

#### **Objectives and Considerations**

You may wish to use the EET meeting to discuss the benefits and objectives of social insurance as a means of enhancing support for displaced workers and how to balance them with wider considerations and risks set out in the Annex. Possible objectives for social insurance include:

- smoothing incomes for workers who experience unexpected job loss (due to redundancy, health condition, disability, etc.) to allow time to find work or lower consumption levels;
- reducing the economic hardship of unemployment regardless of reason and timing;
- reducing wage scarring of displaced workers by facilitating an extended work search to find a more suitable job and by extension better skills matching; and/or,

 supporting a longer period of time away from the labour market to enable retraining and upskilling for displaced workers whose skills do not match current labour market needs.

Design and delivery options will depend on your core objective(s). Possible options include: making improvements to the existing welfare system through enhancing benefits or establishing more individualised, temporary benefits for displaced workers; expanding the existing ACC system to cover more reasons for job loss (e.g. sickness, disability, redundancy); creating a new social unemployment insurance system; enacting statutory redundancy payments; facilitating a private market for redundancy protections, or some combination of these options.

There has been particular focus recently on designing a social insurance option. Social insurance schemes typically use government intervention to ensure that a group of individuals are insured or protected against the risk of a particular life event, in this case job loss. ACC is the primary example of social insurance in New Zealand, with contributions paid through a designated payroll levy shared between employees and employers and set aside in fund designated for the purpose of paying out related benefits.

Social insurance systems typically provide guaranteed individualised benefits based on past earnings and employment history funded from individual contributions, thus are distinguishable from social *assistance* or welfare programs which typically make payments at a flat rate based on household need funded from general taxation. While both "insure" against types of risks, they emphasise different objectives. For these reasons, social insurance systems are relatively better at income smoothing, especially for medium to high income earners.

The welfare system, including Jobseeker Support and student support, has overlapping objectives to those described above, and could be an alternative or supplementary means of delivery. The Welfare Expert Advisory Group identified many concerns with the design and operation of the welfare system including levels of income adequacy which can cause significant income shocks for some recently unemployed workers. The introduction of the COVID Income Relief Payment is an example of a possible way to smooth incomes for medium to higher income earners through the welfare system, though alternative design options could be considered and integrated with the existing system.

s9(2)(ba)(i)

**Next Steps** 

MBIE, in consultation with Treasury, MSD and IRD, is leading the drafting of a paper to support the July Forum. A truncated version of this paper will be provided to EET Ministers for the 6 July meeting. The focus of this paper and Forum discussion will be on the social insurance model. The completed paper, due 13 July, will provide:

- a clearer articulation of how a better system for supporting worker transitions could promote social and economic development objectives;
- a discussion of the emerging understanding of the drivers and impacts of wage scarring, as a quantitative proxy for displaced worker outcomes;
- a fuller description of the approaches under consideration;
- an initial assessment of how the approaches could help to achieve social and economic objectives, including through reducing wage scarring and smoothing incomes;
- an initial assessment of risks and trade-offs, and;
- initial high level costing of social insurance options (if these are available in time for the Forum discussion).

s9(2)(ba)(i)

Following the Forum, the work would require significant resource from agencies to deliver on broader design and delivery options. If Ministers wish to progress this at pace after the Forum, we suggest EET Ministers meet in late 2020 to discuss a 6-12 month work programme, including its governance, key design options, consultation and engagement approach, and continued refinements of estimates of costs and benefits.

Laura Berntsen, Senior Analyst, Skills and Work, s9(2)(k) Nick Carroll, Manager, Skills and Work, s9(2)(k)

#### Annex: Other considerations of this work

In addition to the four possible objectives outlined earlier in this paper, there are other considerations/objectives associated with expanding support for displaced workers that can be applied to this work:

- the benefits of a welfare vs. insurance funding approach in correcting perceived market failures
- the role of macroeconomic stabilisers during economic downturns (countercyclical stimulus)
- the need for permanency and certainty for policy consistency and to avoid the need to rapidly create/recreate bespoke initiatives each time there is a significant economic downturn or regional disaster
- the extent to which this work seeks to reduce poverty and inequality
- the relative importance of labour market attachment and implications of providing support via firms or households (i.e. how to best integrate income support and large scale wage subsidy programs)

There are also significant risks and trade-offs associated with establishing a social unemployment insurance and related design considerations:

- 1. *Fairness.* There is a risk of a real or perceived two-tier benefit system distinguishing between "earned" and "unearned" benefits. Establishing a social unemployment insurance scheme could undermine support for broader longer-term reform of the welfare system and jeopardise other fairness objectives.
- 2. **Fiscal cost and financing mechanism.** Payroll taxes or levies can distort decisions for workers on whether to be employed or self-employed, and they can be difficult to apply in practice when self-employed individuals earn a mix of labour and capital income. There are significant distributional considerations when deciding how to tax labour versus capital income.
- 3. **Labour market distortions.** There is a risk that financing mechanisms and benefits create work disincentives through higher marginal tax rates for workers, incentives for employers to turn to contract labour, increased returns for unemployment, and higher hiring and compliance costs for employers.
- 4. **Distributional considerations.** Most social unemployment insurance schemes replace a share of a worker's past income which can perpetuate existing inequalities within earned income distributions including gender pay gaps. There is a risk of net benefit accumulating to higher income individuals and second earners in high income families.



TE TAI ÕHANGA THE TREASURY

# Treasury Report: Social Insurance Benchmark Cost Estimates

Date: 21/04/2021	Report No:	T2021/1049
	File Number:	ER-647-EM

## Action sought

	Action sought	Deadline
Hon Grant Robertson Minister of Finance	Note this advice to support the Government's work on social insurance and refer this report to Ministers Hipkins, Sepuloni, Parker, Nash and Wood as well as Social Partners.	NA

## Contact for telephone discussion (if required)

Name	Position	Telepl	1st Contact	
Laura Berntsen	Senior Analyst, Skills and Work	s9(2)(k) (wk)	N/A (mob)	×
Nick Carroll	Manager, Skills and Work	s9(2)(k) (wk)	s 9(2)(g)(ii) (mob)	

## Minister's Office actions (if required)

**Return** the signed report to Treasury.

Γ

Note any feedback on the quality of the report

Enclosure:

No

# **Treasury Report:** Social Insurance Benchmark Cost Estimates

#### **Executive Summary**

This report provides benchmark estimates of the overall potential costs of a social unemployment and health condition and disability insurance scheme to complement estimates you have already been provided.

The estimated benchmarks are based on several possible scenarios with a cost range from 33 - 5b per annum for unemployment insurance (UI) for reasons of economic displacement. The addition of health condition and disability insurance could add an estimated 2.5 - 7b depending on design and behavioural responses resulting in a total estimated range of 5.5 - 12b.

The Social Insurance Tripartite Working Group (the Working Group) has initiated several work programmes which will have specific focusses on design features and costings. Through this process, it may be possible to design a narrower scheme to lower the costs but this could undermine some of the indicated policy objectives. We expect that with improved data and more specific design choices estimates will be further refined.

#### **Recommended Action**

We recommend that you:

a refer to Ministers Hipkins, Sepuloni, Parker, Nash and Wood

Refer/not referred.

b refer to the Social Partners

Refer/not referred.

Nick Carroll Manager

# Treasury Report: Social Insurance Benchmark Cost Estimates

#### Purpose of Report

- 1. To provide you with benchmark estimates of the overall potential costs of a social unemployment and health condition and disability insurance scheme to complement estimates you have already been provided (T2021/547, T2020/3457 refer).
- 2. The paper first presents the overall estimates using an international benchmark approach, then describes the methods and caveats, before concluding with comment and next steps. These overall benchmarks will help inform the trade-offs in the key design features relating to coverage of the scheme, payment rate and level of the levy and funding costs for the next phase of design work by the Social Insurance Tripartite Working Group.

#### Analysis

#### **New Top-Down Estimates**

- 3. We consider that approximately \$3 5b per annum is a reasonable benchmark range for the cost of unemployment insurance (UI) for reasons of economic displacement depending on economic conditions. The addition of health condition and disability insurance could add an estimated \$2.5 7b depending on design and behavioural responses resulting in a total estimated range of \$5.5 12b per annum including the costs of active labour market programmes (ALMPs) and administration.
- 4. These benchmarks are based on applying unemployment and disability insurance takeup rates from comparable international schemes to the New Zealand context. We consider that there has not been sufficient assessment of the underlying job displacement data, nor application of detailed policy design to the modelling estimates, to treat these figures as formal estimates. Rather, these are benchmarks designed to give a sense of magnitude and key cost drivers to help Ministers make choices.
- 5. On the basis of these figures, we estimate that generating sufficient funding to cover job loss for economic reasons could require over a 3 per cent payroll levy to ensure a level of prefunding to account for the economic cycle. We estimate that an additional 2 5 per cent levy would be necessary to fund a health condition and disability insurance scheme, resulting in an estimated total levy range of 5 8 per cent. Inclusion of a "levy free zone" would increase the levy rate on incomes above the excluded zone, while eliminating it on income within that zone. We have not considered the split in levy between employers and employees, nor any flow-on economic impacts from this additional levy on employment.
- 6. It may be possible to design a scheme with a narrow focus on redundancy and job loss for economic reasons, combined with significant employment history conditions, that could lower the costs. For example, the benchmarks below based on the Household Labour Force Survey (HLFS) give a levy range of 1.7 2.3 per cent. However this could undermine some of the indicated policy objectives of a scheme and require a shift away from some currently agreed design features.
- 7. Likewise it may be possible to reduce costs by providing a less generous payment rate. For example, we estimate that in a lower rate payment scenario (based on the Canadian system) the costs of unemployment insurance could be funded through a 1.7

-2.7 per cent levy while the levy for health condition and disability insurance could be reduced to 1.4 per cent.

		Average enrolment <sup>1</sup>	Cost of income support (\$b)	Provision of ALMPs (\$m) <sup>2</sup>	Necessary levy for income support	Necessary total levy, including ALMPs and admin <sup>3</sup>
1. rates	Applying Canadian take-up	63,000- 104,000	2.8-4.7	90-150	2.1-3.6%	2.4-3.7%
2. and re	Applying Canadian take-up eplacement rate (55%)	63,000- 104,000	1.9-3.2	90-150	1.5-2.5%	1.7-2.7%
3. rates	Applying Netherlands take-up	77,000- 116,000	3.4-5.2	110-160	2.6-4%	2.8-4.2%
4.	HLFS-based estimates <sup>4</sup>	44,000- 60,000	2-2.7	60-80	1.5-2.1%	1.7-2.3%

#### Unemployment Insurance Benchmark Estimates

#### Health and Disability Insurance Benchmark Estimates

	Average enrolment	Cost of income support (\$b)	Provision of ALMPs (\$m)	Necessary levy for income support	Necessary total levy, including ALMPs and admin
5. Applying Canadian take-up rates	53,000	2.4	70	1.8%	2%
6. Applying Canadian take-up and replacement rate (55%)	53,000	1.6	70	1.2%	1.4%
7. Applying Netherlands take-up rates	155,000	6.9	210	5.3%	5.6%

#### Approach to estimating the benchmarks

- 8. To help inform your discussions on next steps for social insurance, we have calculated benchmark estimates based on overseas system designs, particularly of Canada and the Netherlands (which have broadly similar labour markets to ours).<sup>5</sup>
  - Our CENTRAL UI scenario (1) is based on the take-up rate of the Canadian UI scheme<sup>6</sup> applied to a payment rate consistent with the Forum-agreed payment rate and the New Zealand population size.

<sup>&</sup>lt;sup>1</sup> Average enrolment number suggest a range of normal economic times to recessionary periods within a typical 7-10 year cycle (excluding COVID-19 type downturns). Estimates are based on point in time data averaged over a given year. <sup>2</sup> Based on average costs of MSD-administered employment services of \$1,000 per beneficiary rounded to the pearest 1000 per beneficiary ro

<sup>&</sup>lt;sup>2</sup> Based on average costs of MSD-administered employment services of \$1,400 per beneficiary rounded to the nearest 10 million.

<sup>&</sup>lt;sup>3</sup> Includes estimated cost of income support, ALMPs, and administrative expenses. Administrative costs are estimated based on the 2019 costs of administering the ACC Earners' account (\$157m).

<sup>&</sup>lt;sup>4</sup> HLFS asks survey respondents who report as unemployed or not in the labour force whether the reason for leaving their past job was "made redundant / laid off / business closed". As a useful point of comparison, in 2019, between 130,000 and 150,000 individuals were on Jobseeker benefit at any given time. We believe the HLFS-based estimates to be lower than reasonable bounds given they do not account for the behavioural effects of having a UI system in place.

<sup>&</sup>lt;sup>5</sup> We have calculated the share of the Dutch and Canadian populations receiving unemployment or disability insurance, applied these figures to the New Zealand working age population, and estimated total costs assuming an 80 per cent wage replacement rate replacing median, pre-tax income. This methodology is imprecise given the different design features of the respective systems, difference in the labour markets, and associated behavioural responses.

- Our LOW payment UI scenario (2) and disability scenario (6) applies Canadian UI take-up rates with the less generous replacement rate in the Canadian system (modelled after the Canadian system where beneficiaries receive 55 per cent of their previous wages up to a cap of \$595CN/week)
- Our HIGH UI scenario (3) is based on the higher take-up rates in the Dutch UI scheme (again with New Zealand payment and population levels applied)
- Our LOW strict entry threshold scenario (4) is based on the relatively strict entry criteria required in the HLFS of displacement due only to redundancy, lay-off and business closure, but not other non-personal reasons (for example unfair dismissal, or the end of a fixed-term contract or self-employment)<sup>7</sup>
- Our CENTRAL disability insurance scenario (5) is based on take-up rates of the Canadian disability insurance scheme
- Our HIGH disability insurance scenario (7) is based on the take-up rates of the Dutch disability insurance scheme
- 9. The benchmarks above are based on the gross of tax and do not take into account future growth, such as in the total working age population or payroll. They are based on the designs in the Canadian and Netherlands examples, described further in the footnote below.<sup>8</sup> These design features vary from those being actively considered by Forum partners.<sup>9</sup>
- 10. The benchmarks do not account for:
  - Possible ACC and welfare benefit savings and offsetting effects (though both the Netherlands and Canada have underlying welfare systems so the total number of UI and disability insurance beneficiaries is reflective of those systems)
  - Different labour market contexts including ways in which the New Zealand labour market differs from those overseas (such as the industry makeup and demographics of those facing job loss)
  - Population growth and demographic changes in New Zealand

<sup>&</sup>lt;sup>7</sup> Importantly the HLFS based estimates also assumes no behavioural response from the introduction of a UI based scheme, which may also be leading to the lower estimate.

<sup>&</sup>lt;sup>8</sup> The estimates of the number of eligible workers are based on the design features of the Canadian and Dutch systems. To be eligible for unemployment insurance in Canada, a worker must be employed for a minimum of 420 hours of work in the preceding 52 week period (in areas of high unemployment) or 700 hours (in areas of low unemployment). Benefits are payable for a maximum period of 45 weeks, starting after a two-week waiting period. This entitlement of a claimant is a function of the number of hours worked in the qualifying period and the local unemployment rate. Entitlement varies from 14 weeks to 45 weeks. Source: <a href="https://www.oecd.org/els/soc/2504548.pdf">https://www.oecd.org/els/soc/2504548.pdf</a>. To be eligible for UI in the Netherlands, a worker must have worked as an employee 26 weeks in the 39 weeks immediately preceding unemployment, plus to have worked as an employee at least 52 days or more during four of the last five years (credit is given for caring for children). Benefit duration is variable based on length of time in employment and ranges from 6 to 60 months. <a href="https://www.oecd.org/social/soc/29736028.PDF">https://www.oecd.org/social/soc/29736028.PDF</a>.

The net effect of differences between schemes is unknown. For example, the higher relative durations of overseas schemes would increase the share of the population on benefits at any given time but the requirement of significant employment history as a condition of eligibility and lower wage replacement rates and caps would limit uptake.

Neither the Dutch nor Canadian system is consistent with the health condition and disability structure contemplated for New Zealand. International comparisons covering sickness benefits are hard to come by as the overlap between sickness and disability can be complex, but these costings may still be indicative. With respect to disability insurance, in the Netherlands, employers are required to pay 70 per cent of a sick employee's income up to a maximum of two years at which point, the employee would apply for disability insurance. In Canada, two weeks of sickness benefits are covered through unemployment insurance and many long-term illnesses are covered through the country's disability pension scheme. <a href="https://www.canada.ca/en/services/benefits/publicpensions/cpp/cpp-disability-benefit.html">https://www.canada.ca/en/services/benefits/publicpensions/cpp/cpp-disability-benefit.html</a>

https://ec.europa.eu/social/main.jsp?catId=1122&langId=en&intPageId=4990. Importantly, benefit durations are not capped in either country which is a significant difference from parameters contemplated in New Zealand.

<sup>&</sup>lt;sup>9</sup> Forum partners have expressed a preference for minimal to no past work history requirements ("day one eligibility") which would significantly increase costs, beyond the scope of any design options modelled below. In addition, they have agreed to a wage replacement rate of 80 per cent of earnings up to \$134,000 per annum to align with ACC. This rate and cap combination is significantly more generous than that of any other country we have reviewed.

- Differences in scheme dynamics (such as eligibility criteria, durations, and stand-down periods, though it does account for an 80 per cent wage replacement rate); or
- The costs of covering self-employed workers
- 11. The benchmarks do attempt to account for the cost of providing basic active labour market programmes (ALMPs) and administrative costs given our understanding that the levy rate is intended to cover the full costs of the programme. However these figures are highly hypothetical as little design work has been done to date in these areas. The cost of ALMPs is based on projections by the Ministry of Social Development of the average cost of the provision of employment services to beneficiaries and the administrative costs represent a flat amount based on the cost of administering the ACC Earners' Account.

#### **Comments and Next Steps**

- 12. There remains uncertainty about the potential size of the schemes. We expect that with improved data and more specific design choices estimates will be further refined.
- 13. Joint agencies have previously provided you with scenarios of costs for social insurance ranging from \$100m \$200m per annum for a narrow redundancy scheme up to \$4b-\$5.8b for a scheme with wide coverage. Our benchmarks above suggest that the actual costs of scheme are likely to be towards the upper end of ranges provided to date. Methodological differences and assumptions related to baseline system designs and associated behavioural effect can account for some of differences between these benchmarks and previous estimates.<sup>10</sup>
- 14. We are sceptical of the assumptions underpinning the lower bound cost estimates provided in earlier briefings. The estimates that suggest annual costs could be contained to around \$0.4b \$0.6b are based on some relatively strong assumptions and should be treated with caution.
  - They are based on less than 1,000 observations of displacement from the Survey of Families, Income and Employment (SoFIE) for employees who had been employed for more than a year prior to displacement.
  - The survey includes potentially only a small proportion of coverage (for example it does not include business closure, or the end of fixed-term or self- employment).
  - This implies that around 10,000 people will be on UI at a point in time, which is significantly less than using overseas estimates and estimates from the HLFS and other administrative data sets in New Zealand.
- 15. The Social Insurance Tripartite Working Group (the Working Group) has initiated several work programmes including one focussed on costings. Their aim is to prepare for Ministers indicative costings with sensitivity analysis around key policy choices in advance of the June Cabinet Paper with more robust costings prepared for the public Discussion Document in August. This process will involve consultation with outside

<sup>&</sup>lt;sup>10</sup> Methodological approaches account for both presentational differences as well as cost benchmarking. For example, the higher estimated displacement rates previously provided (375,000 job losses potential during a GFC-like period) are based on calculations of total actual job losses in New Zealand over the course of a full year using the Integrated Data Infrastructure (IDI). To arrive at cost estimates, these figures are then multiplied by the average expected unemployment spell and wage replacement rate. By contrast, our methodology shows lower numbers of people on benefits as they are based on the average number of individuals on social insurance at a given point in time. This coverage rate is then multiplied by 80 percent of the New Zealand pre-tax median wage to account for the cost of serving all claimants over the course of a given year. For this reason, it is more difficult to adjust our approach based on changes in duration settings and (especially in the case of the Netherlands which has a significantly higher maximum duration) would lead to costings based on higher average durations than would be the case in New Zealand.

experts, including at Motu, to attempt to account for potential behavioural responses, offsetting effects, and administrative costs.

16. It is our view that designing a system to fully meet each of the objectives previously agreed (addressing wage scarring and supporting income security) will be expensive and some objectives may be at odds, including with other Government priorities. Future work should prioritise objectives in order to develop more detailed design options on coverage and generosity that can mitigate the cost. The Working Group is undertaking further work on coverage and entry thresholds and these design choices will be particularly critical from a costings perspective. We suggest that these are core areas for you to consider when balancing programme objectives and cost mitigation.

#### Annex: Technical description of the methodology to estimate benchmark estimates

This annex provides a more complete description of the methods used to calculate the benchmark cost. The methodology is based on applying coverage rates of unemployment and disability insurance in Canada and the Netherlands to the New Zealand working age population, New Zealand median wage, and applying the proposed 80 per cent wage replacement rate.

The New Zealand working age population (WAP) which is estimated to be 3,266,100 in 2021. Median pre-tax income used for calculation is \$55,955 based on StatsNZ employment indicators data.

Specifically, the maximum levy revenue needed = UI coverage rate in Netherlands or Canada x New Zealand working age population x New Zealand pre-tax median income x .8 replacement rate.

To estimate the necessary payroll levy, this number was then divided by the total compensation for all employees in New Zealand in 2019, which was \$130,353,000,000 in 2019.11

#### More Detailed Explanation

Disability benefit coverage for a Netherlands-modelled system was determined by combining 2018 enrolments for WIA programmes (for partially and fully disabled workers)<sup>12</sup> and WAO (a legacy programme which is currently phasing out but still has significant enrolment) (169,298+106,243+255,916) and this was divided by the WAP (11,203,843). This figure was then multiplied by the WAP of New Zealand to determine how many New Zealanders would be covered by a similar scheme. This calculation excluded benefits for youth and the selfemployed. Including these beneficiaries would result in higher rates. Eligibility for the included benefits does not trigger until after a worker has been on employer-supported disability pay for two years, so is not analogous to eligibility settings as contemplated in New Zealand. Moreover, because of the phasing out of the WAO, overall enrolments are trending down. Because of these complexities, these estimates should not be heavily relied upon.

To determine the benefit coverage for a Canadian-modelled system, the 2018 CPP and QPP (specific for Quebec) disability pension figures were added (228,856 + 61,566) then divided by the total WAP (24,727,903) then multiplied by the New Zealand WAP.<sup>13</sup>

To estimate UI coverage rates for the Netherlands in normal times, total benefit numbers (263,648) were divided by the total working age population in 2018 (11,203,843). To estimate the total number of covered beneficiaries in New Zealand under a Dutch style scheme, this number was multiplied by the 2021 New Zealand WAP. Estimates for the rates and numbers for times of high unemployment used unemployment benefit figures from 2014 (398,180) which was the (peak for the Netherlands) divided by the WAP at the time (11,063,085).

UI coverage in times of normal employment in Canada was based on 2018 point in time averages for all unemployment benefits in Canada (476,453) divided by the working age population at the time (24,727,903) to determine a coverage rate, then multiplied by the New Zealand WAP. The coverage rate in times of high unemployment used the same process but with Canada's UI numbers from 2009 (746,102 beneficiaries, point in time average).

<sup>&</sup>lt;sup>11</sup> Further detail on unemployment and disability coverage rates in Canada and the Netherlands can be found here: https://www.oecd.org/social/recipients.htm. Median income based on StatsNZ data: https://www.stats.govt.nz/informationreleases/employment-indicators-weekly-as-at-29-march-2021. Total compensation for all employees was \$130,353,000,000 in 2019 -- source: National Accounts - SNA 2008 -- SNE. New Zealand working age population was 3,944,900 in Q1 2020 -source: StatsNZ.

https://www.cbpp.org/research/retirement-security/disability-insurance-in-the-netherlands-a-blueprint-for-us-reform and https://www.oecd.org/social/soc/41429917.pdf <sup>13</sup> https://www.canada.ca/en/services/benefits/publicpensions/cpp/cpp-disability-benefit.html.

T2021/1049 Social Insurance Benchmark Cost Estimates

The HLFS-based estimate took respondents who lost employment due to redundancy, layoffs, or firm closures averaged over all four quarters of both 2018 (to represent normal times) and 2010 (to represent times of high unemployment) and divided those figures by the working age population in the relevant year. These figures were then multiplied by the current WAP of New Zealand.

To estimate the total annual costs of each benefit in normal and high unemployment times, the total estimated number of New Zealand beneficiaries, the pre-tax median income in 2019 (\$55,955) and .8 (which is the preferred wage replacement rate) were all multiplied together. To estimate the total costs of the Canada-based scheme with associated wage replacement rates, the figure of .55 (the WRR in Canada) was used rather than multiplying by .8.

To arrive at the necessary levy rate for each benefit, these figures were then divided the total cost by total compensation in New Zealand in 2019 (\$130.353b).



TE TAI ÕHANGA THE TREASURY

Reference:T2021/1596MC-1-5-2Date:24 June 2021To:Minister of Finance (Hon Grant Robertson)Deadline:None

# Aide Memoire: Automatic stabilising role of Social Unemployment Insurance (SUI) policy

#### Purpose

This Aide Memoire provides a summary of our preliminary view on the automatic stabilising role of a potential social unemployment insurance (SUI) policy. A more detailed draft note on this is included for your feedback.

We intend to share this note with the Future of Work Tripartite Forum (a partnership between the Government, Business New Zealand and the New Zealand Council of Trade Unions). The note will also inform the discussion document due to be published in August 2021 for wider consultation. You can provide feedback on the note in the Weekly Agency Meeting on 28 June.

### Context

One of the objectives of introducing a social unemployment insurance (SUI) policy is to strengthen the automatic stabilisers to enhance New Zealand's response to shocks (TR 2020/3457 refers). In a recession, the stabilisers operate by automatically increasing government's spending and reducing revenue to help stabilise the economy. In an economic upturn, revenue collection will automatically increase as a result of higher employment levels. More broadly, automatic stabilisers can help offset fluctuations in economic activity across the economic cycle without requiring government interventions.

There is significant interest on the macroeconomic stabilisation impact of a potential SUI policy in the Future of Work Tripartite Forum. We intend to share this note with the social partners, with the caveat that the estimates are for a SUI policy that covers economic displacement. The estimates are heavily dependent on the assumptions used and are subject to the limitations in methodology and the data used.

#### Key points

1. There is significant uncertainty around the potential role of the SUI as an automatic stabiliser. The levy design is as important as the payment design in determining the stabilising effect of any new scheme. The note illustrates the impact of the uncertainty by assessing the sensitivity of the stabilisers to different assumptions (Table 1 in the note below). The size of the stabiliser is reflected by the extent to which the government's budget balance (revenue less expenses) changes in response to economic activity.

Assuming a scheme costing 2-4% of GDP per annum, and assuming a range of estimates for the responsiveness of revenue and expenses to change with the business cycle; the budget balance ratio is estimated to decrease by 0.01% to 0.07% of GDP for every percentage point decline in GDP below its potential (due to lower taxes and higher expenses) as a result of the SUI policy.

- 2. This indicates that introducing a SUI scheme will have a small positive impact to strengthen existing automatic stabilisers. This is not enough to remove the need for other stabilisation mechanisms like monetary policy or discretionary fiscal policy. Under current settings, automatic stabilisers in New Zealand are estimated to change the budget balance by 0.51% of GDP for every 1% of GDP change in the output gap.
- 3. Timing for introduction of SUI levy is crucial. Introducing a levy in mid-2023 can have a potentially contractionary effect on the economy at a likely early stage of the recovery, offsetting the stimulatory effect of other policies. In addition, while SUI levies may be adequate to cover the expenses when unemployment is low, there is a risk of sustained deficit due to the SUI policy when unemployment is high. This will need financing through other options, which are likely to impact your fiscal strategy.

#### **Next steps**

Following discussion at the Weekly Agency meeting, we propose sending it to the Tripartite Working Group to inform the final discussion document.

Shefalika, Analyst, Modelling and Research, s9(2)(k) Nick Carroll, Manager, Skills and Work, s9(2)(k)

# **Note:** Automatic stabilising role of the Social Unemployment Insurance (SUI) policy

Automatic stabilisers refer to the automatic changes in government spending and revenues that help stabilise the economy after shocks, without requiring new government action. One of the objectives of a potential social unemployment insurance (SUI) policy is to strengthen automatic stabilisers to enhance New Zealand's response to recessions (refer TR 2020/3457). Based on the international evidence and literature review, this note describes Treasury's preliminary views on the automatic stabilising role of SUI for workers facing economic displacement.

#### In summary -

- There is significant uncertainty around the potential role of the SUI as an automatic stabiliser, particularly in the absence of detailed design parameters. The levy design is as important as the payment design in determining the stabilising effect of any new scheme.
- 2. Timing for introduction of SUI levy is crucial as it may offset the stimulatory impact of monetary and fiscal policies if implemented when there is still slack in the economy. Under BEFU21 forecasts, the output gap only closes at the end of 2022, though there is a high degree of uncertainty around this. Introducing a levy in mid-2023 will have a potentially substantial contractionary effect on the economy at a likely early stage of the recovery, offsetting the stimulatory effect of other policies.
- 3. While SUI levies may be adequate to cover the expenses when unemployment is low, there is a risk of substantial and prolonged increase in SUI payments when unemployment is high, resulting in a sustained deficit due to the SUI policy, if the levies aren't sufficiently high at the outset. This will need financing in the form of higher levy rates (or alternatively increased borrowing, higher taxes, lower expenses in other areas or reduced coverage/income replacement rate for SUI policy).
- 4. We illustrate the impact of the uncertainty by assessing the sensitivity of the stabilisers to different assumptions (Table 1). The size of the stabiliser is reflected by the extent to which government's budget balance (revenue less expenses) changes in response to economic activity.
  - Assuming a scheme: (1) costing 2% of GDP per annum on the lower end of potential estimates and (2) with low responsiveness of revenue<sup>1</sup> and expenses<sup>2</sup> to the business cycle relative to OECD countries (indicating

<sup>&</sup>lt;sup>1</sup> For estimating elasticity of revenue from SUI levy, we use <u>the OECD data</u> on elasticity of social security contribution to output gap for different countries for the low, medium and high assumptions (since New Zealand does not have a payroll tax or social security contribution). This may indicate an optimistic view of elasticities as social security contributions include contributions for policies beyond SUI.

<sup>&</sup>lt;sup>2</sup> For estimating elasticity of expenditure due to SUI policy, we use <u>the OECD data on</u> public unemployment spending as a proxy for SUI payments (this does not include the spending on active labour market policies). This may indicate an optimistic view of elasticities as public unemployment spending includes spending for policies beyond SUI.

lower spending and coverage of SUI and other unemployment policies); the budget balance ratio is estimated to decrease by 0.01% of GDP for every percentage point decline in the output gap (due to lower taxes and higher expenses) as a result of SUI.

- Assuming a scheme costing (1) 4% of GDP per annum on the higher end of potential estimates – and (2) with high elasticities of revenue and expenses among OECD countries (indicating greater spending and coverage of SUI and other unemployment policies), the marginal decline in the budget balance to GDP ratio is 0.07% in response to a percentage point decline in the output gap.
- 5. These estimates are heavily dependent on the assumptions. However, the range of estimates of 0.01% to 0.07% of GDP for marginal change to budget balance ratio indicates a small addition to the existing setting. Under current settings, automatic stabilisers in New Zealand are estimated to change the budget balance by 0.51% of GDP for every percentage point change in the output gap. This indicates that introducing a SUI scheme would likely have a small positive impact in offsetting a shock but would not remove the need for other stabilisation mechanisms like monetary policy or discretionary fiscal policy.
- 6. These estimates are subject to the limitations in methodology and data<sup>3</sup>.

#### The case for automatic stabilisers

The SUI policy can benefit through:

- **Consumption smoothing** provides workers with essential income protection when they are temporarily unemployed, as a result of a layoff. This helps in smoothing consumption for those made worse off.
- **Macroeconomic stimulus** Unemployed individuals have a higher marginal propensity to consume, thus the provision of unemployment insurance can boost overall consumption during recessions, providing aggregate fiscal stimulus when the economy's GDP is below its potential level (i.e. output gap is negative).
- Reducing the need for legislative action Spending on automatic stabilisers is based on the economic scenario and is not reliant on proactive decisions by the Government. As such, automatic stabilisers can respond to economic downturns more quickly than discretionary fiscal policy. This may be particularly useful during times when there is a lack of political consensus on the need or reach of discretionary fiscal policy, or when to "turn on" or "turn off" temporary initiatives.

<sup>&</sup>lt;sup>3</sup> This note uses the size of cyclical budget balance as an indicator of automatic stabiliser with no further linkages to output or consumption. The data uses several proxies which are likely to differ from the final SUI policy design.

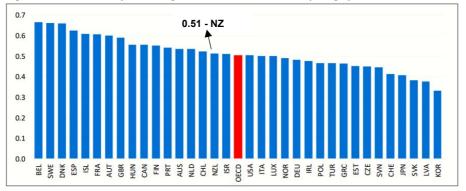
#### Size of overall automatic stabilisers in New Zealand and the OECD

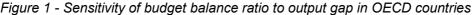
SUI policy can add to government's existing automatic stabilisers which includes -

- The welfare system as benefit expenditure (including on Jobseeker benefits, the Accommodation Supplement, and Hardship Grants) increases as more workers face unemployment and reduction in earnings during a recession.
- The tax system as tax revenue automatically declines as employment and earnings drop during a recession.

The <u>OECD</u> and <u>IMF</u> use the sensitivity of government's budget balance (difference between government's revenue and expenditure as % of GDP) with changes in economic activity to predict its cyclical stabilisation role<sup>4</sup>. Countries where taxes fall and spending increases relative to GDP following a shock have the potential to stabilise the economy more effectively than countries where budget components do not react much to the cycle or are very small.

Under current settings, automatic stabilisers in New Zealand are estimated to change the budget balance by 0.51% of GDP for every percentage point change in the output gap. This is slightly above the OECD average of 0.50% of GDP for every percentage point change in the output gap, suggesting that even absent a SUI scheme, the role of existing automatic stabilisers in New Zealand is close to the OECD average<sup>5</sup>.





<sup>&</sup>lt;sup>4</sup> There are several ways to quantify automatic stabilisers and there is no consensus on the best one. In European Commission (2017), the size of automatic stabilisers is measured through its ability to smooth consumption, GDP or household tax and expenditures fixed in level; in McKay and Reis (2016), the role of automatic stabilisers is assessed in terms of the reduction in the volatility of GDP. Some researchers have adopted micro simulations which replicate an income tax system and use household-level data to assess the direct role of automatic stabilisers in smoothing household disposable income after a shock to market income (Auerbach and Feenberg, 2000; Mohl et al., 2019).

<sup>&</sup>lt;sup>5</sup> Adjusting fiscal balances for the business cycle (<u>OECD, 2015</u>)

#### Contribution of SUI to Existing Suite of Automatic Stabilisers

#### Scenarios

The levy design is as important as the payment design in determining the stabilising effect of any new scheme. In the absence of detailed design parameters, there is significant uncertainty around the potential role of the SUI as an automatic stabiliser. We illustrate this sensitivity by adjusting key assumptions that impact the size of the stabiliser –

- The size of SUI scheme as it determines the size of the levy/contributions and the payments due to the SUI policy.
- The responsiveness of the SUI payments or SUI levies to change with the business cycle (defined as the elasticity of SUI expense and elasticity of SUI revenue with respect to the output gap).
- Extent of recession (defined by the size of the output gap)

The resulting size of the stabiliser indicates that introducing a SUI scheme would likely have a small positive impact in offsetting a shock but would not remove the need for other stabilisation mechanisms like monetary policy or discretionary fiscal policy. For details on the calculation, refer to the appendix.

Assumptions	Low Scenario 1	Medium Scenario 2	High Scenario 3
Size of the SUI policy (% of GDP)	2%	3%	4%
Elasticity of social security contributions to output gap (based on the range of values in OECD data)	0.4	0.7	1.4
Elasticity of overall unemployment spending to output gap (based on the range of values in OECD data)	-0.02	-0.08	-0.4
Output gap (% of potential GDP)	-2.0%	-2.5%	-3%
Results			
Change in budget balance ratio relative to a 1 percentage point change in the output gap	0.01	0.02	0.07
Size of automatic stabiliser (% of potential GDP)	0.0%	0.06%	0.2%

Table 1 – Sensitivity of automatic stabilisers due to a potential SUI policy

#### [low] Scenario 1 - Assuming a scheme -

- Costing on the low end of 2% of GDP per annum
- Low values of elasticity of revenue (of social security contributions beyond SUI policy) and elasticity of expense (on public unemployment spending beyond SUI) among the OECD countries. This reflects lower spending and coverage of overall unemployment policies and lower progressiveness of social security contributions.

The marginal change to the budget balance to GDP ratio with a 1 percentage point change in output gap is 0.01. This is a small addition to the overall budgetary semielasticity of 0.51 for New Zealand.

#### [medium] Scenario 2 - Assuming a scheme -

- Costing of 3% of GDP per annum
- Median values of elasticity of revenue and expenses among the OECD countries

The marginal change to the budget balance to GDP ratio with a 1 percentage point change in output gap is 0.02. Assuming an economic shock when GDP is 2.5% lower than its optimal level, the size of the automatic stabiliser is estimated to be 0.1% of potential GDP.

[high] Scenario 3 - Assuming a scheme -

- Costing on the higher end of 4% of GDP per annum, and
- High values of elasticity of revenue and expenses among the OECD countries (reflecting broader coverage of overall unemployment policies)
- Large downturn with actual output 3% lower than potential

The marginal change to the budget balance to GDP ratio with a 1 percentage point change in output gap is 0.07. Assuming a large economic shock with GDP is 3% lower than its optimal level, the size of the automatic stabiliser is estimated to be 0.2% of potential GDP.

#### **Policy implications**

- 1. **Design features** There are ways in which policy design can improve the counter-cyclical stabilisation effects of SUI including through --
  - **A more progressive levy system** (e.g. through a personal income tax) which will provide greater stabilising effects than a flat levy or even social security contributions (OECD, 2020).
  - **Building in automatic increase during recessions** Linking SUI payments to the unemployment rate or other economic indicators as a trigger can avoid timing lags associated with use of discretionary fiscal policy (OECD, 2020 and McKay and Reis, 2016). This could include
    - Longer benefit durations during recessions
    - More generous payments during recessions
- 2. Alternative and complementary policy SUI is one means of enhancing economic stabilisers, however there are alternative mechanisms that may be more consistent with New Zealand's labour market settings or policy objectives. Examples of alternative or complimentary policy includes:
  - Increasing main benefits (overall or specifically during economic shocks)

- Introducing a permanent wage subsidy scheme to improve job attachment and income support for workers at risk of displacement
- Automatic vs discretionary Automatic fiscal stabilisers are seen as an effective tool to stabilise the economy after temporary shocks as they require no change in legislation and do not suffer from information, decision, design, and implementation lags contrary to discretionary fiscal measures (Blanchard et al. 2010, Sutherland et al. 2010<sup>6</sup>).

However, while automatic stabilisers are the first line of defence against economic fluctuations, they are not enough to fully absorb economic shocks in severe recessions and may inhibit the ability for policymakers to tailor the fiscal response to meet the unique circumstances of an economic shock.

4. Impact on fiscal strategy - While SUI levies may be adequate to cover the expenses when unemployment is low, there is a risk of substantial and prolonged increase in SUI payments when unemployment is high, resulting in a sustained deficit due to the SUI policy. This will need financing in the form of increased borrowing, higher taxes, lower expenses in other areas or reduced coverage/income replacement rate for SUI policy. Scheme design on the revenue side is as important as the payment side for stabilisation effects across the cycle.

#### Limitations

The estimates derived in the scenario analysis are subject to several limitations -

- While budgetary semi-elasticity should correlate with automatic stabilisation, it may not necessarily account for how effectively automatic changes in taxes and public expenditure stabilise household and business income after a specific shock and, in turn, private consumption and investment.
- It is not the unemployment insurance policy by itself, but the total size and cyclical nature of spending on unemployment policies that creates the macroeconomic stabilisation effects. This can also be strengthened through the existing benefits.
- There is significant uncertainty around the size of the macroeconomic stabilisation as a result of a potential SUI policy due to
  - o uncertainty in the design of the SUI policy (levy rates, costing etc).
  - uncertainty due to the nature of recessions, the extent of decline in unemployment and the take-up rates of the SUI, which impacts the counter-cyclical spending.

<sup>&</sup>lt;sup>6</sup> <u>Blanchard et al. 2010</u>, <u>Sutherland et al. 2010</u>

- limitations of the data/methodology used in the note. The data does not include the impact of stabilisation due to the active labour market policies. The imperfect proxies<sup>7</sup> used may reflect a more optimistic estimate of the stabiliser.
- Variations in the displacement rates (and associated eligibility) may change the amount paid in good economic times vs. weak. For example, Treasury benchmark estimates suggest that between 44,000 and 155,000 unemployed workers may be enrolled at any given time, depending on scheme design and economic scenario (T2021/1049 refers)

# Appendix

#### Size of automatic stabilisers due to SUI policy

In this framework, the size of the overall automatic stabiliser is indicated by the extent to which revenue and spending (as % of GDP) resulting from automatic stabilisers responds to the change in the optimal GDP level and the GDP level due to an economic shock (the "output gap"). This is called the **semi-elasticity of the budget balance ratio** ( $\epsilon$ ) with respect to the output gap. Automatic stabiliser is the product of this semi-elasticity and the output gap.

$$\epsilon = \left(s_{r_W} - 1\right) \left(\frac{R}{r}\right) - \left(s_{g_W} - 1\right) \left(\frac{c}{r}\right) \quad (1) \text{ (OECD, 2015)}$$

#### Assumptions

To test the sensitivity of the size of automatic stabilisers due to the SUI policy and how it changes over the business cycle (with changes in output gap), we assume varying estimates of the following assumptions (Table 1) –

1. **Size of the SUI policy (% of GDP)** - This is used as a proxy for revenue contributions towards this policy or the SUI payments made. Increases in overall system costs (driven by changes in scheme design and generosity) would increase the required size of the policy and thus its potential stabilisation role.

# 2. Elasticity or responsiveness of a potential SUI levy and SUI payments with changes in the business cycle<sup>8</sup> –

• An elasticity of 1 for the SUI levy to output gap indicates that when the economy is operating 1% above its potential level (i.e. a positive output gap of 1%), the *revenue* from SUI levy will increase by 1%.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> The proxy used for elasticity of SUI levy is the elasticity of social security contributions to output gap across OECD countries, which includes contributions for policies beyond SUI. Similarly, the proxy used for elasticity of SUI spending is elasticity for public unemployment spending to output gap across OECD countries, which includes spending on overall unemployment policies. As a result, the estimates of the stabiliser may be optimistic.

<sup>&</sup>lt;sup>8</sup> Refer to the OECD paper Table 5 for elasticity of social security contribution to output gap and Table 8 for elasticity of public unemployment spending to output gap.

<sup>&</sup>lt;sup>9</sup> For the purpose of estimating elasticity of revenue from SUI levy, we use OECD's data on elasticity of social security contribution to output gap for different countries for the low, medium and high assumptions in Table 1 (since New Zealand does not have a payroll tax or social security contribution). This may indicate optimistic view of elasticities as social security contributions cover contributions for policies beyond SUI.

- An elasticity of 1 for SUI payments to output gap indicates that when the economy is operating 1% above its potential level, the *SUI payments* will decline by 1%.<sup>10</sup>
- 3. **Output Gap<sup>11</sup>** Post GFC, New Zealand's GDP declined from its potential level by 2 to 2.5% between 2009-14. Hence, we look at a range of values of output gaps to assess the varying sizes of automatic stabilisers in different recessions.

Assumptions	Low Scenario 1	Medium Scenario 2	High Scenario 3
Size of the SUI policy (% of GDP)	2%	3%	4%
Elasticity of social security contributions to output gap (based on the range of values in OECD data)	0.4	0.7	1.4
Elasticity of overall unemployment spending to output gap (based on the range of values in OECD data)	-0.02	-0.08	-0.4
Output gap (% of potential GDP)	-2.0%	-2.5%	-3%
Results			
Change in budget balance ratio with 1 percentage point change in the output gap	0.01	0.02	0.07
Size of automatic stabiliser (% of potential GDP)	0.0%	0.1%	0.2%

#### Table 1 – Sensitivity of automatic stabilisers due to potential SUI policy

Notes -

 From equation 1, semi-elasticity = revenue to GDP ratio\* (elasticity of revenue -1) - expense to GDP ratio\* (elasticity of expenditure - 1). Size of the SUI policy (% of GDP) is used as a proxy for revenue and expense to GDP ratio.

2. For elasticity of SUI levy to output gap, we use OECD's data on elasticity of social security contribution to output gap as a proxy (this includes all social security contributions and not just for SUI)

3. For elasticity of unemployment spending to output gap, we use OECD's data on elasticity of public unemployment spending to output gap as a proxy (this includes all unemployment spending and not just for SUI)

4. Size of automatic stabiliser (% of GDP) = -semi-elasticity\*output gap

5. Definition of output gap = actual GDP/potential GDP -1

We use the same methodology<sup>12</sup> (subject to the limitations already outlined in the note, hence should be taken as indicative rather than robust measure) to estimate the size of automatic stabilisers across some countries as a result of their overall unemployment policies (based on Annex 4 of TR 2020/3457). Even across counties differing widely in the size of their unemployment spending and the social security contributions as % of GDP, the size of automatic stabilisers as a result of their overall unemployment policies is estimated to be up to ~0.2% of potential GDP<sup>13</sup> (Figure 2).

<sup>&</sup>lt;sup>10</sup>For the purpose of estimating elasticity of expenditure due to SUI policy, we use public unemployment spending as a proxy for SUI payments (this does not include the spending on active labour market policies). New Zealand's elasticity of public unemployment spending to output gap is -0.06 (close to the median of -0.08 for OECD countries). This means that New Zealand's unemployment spending decreases by 0.06% when the economy operates 1% above its optimal level. Public unemployment spending in OECD database is defined as expenditure on cash benefits for people to compensate for unemployment (includes redundancy payments from public funds, as well as the payment of pensions to beneficiaries before they reach the standard pensionable age, if these payments are made because the beneficiaries are out of work or for other labour market policy reasons)

<sup>&</sup>lt;sup>11</sup> Output gap estimates are surrounded by a degree of uncertainty as they are unobservable and, therefore, often subject to significant revisions.

<sup>&</sup>lt;sup>12</sup> This is based on multiplying their budgetary semi-elasticity and output gap over the last two decades. The output gap data sourced from IMF, WEO (April 2021) data. The budgetary semi-elasticity uses the social security contribution (% of GDP) as a proxy for revenue to GDP ratio and public unemployment spending as a proxy for expense to GDP ratio. Elasticities are used from <u>OECD's data</u> on elasticity of social security contribution to output gap (Table 5) and elasticity of public unemployment spending to output gap (Table 8).

<sup>&</sup>lt;sup>13</sup> Subject to the caveat that the data on social security contributions and public unemployment spending includes policies beyond social unemployment insurance, but not active labour market policies.

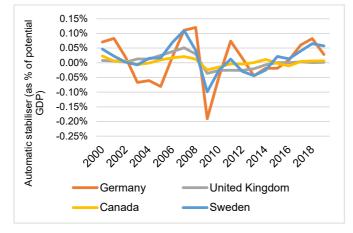


Figure 2 - International comparison of automatic stabilisers (as % of potential output)





TE TAI ÕHANGA THE TREASURY

# **Joint Report:** The interaction between social unemployment insurance and a crisis wage subsidy

Date:	21 July 2021	Report No:	T2021/1815
			REP/21/7/746
		File Number:	SH-3-5

# Action sought

	Action sought	Deadline
Minister of Finance	Agree to the recommendations	6 August 2021
(Hon Grant Robertson)		
Minister for Social Development and Employment	Agree to the recommendations	6 August 2021
(Hon Carmel Sepuloni)		

# Contact for telephone discussion (if required)

Name	Position	Telephone		1st Contact
	Principal Adviser, Welfare & Oranga Tamariki, The Treasury	s9(2)(k)	N/A	Х
		(wk)	(mob)	
	Manager, Welfare & Oranga Tamariki, The Treasury	N/A	s 9(2)(g)(ii)	
		(wk)	(mob)	
	Policy Manager, Employment & Housing Policy, Ministry of Social Development	s9(2)(k)	N/A	
		(wk)	(mob)	

# Minister's Office actions (if required)

**Return** the signed report to Agencies.

Refer the report to SUI Ministers

**Enclosure**: Annex One: View of Tripartite Working Group on using a Social Unemployment Insurance Scheme to deliver a crisis event wage subsidy

# **Joint Report:** The interaction between social unemployment insurance and a crisis wage subsidy

### **Executive Summary**

The COVID-19 Wage Subsidy Scheme (WSS) provided support for employment attachment and household incomes during a time of economic disruption, as well as significant fiscal stimulus. Ministers have sought advice on an enduring, crisis wage subsidy scheme, alongside the proposed Social Unemployment Insurance scheme (SUI) [T2021/1337; REP/21/5/504 refers].

There are advantages to using the social unemployment insurance administrative arrangements to support employment attachment. It could mean financial support is more targeted and could ensure that the interaction between the payments is determined in advance. Annex 1 provides the current view of the Tripartite Working Group on possible SUI crisis provisions. Broad proposals along these lines will be included in the draft discussion document for public consultation on SUI.

SUI crisis provisions could reduce the need for a standalone wage subsidy, or significantly impact its design. As a result we do not propose any further work on an enduring, crisis wage subsidy scheme for the time being. We would review this following Cabinet decisions on SUI in March 2022.

However, since a SUI scheme would not be in place until May 2023 at the earliest, we propose near-term work that will adapt and improve the role of the WSS in the COVID-19 response. This will keep the current scheme fit-for-purpose as a COVID-19 economic support measure for the time being. However, we do not propose to continue work previously requested on a new WSS repayment rule, as the benefits of the work are not clear and limited resources can be better used on other policy work.

#### **Recommended Action**

We recommend that you:

- a **note** the advice provided by the Tripartite Working Group in Annex 1
- b **note** that the existence of a SUI scheme could allow a wage subsidy, or other retention support, to be provided through the SUI mechanism, thereby reducing the need for a standalone wage subsidy in a crisis
- c **note** that officials consider the option of delivering support for employment retention through a SUI mechanism in a crisis has merit and support further development of this option
- d **note** that broad proposals for SUI crisis provisions along the lines of the content in Annex 1 will be included in the draft discussion document which is due to be considered by Cabinet in mid-September
- e **note** that Cabinet would look at any policy decisions on SUI crisis provisions with the rest of SUI policy in March 2022

f **agree** that officials will **not** do further work to design or implement a standalone, enduring, crisis wage subsidy scheme for the time being

Agree/disagree Hon Grant Robertson Agree/disagree Hon Carmel Sepuloni

- g **note** that officials can do further work on the design of an enduring, crisis wage subsidy scheme once there is more clarity on any SUI crisis provisions for retention support, which may occur in March 2022 after public consultation and Cabinet policy decisions on SUI
- h **agree**, as an interim measure, to the proposed Wage Subsidy work programme in Table 1 including advice on potential changes to adapt and improve the role of the Wage Subsidy in the COVID-19 response

Agree/disagree Hon Grant Robertson Agree/disagree Hon Carmel Sepuloni

i **agree** that officials will **not** do further work on new wage subsidy repayment rules.

Agree/disagree Hon Grant Robertson Agree/disagree Hon Carmel Sepuloni

Keiran Kennedy Manager, Welfare & Oranga Tamariki The Treasury

Villen A

Megan Beecroft Manager, Employment and Housing Policy Ministry of Social Development

Hon Grant Robertson **Minister of Finance** 

Hon Carmel Sepuloni Minister for Social Development and Employment

# **Joint Report:** The interaction between social unemployment insurance and a crisis wage subsidy

#### Purpose of Report

- 1. The purpose of this paper is to:
  - a. advise on the potential role of a social unemployment insurance (SUI) scheme to include a job retention component during an economic crisis, and
  - b. propose a work programme to adapt and improve the COVID-19 wage subsidy scheme in the short term.

#### Background

- 2. In November 2020, officials offered advice on an enduring wage subsidy scheme [T2020/3581 refers]. However, other priorities have prevented significant progress on this work so far, including establishing the March 2021 Wage Subsidy Scheme, responding to the Auditor-General's performance report on the Wage Subsidy, and developing a SUI.
- Joint Ministers recently sought advice on progressing work on an enduring, crisis wage subsidy scheme alongside the development of the proposed SUI scheme [T2021/1337; REP/21/5/504 refers].
- 4. The Government and the Tripartite Working Group are preparing for public consultation on the SUI. Cabinet is due to consider the draft Discussion Document in mid-September.
- 5. There is an opportunity to consider whether a SUI, once established, could include a job retention component during an economic crisis.

# The Tripartite Working Group has provided further advice on possible SUI crisis provisions

- 6. The Tripartite Working Group has considered the role of a SUI in delivering financial support during a crisis, as has occurred in similar schemes overseas. The current SUI draft Discussion Document includes an option of provisions that could operate in a crisis to temporarily change entitlements and how the scheme functions to provide appropriate economic support.
- 7. Annex 1 provides further advice from the Tripartite Working Group on this option.
- 8. The SUI will go out for public consultation. Depending on feedback the crisis provisions may be further developed or may be dropped at this stage.
- 9. Note that you will also shortly receive further advice from the Tripartite Working group on detailed design of the SUI scheme settings. We do not consider there to be any interdependencies between decisions on this policy paper and that forthcoming advice.

#### Officials' advice on use of SUI for retention support in a crisis

10. There are multiple mechanisms that could be used in a SUI scheme to incentivise job retention during a crisis, such as a flat-rate wage subsidy delivered via the employer, a 'short-time work' scheme providing top-up payments via the employer based on specific reduction in hours and normal wages, or a SUI for partial job loss providing a variable payment to a worker who is on reduced hours.

11. Officials consider that delivering retention support through a SUI mechanism in a crisis has merit and support further development of this concept. The existence of such a scheme would allow better targeting of support to employment attachment and incomes than the COVID-19 Wage Subsidy. This is because payments could be more directly tied to an individual's hours worked and to prior earnings. A SUI could also replace the need for payments such as the COVID-19 Income Relief Payment.<sup>1</sup>

#### Distributional considerations

- 12. However, the settings of any SUI-administered retention support, such as a crisis wage subsidy, require careful consideration. For example, if eligibility for a SUI-administered retention scheme were linked to eligibility for regular SUI, it could reduce retention support available for some lower-income workers, casual workers, and recent labour market entrants. Conversely, delivering retention support as a flat-rate wage subsidy (unlinked to other SUI eligibility) would provide relatively higher retention support for low paid workers.
- 13. If appropriate SUI provisions can be developed, then there is a good case to deliver employment retention support through this mechanism, since managing the distributional and labour market interactions between separate SUI and wage subsidy schemes would be challenging.

#### Activation triggers

14. There is an argument for the government to define in advance the general triggers for activating any retention support - signalling both when support will be provided and when it won't. This enables businesses to make their own risk management and insurance decisions with more confidence. It reduces the risk that businesses underprepare in the expectation of unspecified Government support. Activation triggers could be considered as part of any work on SUI crisis provisions.

#### Fiscal considerations

- 15. Government intervention to fully or partially Crown-fund a Wage Subsidy through SUI could provide a form of discretionary fiscal stimulus in an economic shock, similar to the COVID-19 Wage Subsidy. The Treasury has not modelled the macro-stabilisation effects of using the insurance scheme to administer retention support. Due to its better targeting it is possible that a SUI-delivered Wage Subsidy would enable a similar level of retention support for a lower fiscal cost.
- 16. Retaining some flexibility in any SUI crisis provisions would allow the Government of the day to vary generosity in line with the stimulus objectives at the time. Establishing these flexibility provisions in advance so that administrative tools are in place would help to deliver timely fiscal support in a crisis.
- 17. If the Government of the day considered more fiscal stimulus were required, it would have choices about what mechanism to use, including SUI or other mechanisms, informed by the scale and nature of the economic shock.

Withheld out of scope of request

<sup>&</sup>lt;sup>1</sup> The Income Relief Payment was a temporary, short-term support for people who lost their jobs from 1 March to 30 October 2020 because of COVID-19.

Withheld out of scope of request

Withheld out of scope of request

## Consultation

29. We have consulted MBIE on this report. MBIE worked as part of the Tripartite Working Group to provide the advice in Annex 1.

## Annex 1: View of Tripartite Working Group on using a Social Unemployment Insurance Scheme to deliver a crisis event wage subsidy

#### Policy context

- In normal economic times, the policy landscape generally promotes uncompetitive firms exiting the market and encourages the reallocation of capital and labour into more productive uses. It is generally undesirable to protect firms in normal economic conditions since this risks supporting unviable jobs and businesses and inhibiting valuable reallocation of labour, as well as dis-incentivising private investment in business continuity insurance and resilience.
- An economic crisis challenges the standard assumptions about allowing firms to exit the market. In an economic crisis such as a Level 4 pandemic response firms that are otherwise viable may be threatened, and face pressure to release their staff.
- By protecting firms in this situation, the government can provide them with an
  opportunity to weather the crisis, or to unwind their operations in an orderly manner. In
  either case, the government can avoid a rapid and sustained increase in
  unemployment.
- One key way to protect firms is to ensure they can keep paying their employees, and avoid the need to make them redundant. Through the pandemic, the Government has used the WSS to protect firms, and by extension their workers.
- The WSS, and subsequent scheme iterations, were a core part of the Government's COVID-19 economic response. The WSS incentivised employers to retain staff with a per capita payment conditional on workers remaining employed. Worker incomes were supported by subsidy pass-through rules and expectations. The WSS also provided a substantial part of the Government's discretionary fiscal stimulus response (approximately \$13.8b through the original WSS, extension and August 2020 resurgence scheme).
- The Government is now considering introducing a social insurance scheme to support displaced workers. This raises two questions relevant to the future use of crisis wage subsidies:
  - a. could the SUI scheme also deliver a wage subsidy or similar financial support for workers at risk of displacement during economic crises, and,
  - b. are there advantages to using the SUI mechanism to deliver wage subsidy?

# A social insurance provider could readily deliver wage subsidies, potentially at lower administrative cost, with a better integration with the main insurance scheme

- Through establishing a social unemployment insurance scheme, the Government will build a permanent administrative capability for the Accident Compensation Corporation (ACC) to receive and assess insurance claims from employers on behalf of displaced workers, and make insurance payments to displaced workers.
- While in normal times this administrative capability would focus on supporting workers into new jobs, that same capability could readily be used, in a crisis, to receive, assess, and pay wage subsidy claims from employers of workers *at risk of displacement*.
- Using the SUI administrative capability could:
  - potentially lower delivery costs compared to the alternative of standing-up ad hoc arrangements,
  - better manage the policy and operational interactions with the main social insurance scheme, and

- enable earlier employment support, and insurance claim management, where workers do face displacement. Such early intervention could improve return-to-work outcomes.
- Most other developed countries used their SUI schemes in this way during the pandemic. Many countries also instituted temporary or permanent extensions to their schemes, for instance introducing cover for partial income loss, extending eligibility to self-employed people, and increasing the generosity and duration of their schemes to ensure support for workers and the economy (eg. Germany, Canada, Denmark, the United States). These extensions were typically funded by the Government rather than from levies so as not to overburden the schemes.
- The ACC could operate a 'short-time work' scheme, in which the Government tops-up a proportion of normal wages for workers on reduced hours. This would encourage employers to reduce hours worked across their staff rather than reducing staff numbers.

# The usual coverage and entitlement rules could be adapted as appropriate to the situation...

- While the preferred SUI design remains in development, the key elements are likely to include an 80% replacement rate, a specified eligibility duration, minimum contribution requirements, coverage for complete job loss only, and eligibility for New Zealand citizens and residents.
- These settings might not be appropriate for a wage subsidy in an economic crisis, and it is difficult to specify in advance what settings could be appropriate. In enabling the use of SUI as a wage subsidy, therefore, it would be appropriate also to create the flexibility to set eligibility and entitlement settings appropriate to the nature of the crisis.
- Allowing coverage for partial loss of work could be especially useful where employers can only offer reduced hours of work. Another option that should be considered is a furloughing which would allow firms to pause production whilst maintaining the established employer-employee link. This would be only available under conditions as set out by the government at the time.
- The Government might also want the option of changing, in a crisis, the usual eligibility and entitlement rules for social unemployment insurance itself. This could be necessary, for example, to ensure that remaining in work provided greater income than displacement.

#### ...while establishing some clear bottom lines

- While we recommend retaining flexibility in determining eligibility and entitlement settings, we also recommend establishing some clear bottom lines. For example, policy could require employers claiming a wage subsidy to commit to keeping their employees employed at least as long as they received the subsidy. This was a feature of the WSS.
- The delivery of the WSS also raised some operational questions about the respective roles and responsibilities of employers and employees. It would also be useful to address these in due course.
- Most critically, the levy model could not fund a wage subsidy through SUI for 'uninsurable' events such as COVID-19 Alert Level 4. There is a strong case for additional Crown funding for SUI crisis provisions in such scenarios. The entitlement settings and scheme conditions in any particular case would influence how the overall cost of maintaining employment attachment is shared between employers, employees and the Crown.
- It will also be necessary to define further what constitutes a crisis, or levels of crisis, for the purpose of triggering any use of SUI crisis provisions and additional Crown funding. The crisis could be national, or limited to a region.

• Clear signalling would enable businesses to make their own risk management and insurance decisions with more confidence. Signalling also reduces the risk that businesses underprepare in the expectation of unspecified Government support.



TE TAI ÕHANGA THE TREASURY

## Social Insurance Updated Costing Scenarios

Date:	13/8/2021	Report No:	T2021/2074
		File Number:	SH-2-6

## Action sought

	Action sought	Deadline
Hon Grant Robertson Minister of Finance	<b>Note</b> this advice to support the Government's work on social insurance	None

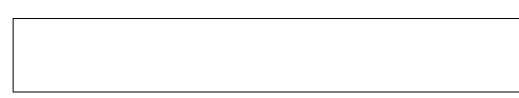
# Contact for telephone discussion (if required)

Name	Position	Telep	Telephone		
Laura Berntsen	Senior Analyst, Communities Learning and Work	s9(2)(k) (wk)	N/A (mob)	~	
Nick Carroll	Manager, Communities Learning and Work	s9(2)(k) (wk)	s 9(2)(g)(ii) (mob)		

## Minister's Office actions (if required)

**Return** the signed report to Treasury.

Note any feedback on the quality of the report



Enclosure:

No

## Treasury Report: Social Insurance Updated Costing Scenarios

## **Executive Summary**

This report provides Treasury's views on social unemployment insurance (SUI) costings based on revised design parameters. This advice is a compliment to the related briefing provided by the Social Unemployment Insurance Working Group. Both reports are based on the same underlying costings and methodologies.

Treasury recommends a costing approach that looks to coverage rates for comparable overseas systems, applies those rates to the New Zealand workforce, and makes adjustments based on differences in generosity between the New Zealand and comparison systems (using estimates from international research).

Using this approach, and running figures through the Tax and Welfare Analysis (TAWA) model, **Treasury estimates the cost of a seven month** <u>redundancy</u> scenario to be **around \$2.6B resulting in a necessary levy of around 2%**. This is before accounting for a bridging payment which would require employers to pay for the first month of benefits for workers whom they make redundant (although the estimates assume this feature as an integrity measure that reduces overall take-up). Treasury estimates the overall cost of the redundancy scheme to reduce to about \$2B per year (for a 1.6% levy) after accounting for this cost shift to employers. The estimates provided are in 2018 dollars.

**Treasury estimates the cost of a seven month scenario covering** <u>health conditions and</u> <u>disabilities (HCD)</u> could be around \$1.5B resulting in a 1.2% levy. However, the costs of the HCD scheme could be significantly higher, as there is very little evidence on which to base HCD estimates and these scenarios assume that gateways are well designed and implemented. If the scheme has broad coverage (such as for chronic pain and mental health conditions) and lacks effective mechanisms to limit inflows into the scheme, then a doubling or more of the costs and levy is possible.

These are early figures and have been developed at pace so should be considered preliminary and may be subject to revision upon further quality assurance work. Moreover, all costings are inherently highly uncertain given the lack of reliable data and the unknown behavioural effects of introducing a scheme of this size and generosity. Accordingly, if Ministers choose to move forward to enact a scheme, Treasury advises including a prudential margin when setting levy rates to prevent cost overruns. We also consider that further modelling and policy work is required before a single point estimate of the forecast cost of HCD could be reliably provided.

## **Recommended Action**

We recommend that you:

- **a. note** Treasury's approach to the costing of social unemployment insurance scenarios for redundancy and health conditions and disabilities.
- **b. note** that Treasury considers the international methodology used in to be the most sound approach to estimating costs.
- **c. recommend** Ministers request further advice of the Social Unemployment Insurance Working Group on the potential cost of coverage of health conditions and disabilities.

Agree/disagree.

lik Well

Nick Carroll Manager Communities, Learning and Work

Hon Grant Robertson **Minister of Finance** 

# Treasury Report: Social Insurance Updated Costing Scenarios

### Purpose of Report

- 1. The purpose of this report is to provide Ministers with an updated estimate of the potential costs of a social unemployment insurance (SUI) scheme, describe Treasury's preferred methodology to generating these estimates, highlight the inherent uncertainty, and possible mitigation options.
- 2. Additional context for this report was provided in the complementary advice to Ministers in the Social Unemployment Insurance Governance Group from the SUI Working Group.

### Analysis

### The Treasury's Preferred Approach

1. The scenarios and estimates described in this report are consistent with the scenarios described in the Social Unemployment Working Group's report. The preferred Treasury scenarios align with "Option 3" described in the Working Group's report.

#### Redundancy

- 2. A wide range of social insurance scenarios has been prepared, but we consider that the best central estimate to be the international approach (scenario 1) which would result in a cost for a seven month scheme of around \$2.5B and a resulting necessary total levy around 2% (which has been proposed to be split between employers and employees).
- 3. The costs and levies associated with the one month scheme would then be deducted to account for the bridging payment's cost shift from the scheme to employers resulting in a net cost to the scheme of around \$2B per year and 1.7% levy for a seven month scheme (before applying a prudential margin as discussed below).

#### Health Conditions and Disability (HCD)

- 4. The cost estimates for HCD cover are significantly more uncertain than for redundancy due to data limitations and the need for more policy and implementation work. However, Treasury views scenario 4 below to be the most realistic as it assumes the average pre-displacement income of HCD claimants will equal the average income of all employees in New Zealand. It also employs a methodology that, in Treasury's view, more accurately anticipates the estimated number of claimants based on international experience. The precise methodology is explained in further detail in the Annex.
- 5. The resulting cost of a seven month HCD scheme would be around \$1.5B resulting in a 1.2% levy. At the time of drafting, the bridge payment policy with respect to HCD had not yet been determined. The inclusion of a bridging payment would reduce the estimated costs to the system and increase the share of costs borne by employers.

#### Explanation of Preferred Approach

6. Treasury's view is that using an international approach provides the most realistic estimate of possible scheme costs because it is based on labour markets with SUI schemes in place and minimises the need for arbitrary judgments.

- 7. The international approach is based on observed data from countries with comparable labour markets, similarly designed systems, and comprehensive available data. While this is not a perfect approach given the differences across countries and schemes, the comparators selected represent a valid midrange. While it is true that there are differences between the New Zealand and overseas comparators' labour markets (e.g. available data suggests comparatively low rates of redundancies in New Zealand) it is reasonable to assume that if New Zealand introduces new incentives for redundancy, our labour market will behave more like ones that has those incentives built in.
- 8. The table below shows the share of the labour force receiving unemployment insurance for economic displacement across a range of countries and U.S. States with available data. Massachusetts (shown in purple) represents a mid-range comparator and was the basis for the data in scenario 1.

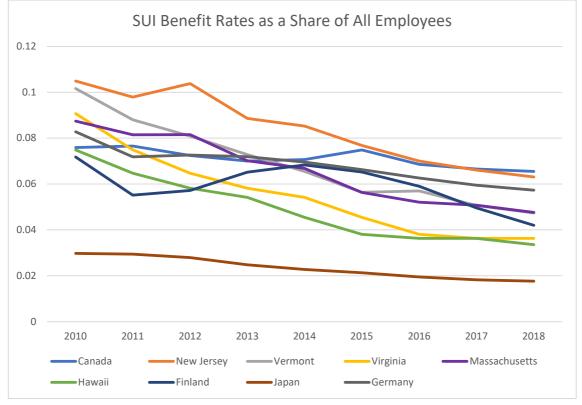


Table 2: Share of Employees Who Receive Unemployment Insurance for JobDisplacement in a Given Year

- 9. There are fewer comparators with respect to HCD benefits given the unique design. Denmark and Finland stand out as the only countries that have comparably designed systems, and Denmark was selected due to its bridging payment policy under which employers are required to cover the first 30 days of benefits.
- 10. It should be noted that the proposed New Zealand replacement rate of 80% and high earnings cap make the proposed New Zealand scheme significantly more generous than any of the schemes shown or described above so it may be reasonable to expect higher claims and costs than generated from the international-based estimates. Accordingly, these costings should not be viewed as upper bound estimates, but Treasury considers each to represent reasonable possible benchmarks based on our understanding of the proposed scheme design. Modifications, such as removing the bridge payment, could significantly increase the costs of the scheme, if there are large behavioural impacts.

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- 11. The modelling approaches that rely on historical New Zealand data and applied to Jobseeker settings (as done in options 2 3 for redundancy option 5 for HCD) require numerous judgments, most significantly:
  - What the true historical rates of job loss or due to redundancy, sickness, and disability rates were in New Zealand
  - How behaviour will change as a result of introducing a SUI system
- 12. As a result of these judgments, some of the estimates based on historical data and Jobseeker benefits have been *lower* than previous benchmark estimates that assumed no behavioural response. Treasury's view is that such results are not credible.
- 13. These costing scenarios provide lower benchmark estimates than past Treasury advice (T2021/1049 refers). This is due to the comparator systems selected. Past advice used claims data from Canada to inform Treasury's central redundancy estimate due to the Canadian system's relatively expansive eligibility criteria (which was more consistent with the New Zealand proposal at the time) and associated high claims rate. Massachusetts has more stringent eligibility, which is more consistent with the New Zealand design as currently described.
- 14. With respect to HCD, past advice used claims data from both Canada and the Netherlands. Further details on the proposed design now suggest a system more similar to the Danish model. However, there are still large differences in scheme design and insufficient evidence on which to base even the revised estimates. On balance, these differences suggest HCD costs are likely to be higher than the scenarios in this advice.

### Costings Overview

- 15. The Social Unemployment Insurance Project Team has provided Treasury with several possible methodologies for TAWA input to estimate the cost of introducing social unemployment insurance covering both redundancy and the onset of a health condition or disability. Significant judgment is necessary to select which methodology will result in the most realistic cost estimates.
- 16. The overall costings are preliminary, use non-standard modelling, and may be subject to revision as they have not yet been through a formal quality assurance process.
- 17. Table 1 below presents three possible costings scenarios and methodologies for coverage of redundancy and the associated cost and levy rates:
  - 1. International approach using Massachusetts as the comparator
  - 2. Historical/Jobseeker-based assuming low behavioural changes
  - 3. Historical/Jobseeker-based assuming higher behavioural change

# Table 1: Possible Approaches to Estimating the Cost and Levy Rates of Social Unemployment Insurance for Economic Displacement

Scenario	Maximum duration	SUI Payments (\$m)	SUI Levy as a Proportion of Wage & Salary	Cost After Bridge Payment (\$000)	Levy After Bridge Payment
International (1)		500	0.40%		
Historical low (2)		208	0.16%		
Historical high (3)	1 mo.	347	0.27%		
International (1)		2,608	2.09%	2108	1.69%
Historical low (2)	7 mo.	1,017	0.80%	809	0.64%

Historical high (3)		1,732	1.37%	1385	1.10%
International (1)		3,398	2.73%	2898	2.33%
Historical low (2)		1,298	1.02%	1090	0.86%
Historical high (3)	9 mo.	2,180	1.73%	1833	1.46%
International (1)		4,530	3.66%	4030	3.26%
Historical low (2)		1,662	1.31%	1454	1.15%
Historical high (3)	12 mo.	2,813	2.24%	2466	1.97%

Note these a preliminary figures and subject to revision. Estimates are provided in 2018 dollars.

- 4. International approach using Denmark as the comparator
- 5. Historical/Jobseeker-based

# Table 2: Possible Approaches to Estimating the Cost and Levy Rates of Social Unemployment Insurance for Health Conditions and Disabilities

. ·	Maximum		
Scenario	duration	SUI Payments (\$m)	SUI Levy as a Proportion of Wage & Salary
International (4)	1 mo.	272	0.21%
Historical (5)		254	0.20%
International (4)	7 mo.	1,493	1.17%
Historical (5)		1,302	1.03%
International (4)	9 mo.	1,847	1.45%
Historical (5)		1,576	1.24%
International (4)	12 mo.	2,370	1.86%
Historical (5)		1,954	1.54%

Note these a preliminary figures and subject to revision. Estimates are provided in 2018 dollars.

### Accounting for Uncertainty

- 19. There is significant uncertainty with respect to each possible approach to costings and levy settings. This is because:
  - Historical New Zealand data on the rates and reasons for job loss is incomplete
  - The possible degree of behavioural change is unknown and evidence on behavioural change as a result of differences in generosity is both limited (we have few elasticities to apply to HCD) and typically evaluates more marginal differences (e.g. increasing benefit levels by 10% or comparing neighbouring countries) rather than significant differences in settings (e.g. comparing distinct systems that are two times as generous)
  - The selected international comparators have different labour markets and social insurance settings than New Zealand
  - Treasury have found no relevant research on the costs and impacts of introducing a new social insurance system
  - Several design features that will have significant impacts on cost (e.g. the bridging payment and allowable extensions of maximum duration) are yet to be confirmed and will be difficult to reliably model even once confirmed

<sup>18.</sup> Table 2 below presents two possible costings scenarios and methodologies for coverage of HCD and the associated cost and levy rates:

- Fluctuations in the economic scenario and the gradual nature of behavioural change mean early indicators may not be reflective of the long-run costs
- 20. To account for this uncertainty, Treasury recommends presenting cost estimates based on international experience and literature (e.g. scenario 1 for redundancy and 4 for HCD) and a proposed levy based on higher range estimates that includes a prudent margin. This margin can provide a buffer in the event costs exceed projections or the economic scenario in the early years of implementation is worse than over a 10-year cycle.<sup>1</sup>
- 21. While there are risks with setting a levy that is too high (such as exacerbating the effects of introducing a new labour tax and resulting increase in avoidance behaviour) Treasury considers the risks of setting a levy that is too low to be greater. Such risks include:
  - Early cost overruns and system insolvency
  - The need for Crown funding as either a subsidy or loan to the system
  - Undermining the "social insurance" design objectives and reduced salience between levy and benefit
  - Reduced public confidence in the system

#### **Unresolved Design Features with Cost Implications**

- 22. There are several design features yet to be finalised that will impact the costs of the scheme. While it is difficult to accurately estimate their costs, Ministers should consider their implications. These features include:
  - The inclusion and nature of the bridging payment. While the bridging payment is likely to reduce the incidence of redundancies, there is the potential it could increase their rates if employers consider this payment to be a reasonable trade-off compared to alternative processes.
  - Gateway features including required employer notification and automatic enrolment. Automatic enrolment is likely to increase take-up, including of those who wouldn't otherwise claim.
  - Inclusion of self-employed workers. Self-employed workers are more likely to be able to control their income and employment to maximise benefits (i.e. pay lower levies and receive larger pay-outs).
  - The required employment history. Requiring a longer employment history can mitigate the potential for employees and employers to rearrange employment contracts in order to utilise the scheme. For example, some workers currently on shorter-term or seasonal contracts may negotiate for permanent contracts in order to become eligible for SUI upon job end.
  - The treatment of widespread population health conditions like chronic pain and mental health and the gateways into the HCD scheme.

### **Fiscal and Other Implications**

23. While the goal is for SUI to be funded through levies on workers and employers, there are several areas that will likely increase costs to the Crown, though some (such as

<sup>&</sup>lt;sup>1</sup> The cost estimates and levy rates are based on a 10-year cycle and there will be significant variation across the cycle. For example, the table above shows that it may be reasonable to expect over 10% of the labour force (over 250,000 workers) to receive benefits during an economic downturn and only 5% of the labour force (125,000 workers) to receive benefits during normal economic times.

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administrative costs and services) could be funded through higher levy rates. These include:

- Levy payments as an employer of public sector workers
- Continued policy design and implementation costs
- Initial SUI benefit payments claimed before sufficient reserves are accumulated
- The cost of providing additional or expanded active labour market programmes and rehabilitation services
- Administrative costs
- Cost overruns in the event the cost of claims exceed levy funding
- 24. It should be noted that the cost estimates presented in this report do not include the offsetting effects of tax and welfare. The TAWA model did include initial estimates of these effects and depending on the assumptions and methodology, offsetting could either increase or decrease the costs in the range of 10-20%.
- 25. The totality of additional costs has not been quantified and will likely be significant with implications for Budget 22 and Budget 23. We consider that the levy rate should be set with some buffer so that the potential risk of high costs is not carried by the Crown.
- 26. The implementation timeframes are tight, and the project team is looking for immediate funding to build policy and implementation capability in MBIE and ACC. We consider that there is the need for additional funding if implementation timeframes are to be met but consider that some scaling is required and some re-prioritisation of work across ACC and MBIE should be investigated.
- 27. This advice is solely focussed on the direct cost implications of introducing a new scheme. Due to resource constraints, **Treasury has not looked at the broader labour market impacts of introducing SUI.** These impacts would likely be significant and should be weighed against the likelihood the scheme would deliver its anticipated objectives.

#### Massachusetts (MA)

Massachusetts has a relatively generous unemployment insurance system compared to other U.S. states and the maximum duration of 30 weeks makes its duration comparable with the seven months proposed in New Zealand. The state's 10-year average unemployment rate of just over 5.3%, which is comparable but higher than New Zealand's 10-year average over the same period (4.8%). Given evidence showing SUI can increase the unemployment rate, we believe this suggests similar settings with regard to unemployment levels. The table below compares key parameters of the Massachusetts and proposed New Zealand schemes.

Scheme	Benefit receipt rate	Average wage replacemen t rate	Max payment to average wage ratio	Max replace ment rate	Average duration (weeks)	Max duratio n of entitlem ent	Average weekly wage	Max weekly benefit	Coverage and triggering event
MA-ED	6.3%	36%	59%	50%	18	7 mo.	1450USD	855USD	Covers only employees with sufficient work/earning history and excludes seasonal workers. Workers must lose job through no fault of their own.
NZ - ED	?	?*	160%	80%	?	7 mo.	865USD	1390USD	Covers employees with more limited coverage for dependent contractors (self- employed) and seasonal and temporary workers.

Source of data for table<sup>2</sup>

#### Accounting for Differences in Scheme Design

The differences in design features make it difficult to conclude how take-up rates may differ based on New Zealand's SUI specifications, and will likely have counteracting effects as shown in the table below. For this reason, we did not make any adjustments for take up rates based on the different system designs. Removing key features such as the bridging payment or expanding the definition of redundancy would mean higher take-up rates.

Differences between the two systems, however, are very likely to increase duration relative to the Massachusetts average. For this reason, we have applied empirical evidence on the relationship between system generosity and claim duration to the underlying data.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Labor. <u>https://oui.doleta.gov/unemploy/data\_summary/DataSum.asp</u>. State of Massachusetts. <u>https://www.mass.gov/info-details/how-your-unemployment-benefits-are-determined</u>.

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Comparing Effects of NZ and MA SUI Systems					
NZ Features Likely to Increase	NZ Features Likely to Decrease Take-up				
Take-up					
Wage replacement rate higher than	Narrower definition of economic				
MA	displacement (i.e. only covers redundancy)				
Wage replacement cap higher than	Required bridging payment				
MA					
Automatic enrolment					
No experience rating required					
NZ Features Likely to Increase	NZ Features Likely to Decrease Duration				
Duration					
Wage replacement rate					
Wage replacement cap					
Features with Uncertain Impacts					
Different treatment of those on short-term contracts (e.g. seasonal workers) and the					
self-employed					
Different employment history criteria ar	nd "base period" for calculating benefit levels				
Treatment of migrant workers					

#### Methodology

Using data from the U.S. Department of Labor (DOL), we determined a benefit rate by dividing the 10-year average of the number of paid claims by the 10-year average (2010 - 2019) of total employees in Massachusetts.

210,686/3,344,025 = .063 for a benefit rate of 6.3%.

We then applied this rate to the total number of employees in New Zealand in 2019 of 2,198,000.

0.63 x 2,198,000 = 138,482 annual claims paid to employees.

This results in an estimate of 138,000 claims paid per year. This approach does not allow for an evidence-based methodology to determine the total eligible population or take-up rate. It could essentially be considered equivalent to 276,000 displacement events and a 50% take up of SUI by those displaced. However, given we do not have the data necessary to determine displacement vs. take up, this example is just illustrative.

DOL data show that the average duration of benefits in Massachusetts in 18 weeks.

We then adjust these figures based on the suggested elasticities provided in a literature review by Motu.<sup>3</sup> Motu's review suggests elasticities of:

- total claims with respect to benefit generosity of .5
- total claims with respect to maximum duration of .175
- duration with respect to benefit generosity of .5
- duration with respect to maximum duration of .5

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<sup>&</sup>lt;sup>3</sup> Hyslop, D., Mare, D., and Sin, I. Motu Working Paper: Incentive effects associated with Unemployment Insurance Schemes. June 2021.

As described above, we **did not** apply any elasticities to adjust claims based on generosity but have applied the others. If we had increased the number of claimants based on generosity, we would find the following:

 $[1 + (80/36 - 1) \times .5] = 61\%$  increase in number of claims = 223,000 claims for 7 month scheme.

We first adjusted the estimated number of total claims based on the maximum allowable duration of benefits using the following equation:

7 months: no adjustment given identical maximum duration. 9 months:  $(9/7 - 1) \times .175 = 5\%$  increase in claims = 144,900. 12 months:  $(12/7 - 1) \times .175 = 12.5\%$  increase in claims = 155,250.

We then adjusted this average duration to account for scheme generosity as measured by average benefit payment over average income. For Massachusetts, over a 10-year window, benefits replaced an average of 36% of average income. Given the high cap on replaceable income, we would expect the average replacement rate to be close to 80%. Thus, the New Zealand structure is 2.2x as generous as Massachusetts.

Motu's review suggests an elasticity of duration with respect to benefit generosity of .75 so, we applied this to the average duration of 18 weeks in Massachusetts (which has a maximum duration of 30 weeks, so is comparable to the New Zealand proposal).

 $(.8/.36 - 1) \times .5 = .61 = 61\%$  increase in average duration unemployed.

Using TAWA, we can apply the 61% increase across the distribution of unemployed (e.g., a unit record which currently shows a gap between jobs of 1 mo. will increase to 1.6 mo.). The Massachusetts-approach is based on the total number of claims who have some duration of benefits, rather than the JSS-based approach which includes all individuals who experience redundancy (including those who don't receive benefits because they get another job very quickly).

If the maximum duration for the New Zealand scheme were increased to 9 or 12 months, we could, in addition, apply the elasticity for the relationship between maximum duration of entitlement to average duration unemployed resulting in the following increases to unemployment duration:

9 months:  $(1+(.8/.36 - 1) \times .5) \times (1+(9/7 - 1) \times .5) - 1 = 84\%$  total increase in duration. 12 months:  $(1+(.8/.36 - 1) \times .5) \times (1+(12/7 - 1) \times .5) - 1 = 118\%$  total increase in duration.

#### Denmark

Denmark has a sickness benefit available for both employees and self-employed for up to 26 weeks. The first 30 days of the employees' sickness benefits are paid by the employer. To be eligible, workers must have worked 240 hours in the 6 calendar months immediately preceding illness (equivalent to 6 weeks of 40 hours per week employment) with at least 40 hours in at least 5 of these months. It also includes people who recently undertook vocational training lasting more than 18 months, and people employed in a flexi-job (a form of employment that takes into account that your ability to work is limited due to health reasons).<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Mutual Information System on Social Protection Comparative Tables. Available: <u>https://www.missoc.org/missoc-database/comparative-tables/?test=</u>

European Commission: Denmark Sickness Benefit. Available:

https://ec.europa.eu/social/main.jsp?catId=1107&langId=en&intPageId=4489 T2021/2074 Social Insurance Updated Costing Scenarios

The employer is obliged to notify the municipality that its employee is on sick leave. Once the municipality has assessed that the employee is entitled to sickness benefit (or that the employer is entitled to sickness benefit reimbursement), this employee is invited to meet a doctor to have a medical certificate prepared. Partial sickness benefits are possible if the person is partially absent from work. The absence must be at least 4 hours per week, which includes transportation and waiting time (e.g. at the hospital). In addition, Denmark has a disability insurance system for those with long-term health and disabilities. Individuals do not need to enter the sickness scheme before applying for disability benefits.

The benefit is based on past earnings (100% replacement rate) and capped at DKK4,405 per week (NZ\$1,000) after 30 days.<sup>5</sup> The average income in Denmark is NZ $$83,000.^6$  This is equivalent to a maximum benefit of NZ\$34,700 or 62% of average income (\$56,000 median income x (52 weeks x \$1,000 per week) / \$83,000). While we do not have data on the predisplacement income for Danish beneficiaries, we have worked out the replacement rate for every income band and weighed this by the number of people in each of those bands. Using this methodology, we find an average replacement rate of 59% compared with New Zealand's of near 80%.

Schem e	Benefit receipt rate (	Average wage replaceme nt rate	Max payment to average wage ratio	Max replac ement rate	Average duration (weeks)	Max duration of entitlement	Average weekly wage	Max weekly benefit	Coverage and triggering event
Finland - Sickne ss	6.6%	59%	62%*	Method ology unclear	8**	26 weeks	ND\$1600	NZ\$100 0	Includes all employees, self-employed, and recipients of unemployment insurance
NZ - HCD	?	Near 80%***	160%	80%	?	7 mo.	865USD	1390 USD	Covers all workers including option for partial benefits for reduced working capacity.

\*\* this figure was not specifically provided, but we do know that, for all claims greater than 30 days, half were between 3 - 60 days, suggesting this is a reasonable estimate.

\*\*\* We have not worked this out precisely, but given high max benefit, will be close to 80%.

#### Accounting for Differences in Scheme Design

The differences in design features make it difficult to conclude how take-up rates may differ based on New Zealand's SUI specifications, and will likely have some level of counteracting effects as shown in the table below. Moreover, at the time of these estimates, there had been no decision on the parameters of the bridging payment for HCD. For these reasons, the adjustments and elasticities applied are incomplete and imprecise.

Comparing Effects of NZ and Finland Sickness Systems				
NZ Features Likely to Increase NZ Features Likely to Decrease Take-up				
Take-up				
Greater generosity	Does not include those who recently undertook vocational education			

<sup>&</sup>lt;sup>5</sup> ibid

<sup>&</sup>lt;sup>6</sup> OECD Average Wages. Available: <u>https://data.oecd.org/earnwage/average-wages.htm</u>.

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Longer max duration	
NZ Features Likely to Increase	NZ Features Likely to Decrease Duration
Duration	
Greater generosity	
Longer max duration	

#### Methodology

Data from Denmark from 2013 – 2019 includes the total number of sickness benefit claims disaggregated by different durations (1 day, 2 days, 3-7 days, 8-14 days, 15-21 days, 22-30 days, etc).<sup>7</sup> We determined a benefit rate by dividing the average number of claims in Denmark by the average number of employees and self-employed.

One option in determining a claims rate is to only consider claims with durations over 30 days given the NZ policy of allowing payments only on the condition of a medical professional attesting that the condition will likely last longer than 30 days. This would result in a rate of 3.9%. However, this would likely be a significant undercount as medical professionals may expect conditions to last longer than they do in reality and it is reasonable to think medical professionals may err on the side of caution so their patients have access to support.

Another option is to include all durations longer than 7 days under the assumption shorter durations would be covered by existing statutory sick leave. This would result in a rate of 13.5%, however this is likely an overcount because many individuals would not meet the criteria for the medical professional assessment.

To adjust for these challenges of potential overcounting and undercounting, we have used a methodology that includes 50% of claimants who have durations between 8 and 30 days. This results in a claims rate of 8.8%.

To account for the inclusion of disability, we also calculated the number of disability claims between 2013 and 2018 divided by the number of employees and self-employed in each year to get an average rate of 0.4%. We then added this to the sickness claims rate to get a total rate of 9.3% (number is higher than sum due to rounding). This is an imprecise method given the uncapped duration of disability benefits and potential churn for this population.

Rather than apply this rate to the number of employees and self-employed in New Zealand, we apply it to the number of employees, as TAWA only has the capacity to adjust for employees. This results in a lower estimate that would need to be adjusted upwards based on the assumptions of take-up rates for the self-employed.

0.093 x 2,198,000 = 204,000 annual claims paid per year for a 7 month scheme.

We estimate the average duration of benefits for those in the group described above<sup>8</sup> in Denmark to be 7.5 weeks.

We then adjust these figures based on the suggested elasticities provided in a literature review by Motu. Motu's review suggests elasticities of:

total claims with respect to benefit generosity of .5

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<sup>&</sup>lt;sup>7</sup> Statistics Denmark.

https://www.statbank.dk/statbank5a/selectvarval/define.asp?PLanguage=1&subword=tabsel&MainTable=SOCDAG1&PXSId =171188&tablestyle=&ST=SD&buttons=0 and https://statbank.dk/10322.

<sup>&</sup>lt;sup>8</sup> This includes all benefit recipients with durations longer than 30 days and half of all recipients with durations between 8 and 30 days. The approach assumes that each group is evenly spread across the period provided (e.g. if there are 60,000 claims that last between 31-60 days then assume that 2,000 claims lasted 31 days, another 2,000 lasted 32 days, etc).

- total claims with respect to maximum duration: no estimate
- duration with respect to benefit generosity of .3
- duration with respect to maximum duration: no estimate

Motu's review suggests an elasticity of .5 with respect to benefit generosity and claims. However, as was the case with the Massachusetts approach, we have not adjusted claims based on generosity. If we had done so, we would expect claims for a 7 month scheme to increase by 18%. We do think there is a much stronger case to adjust claims based on generosity for HCD benefits compared to redundancy (particularly given the lack of clear claims mitigation details), so it should be noted the high likelihood of increased claims.

 $[1 + (80/59 - 1) \times .5] = 18\%$  increase = 240,000 claims for 7 month scheme.

There was no relevant literature on the relationship between maximum duration and take-up, so we have not accounted for differences in take-up between the 7, 9 and 12 months schemes, though presumably longer maximum durations will also lead to a small increase in take up.

We then adjusted this average duration to account for scheme generosity as measured by average benefit payment over average income. As described above, this is 80/59. Motu's review suggests an elasticity of .3 with respect to benefit generosity and average duration so we applied this elasticity to the average estimated duration of 7.5 weeks in Denmark.

 $[1 + (80/59 - 1) \times .3] = 11\%$  increase in average duration = 8.3 week average duration for a 7 month scheme.

Motu did not find sufficient research on the relationship between maximum duration and average duration, so we have assumed all schemes (the 7, 9 and 12 months schemes) each have an average duration of 8.3 weeks. In reality, we would likely expect a marginal increase in average duration as maximum duration shifts.

Another possible option is to apply an elasticity of .2 (given we would expect some increase but likely significantly less than with redundancy coverage). Maximum benefit duration in Denmark is 6 months. Thus, we would expect the average duration of 8.9 weeks to be increased consistent with the following:

7 months: (7/6 - 1) x .2 = increase by 3% 9 months: (9/6 - 1) x .2 = increase by 10% 12 months: (12/6 - 1) x .2 = increase by 20%



TE TAI ŌHANGA THE TREASURY

# Treasury Report: Social Insurance Working Group Costings

Da	ate:	3 September 2021	Report No:	T2021/2246
			File Number:	SH-2-6

## Action sought

	Action sought	Deadline
Hon Grant Robertson Minister of Finance	<b>Note</b> this advice to support the Government's work on social insurance.	None

# Contact for telephone discussion (if required)

Name	Position	Telepl	hone	1st Contact
Laura Berntsen	Senior Analyst, Communities Learning and Work	s9(2)(k) (wk)	N/A (mob)	~
Nick Carroll	Manager, Communities Learning and Work	s9(2)(k) (wk)	s 9(2)(g)(ii) (mob)	

## Minister's Office actions (if required)

**Return** the signed report to Treasury.

Note any feedback on the quality of the report			
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Enclosure:

No

# Treasury Report: Social Insurance Working Group Costings

## **Executive Summary**

The Social Unemployment Insurance Governance Group (SUIGG) has received several estimates of the cost of introducing Social Unemployment Insurance in New Zealand covering loss of employment due to redundancy or the onset of a health condition or disability (HCD). Most recently, SUIGG has received advice from the Social Unemployment Insurance Working Group which includes a range of past estimates as well as updated figures that have gone through further quality assurance to address methodological issues.

The Treasury has undertaken further internal review and concludes that the assumptions that went into our 13 August advice provide the best estimate of an indicative levy for public consultation. These assumptions are more conservative than those of the Working Group's. To reflect the ongoing quality assurance process, revised figures have been calculated using these assumptions, resulting in a total indicative levy of 3.1% after accounting for administrative costs (compared with 3.0% in our 13 August advice). Treasury maintains that the assumptions that went into our 13 August advice provide the best estimate of an indicative levy for public consultation.

However, we believe that the costs could plausibly be higher or lower than this, given the level of uncertainty. The Treasury considers the most recent figures from the Working Group included in Option 4 to be broadly reasonable and reflective of a lower degree of behavioural change. Using this approach would result in a total indicative levy of 2.4% after accounting for administrative costs.

The range of cost estimates provided highlight the uncertainty in predicting actual costs and the need for judgment that weigh the risk of setting levies that are too low or too high. Treasury's more cautious estimates are based on our expectations of the ultimate steady state of scheme usage and assume significant behavioural change due to the generosity of the scheme.

It is important to note that there are still upside risks, even to the Treasury estimate, and particularly around HCD. The calculations assume robust measures are in place to prevent unintended use and gaming and promote rapid return to work. However, these measures have not been determined or described in detail to date.

Treasury suggests that further work is required on the cost and levy estimates ahead of the March Cabinet Paper involving a broader circle of labour market experts. From a communications and risk management perspective, Ministers may wish to commission further work from officials and note this work in the public communications material.

## **Recommended Action**

We recommend that you:

- a **note** that the Treasury views its initial methodology to be the preferred basis for cost and indicative levy estimates
- b **note** that the Treasury also considers the revised assumptions from the Social Insurance Working Group to also be broadly reasonable but reflective of a lower degree of behavioural change
- c **recommend** Ministers commission further work and consultation with labour market experts to refine the cost and levy estimates ahead of the March 2022 Cabinet paper and note this further work in the public communications material

#### Agree/disagree.

d **Refer** this report to the Minister of Education, Minister of Social Development and Employment, Minister of Economic and Regional Development, Minister of Revenue, and Minister for Workplace Relations

Refer/not referred.

e **Refer** this report to Business New Zealand and the Council of Trade Unions

Refer/not referred.

Tike Will

Nick Carroll Manager Communities, Learning and Work

Hon Grant Robertson **Minister of Finance** 

## Treasury Report: Social Insurance Working Group Costings

### Purpose of Report

- 1. This report discusses the differences in approach between the methodology used by Treasury and the Social Unemployment Insurance (SUI) Working Group in estimating the cost of a SUI scheme in New Zealand. It is meant to accompany advice provided by the Social Unemployment Insurance Working Group on 2 September 2021.
- 2. The purpose of the report is to relay Treasury's preferred approach to estimating the costs and indicative levies of a SUI system.

#### Background

- 3. On 13 August, the Social Unemployment Insurance Working Group provided advice describing three possible options and methodologies for estimating the cost of introducing a SUI scheme in New Zealand. Treasury provided accompanying advice (T2021/2074 refers) describing a preference to use international comparators to form the basis of the costings, consistent with Option 3 in the Working Group's advice.
- 4. Because of the differing views in the 13 August advice, the Working Group (including Social Partners) and Treasury took several days scrutinising Treasury's preferred methodology and reviewed additional data. As a result, Working Group members agreed to a new methodology (referred to here as Option 4) which used different assumptions from those of Treasury.
- 5. The updated methodology and resulting cost and levy estimates were provided in advice on 25 August. This advice also included updates to the 13 August costings based on revised TAWA outputs.
- 6. The ongoing quality assurance process identified further issues with cost estimates provided to date, requiring additional revisions from the 25 August advice. Addressing these issues increases the cost estimates and the Working Group provided updated figures on 2 September.
- 7. The table below shows the original and updated estimates for Options 3 and 4. These revisions are based on TAWA model outputs and some additional assumptions and the resulting outputs are consistent with TAWA modelling.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Note that there is a ~.2ppt difference in the Working Group assumptions for Option 3. This is because the Working Group used longer durations than compared to Treasury. Treasury views our estimates as more consistent with the initial modelling assumptions and inputs.

Scheme	Claims	Max duration	Avg duration (months)	Avg income (\$)	Total cost (\$b)	Total updated levy (incl admin)	Total updated levy (incl admin + GST)	Levy rate in initial advice (incl admin only)	Levy rate in initial advice (incl admin + GST)
HCD									
Option 3 (Treasury Preferred) <sup>2</sup>	204600	6	2.0	\$57,100	\$1.55b	1.33%	1.53%	1.11%	1.28%
Option 4 (Working Group Assumptions)	135300	6	2.7	\$57,100	\$1.38b	1.19%	1.36%	0.80%	0.92%
Redundancy									
Option 3 (Treasury Preferred)	138600	7	4.9	\$57,100	\$2.58b	1.77%	2.04%	1.85%	2.13%
Option 4 (Working Group Assumptions)	112300	7	4.9	\$49,500	\$1.81b	1.23%	1.42%	1.08%	1.24%
Combined Levy Option 3						3.10%	3.56%	2.96%	3.40%
Combined Levy Option 4						2.42%	2.79%	1.88%	2.16%

 $^2$  While the initial Option 3 assumed 204,000 claims lasting 8.5 weeks, after further policy clarification, Treasury views 135,000 claims to be more plausible, but with a longer assumed duration of 13 weeks (though even 13 weeks would be a lower bound estimate). The final cost is the same between these two assumptions, so the Option 3 cost would not change.

Note, numbers in the table may not add up exactly due to rounding.

#### Analysis

- 8. The Treasury has undertaken further internal review to test our own assumptions as well as those of the Working Group and maintain that the assumptions that went into our 13 August advice provide the best estimate of an indicative levy for public consultation. These assumptions are more conservative than those of the Working Group. To reflect the ongoing quality assurance process, revised figures have been calculated using these assumptions. If Ministers would like to proceed based on Treasury's assumptions, they should use the revised figures which would result in a total indicative levy of 3.1% after accounting for administrative costs (compared with 3.0% in our 13 August advice).
- 9. There remains inherent uncertainty in estimating the costs of introducing a SUI scheme, and this is reflected by the large number of estimates Ministers have been provided. If Government chooses to proceed with introducing a scheme, it should be with a recognition that the actual costs of the scheme may be lower or higher than the range of figures presented above, and future Governments will need to make decisions about how to modify scheme parameters, adjust levies (or both) to ensure adequate funding.
- 10. While the cost estimates are based on a 10-year economic cycle, the system may initially be over or under-funded depending when in the economic cycle it is introduced and how long it takes for behaviour to change. It is reasonable to expect that a steady state will not be reached for two to three economic cycles (20 30 years).

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- 11. In keeping with the level of uncertainty in costs, the Treasury considers the most recent figures from the Working Group included in Option 4 to be broadly reasonable and reflective of a lower degree of behavioural change. If Ministers wish to use this approach, it would result in a total indicative levy of 2.4% after accounting or administrative costs.
- 12. The difference between the Treasury's and the Working Group's estimates are driven by a small number of differences in assumptions. Treasury's key assumptions driving the difference in the redundancy costings are as follows (all relative to the seven month scheme):
  - Treasury assumes a higher **number of claims** than the revised methodology of the Working Group (138,000 vs 112,000). The Massachusetts UI system (which Option 3 draws on) covers more reasons for job loss than just redundancy and the Working Group has adjusted numbers downward to account for this difference (and also increased upwards to account for differences in generosity). Treasury's view is that a share of the workers that the Working Group assumes would be ineligible for SUI would in fact be eligible under the New Zealand scheme due to behavioural changes that increase uptake (e.g. a share of those on short-term layoffs or seasonal work would be covered under the New Zealand scheme due to expected behavioural shifts).
  - Treasury assumes a higher **average pre-displacement income** distribution for those on the scheme. The Working Group approach in Option 4 uses observed pre-displacement income based on survey data which implies there would be little behavioural change in this area. Treasury's preferred approach in Option 3 uses average income for all workers based on an assumption that more job ends for upper income workers will be classified as redundancies with a SUI scheme in place due to the incentives created by the generous income replacement.
- 13. Treasury's key assumptions driving the difference in the HCD costings are much less significant. The differences are as follows (all relative to the six month scheme):
  - Treasury initially assumed a higher **number of claims** (204,000) and relatively lower duration (8.6 weeks on average). Upon further policy discussion and clarity around the intent of the proposal, Treasury now assumes the average number of claims would decrease (to around 135,000) and the average duration to increase to 13 weeks, so long as the policy is implemented as intended (rather than as currently proposed). However, this change in assumption would not have an impact on the cost estimates as compared to our past advice.
  - The adjustment above results in equal costs (~\$1.5b) between assumptions of higher claims and lower durations vs. lower claims and higher durations. Hence Treasury assumes a higher **average duration** of 13 weeks for those receiving HCD benefits, whereas the Working Group assumes 11.6.

# SUI analysis report HCD

This analysis provides some initial costings of a Social Unemployment Insurance (SUI) payment for job losses related to health conditions and disabilities (HCD) under a range of scenarios. As this is a new payment, the accuracy of the modelled results are strongly dependent on the input assumptions. These assumptions have been specified by the SUI working group and are not data driven.

Note that these modelling results are subject to increased uncertainty when compared to standard TAWA results, due to the behavioural assumptions and limited data on the reason for job losses. Some of the behavioural responses specified in the request are significant and could have flow on impacts that cannot be modelled using microsimulation techniques, which do not account for the macroeconomic effects of different scenarios. The scenarios with large behavioural responses assume a large share of people who currently experience no gap in employment after redundancy then have a large gap. By removing the income, the model assumes that the jobs that displaced workers are deciding to forego in favour of UI are not filled by anyone in the economy – the income has simply been removed from the distribution.

# **Request Outline**

### Requestor

SUI working group

#### Context

This request provides detail fiscal breakdowns for the scenarios described below. These estimates will inform SUI working group about social unemployment insurance related advice.

#### Time frame

Thursday 02 September 2021.

Sent on: 06 September 2021.

### Outputs

TUI analysis results (fiscal costs in an html document) for the below settings changes will be provided for tax year 2019 (from 1 April 2018 to 31 March 2019).

All modelled outputs will use HES 19 input data and BEFU21 inflators and benchmarks, estimated amounts in this report are in 1 July 2018 dollars.

#### Scenarios

This report contains 2 requested scenarios. Each have been modelled for a range of maximum durations (the maximum number of months that SUI can be received). The technical parameters as specified in the model are given in the table below and were chosen to satisfy the following requirements.

- HCD HES assumes that:
  - 28.47% 29.27% of job ends are due to HCD;
  - the wage/salary distribution of people losing jobs due to HCD is based on their observed income in HES (i.e. no adjustment has been made);and
  - 46% of those with gaps greater than 0 have been dropped to reduce the average gap length.

· HCD all-jobs assumes that:

- 25.67% 26.17% of job ends are due to HCD;
- the wage/salary distribution of people leaving work due to HCD is similar to the distribution of all wage/salary jobs; and
- 46% of those with gaps greater than 0 have been dropped to reduce the average gap length.

#### Scenarios

Scenarios	Earnings distribution scaled or not	Maximum duration	Proportion of job ends assumed to be due to HCD or Rdundancy	Remove a proportion of those with gap > 0	Proportional increase in 1+ distribution	Proportion of zeros to replace with 1+ distribution	Proportional increase/decrease in gap distribution
		6	0.2927	0.46			
HCD HES No	8	0.2867	0.46				
		12	0.2847	0.46			
		6	0.2617	0.46			
HCD all- jobs	Yes	8	0.2587	0.46			
Jobs	12	0.2567	0.46				

#### Risk/reliability assessment

The Treasury considers these results to have low reliability and high risk.

#### **Fiscal summary**

This table contains estimates of the total SUI paid under each scenario, total SUI entitlement amount, and offsets from PAYE and transfer payments.

SUI entitlement is the maximum amount of SUI a person would get if they received 80% of their earnings (capped at 130,000) over the entire entitlement period.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

Fiscal costs and savings (\$)

Туре	Scenarios	Maximum duration	SUI Payments	SUI Capped Entitlement	Total including Offsets	PAYE Tax	Core Benefits	Accommodation Supplement	Winter Energy	Working fc Families
		6 Month	\$911,800,000	\$2,614,000,000	\$607,500,000	-\$197,900,000	-\$55,500,000	-\$22,800,000	-\$1,600,000	-\$19,300,0
	HCD HES	8 Month	\$1,145,300,000	\$3,407,700,000	\$764,800,000	-\$247,700,000	-\$70,200,000	-\$28,100,000	-\$2,000,000	-\$23,400,0
нср		12 Month	\$1,626,200,000	\$5,047,000,000	\$1,086,200,000	-\$353,500,000	-\$99,500,000	-\$39,000,000	-\$3,000,000	-\$32,000,0
нср		6 Month	\$1,358,700,000	\$4,062,300,000	\$895,700,000	-\$343,500,000	-\$48,700,000	-\$31,000,000	-\$1,700,000	-\$29,000,0
	HCD all- jobs	8 Month	\$1,729,000,000	\$5,358,300,000	\$1,141,000,000	-\$437,300,000	-\$63,600,000	-\$38,000,000	-\$2,000,000	-\$35,600,0
		12 Month	\$2,461,200,000	\$7,862,400,000	\$1,630,600,000	-\$623,500,000	-\$88,400,000	-\$52,600,000	-\$3,000,000	-\$46,800,0

#### Distribution of payments

#### Weekly SUI payment

These results show the distribution of the average amount of SUI received per week. Each income band includes the hightest but **not** the lowest. For example, the band "\$0 - \$200" includes people who receive \$200 per week and exclude the \$0's.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month 8 Month 12 Month Data

6 Month							
Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
HCD HES	6 Month	82300	45200	25700	11600	5400	7300
HCD all-jobs	6 Month	58500	41400	29700	18300	11500	18900
8 Month							
Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
HCD HES	8 Month	89300	49000	26900	12700	6100	7600
HCD all-jobs	8 Month	64600	45700	30900	20200	12700	20200
12 Month							
Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
HCD HES	12 Month	106700	58800	30300	14900	6600	9100
HCD all-jobs	12 Month	76100	54600	35900	23400	13500	23600

#### Total SUI over a tax year

The TAWA model considers a fixed tax year. This means that the estimated "Total SUI" for each recipient in the TAWA year may not cover their full period of entitlement; some will have started receiving SUI some months before the start of the tax year and some may carry on receiving SUI after the tax year ends. As such, we advise that the weekly amount in the above results is easier to interpret.

Each income band includes the hightest but **not** the lowest. For example, the band "\$0 - \$500" includes people who receive \$500 per week and exclude the \$0's.

"Within the TAWA years" refers to those who were receiving SUI at some time during the TAWA year.

6 Month 8 Month 12 Month Data

6 Month

	Maximum									
Scenarios	duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,0
HCD HES	6 Month	24300	19900	15000	13300	20600	14000	21100	13200	9100
HCD all- jobs	6 Month	17900	13600	11700	10600	17800	13800	22000	15000	10600

8 Month

Maximum	l								
Scenarios duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,0

Scenarios	Maximum duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,(
HCD HES	8 Month	24500	20500	15200	13300	21400	14600	21900	14900	10700
HCD all- jobs	8 Month	17900	14100	11600	10100	19100	14100	22600	16300	12000

12 Month

#### Maximum

Scenarios	duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,0
HCD HES	12 Month	26700	21800	17900	14600	22700	17600	25200	16900	12700
HCD all- jobs	12 Month	19600	15700	12800	11200	19000	16500	24000	18400	13300

#### Abatement of SUI

These results show the proportion of the SUI entitlement amount paid out after abatement against subsequent earnings. SUI entitlement is the maximum a person would receive if they received 80% of their lost job earnings (capped at 130,000) over the entire entitlement period. E.g. they had no job or no increase in earnings from other jobs they had.

"Within the TAWA years" refers to those who were receiving SUI at some time during the TAWA year.

6 Month	8 Month 12 Month	n Data									
6 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
HCD HES	6 Month	0.471	0.48	0.428	0.412	0.426	0.382	0.38	0.351	0.302	0.313
HCD all-jobs	6 Month	0.458	0.394	0.39	0.375	0.373	0.338	0.332	0.285	0.313	0.334
8 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
HCD HES	8 Month	0.477	0.429	0.429	0.421	0.388	0.378	0.378	0.33	0.3	0.299
HCD all-jobs	8 Month	0.432	0.405	0.363	0.358	0.365	0.333	0.299	0.315	0.282	0.323
10 Marsh											
12 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10

0.347

#### Gains and losses

HCD all-jobs 12 Month

#### Families gaining by income decile

The modelling suggests that recipient families are more likely to be in the top end of the family income distribution, although there are still a considerable number in the bottom. The number of families receiving SUI peaks in the 8th decile.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

0.366

0.36

0.411

6 Month	8 Month	12 Month	Data			
6 Month						
Name			Maximum duration	Scenarios	Detail	Value
Recipient F	amilies		6 Month		Decile1	15600
					Decile2	16600
					Decile3	18300
					Decile4	15300
				HCD HES	Decile5	16600
				HOD HES	Decile6	18400
					Decile7	19800
					Decile8	22800
					Decile9	17100
					Decile10	13300
				HCD all-jobs	Decile1	6900

0.31

0.337

0.317

0.303

0.28

0.312

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12600

14600

16800 19700

Decile2

Decile3 Decile4

Decile5

Name	Maximum duration	Scenarios	Detail	Value
			Decile2	9500
			Decile3	12200
			Decile4	12500
			Decile5	16300
			Decile6	20700
			Decile7	20500
			Decile8	29300
			Decile9	24500
			Decile10	21400

3 Month				
Name	Maximum duration	Scenarios	Detail	Value
			Decile1	17000
			Decile2	17600
			Decile3	18800
			Decile4	17500
		HCD HES	Decile5	17300
		HOD HES	Decile6	20100
			Decile7	21400
			Decile8	24400
			Decile9	18900
Paginiant Familias	9 Month		Decile10	14600
Recipient Families	8 Month		Decile1	7200
			Decile2	10500
			Decile3	12900
			Decile4	14000
			Decile5	16900
		HCD all-jobs	Decile6	22100
			Decile7	22600
			Decile8	31800
			Decile9	27800
			Decile10	23200
2 Month				
Name	Maximum duration	Scenarios	Detail	Value
Recipient Families	12 Month		Decile1	20800
			Decile2	21500
			Decile3	21800
			Decile4	20400
		HCD HES	Decile5	20600
			Decile6	22800
			Decile7	24900
			Decile8	28700
			Decile9	22000
			Decile10	17400
		HCD all-jobs	Decile1	9300

Name	Maximum duration	Scenarios	Detail	Value
			Decile6	25800
			Decile7	26500
			Decile8	35800
			Decile9	32200
			Decile10	27500

#### Average weekly change by income decile

In these scenarios, families in all deciles are better off on average. This is because these scenarios assumed no change in the time between losing a job and starting a new one, so no wage and salary income was lost and some people received SUI.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month 8 Month 12 Month Data

8 Month

6 Month				
Name	Maximum duration	Scenarios	Detail	Value
			Decile1	180
			Decile2	210
			Decile3	200
			Decile4	180
		HCD HES	Decile5	180
		HOD HES	Decile6	200
			Decile7	190
			Decile8 Decile9	220
				260
Average Change	6 Month		Decile10	360
werage change	6 Month		Decile1	300
			Decile2	310
			Decile3	310
			Decile4	250
		HCD all-jobs	Decile5	240
		TICD all-jobs	Decile6	260
			Decile7	270
			Decile8	290
			Decile9	330
			Decile10	490

Name	Maximum duration	Scenarios	Detail	Value
Average Change	8 Month		Decile1	180
			Decile2	200
			Decile3	210
			Decile4	180
		HCD HES —	Decile5	180
			Decile6	200
			Decile7	200
			Decile8	220
			Decile9	250
			Decile10	350
		HCD all-jobs	Decile1	320
			Decile2	330
			Decile3	310
			Decile4	250

Name	Maximum duration	Scenarios	Detail	Value
			Decile5	240
			Decile6	260
			Decile7	270
			Decile8	290
			Decile9	330
			Decile10	480
12 Month				
Name	Maximum duration	Scenarios	Detail	Value
			Decile1	190
			Decile2	200
			Decile3	200
			Decile4	180
			Decile5	180
		HCD HES	Decile6	200
			Decile7	200

Average Change

#### Decile8 220 Decile9 260 Decile10 340 12 Month Decile1 330 Decile2 320 Decile3 300 Decile4 240 Decile5 240 HCD all-jobs Decile6 260 Decile7 260 Decile8 290 Decile9 340 Decile10 460

#### Social Unemployment Insurance (SUI) Modelling assumptions

- 1. The SUI payment is considered taxable income, income for the purposes of benefit abatement, income for the purposes of calculating working for family and independent earner tax credit payments, and income for the purposes of in-work tax credit calculation.
- 2. The SUI payment can be received at the same time as core benefits (JSS, SLP, SPS), Working for Families payments, New Zealand Superannuation, Student Allowance, and paid parental leave.
- 3. The SUI payment along with wage and salary and self-employment income cannot exceed total income received before the job loss event.
- 4. Job loss in self-employment is not considered in the SUI model.
- 5. Data limitations increase the uncertainty (compared to standard TAWA modelling) and mean that some aspects of the model are purely assumption-driven (as opposed to data-driven).
- 6. The SUI model has moderate predictive power, which implies that the distributional impacts may be muted compared to reality.
- 7. The possible incentives for people to enter work to qualify for the scheme is not accounted.

#### **TAWA Modelling assumptions**

- 1. This analysis was carried out using Treasury's micro-simulation model of the tax and welfare system TAWA. All calculations should be considered as estimations.
- 2. Estimates are for the 2018/2019 tax year using HES 2018/19 augmented using IDI data.
- 3. The modified OECD equivalisation scale is used to calculate equivalised incomes.
- Apparent inconsistencies in totals are due to rounding and/or suppression, with estimates being suppressed if they did not meet the confidentiality requirements of Statistics NZ.
- 5. Our reporting uses 95% confidence intervals, calculated as the estimate plus or minus the margin of error (MoE). The MoE is calculated as 1.96 multiplied by the standard error of the estimate.

#### Disclaimer

These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which is carefully managed by Stats NZ. For more information about the IDI please visit https://www.stats.govt.nz/integrated-data/ (https://www.stats.govt.nz/integrated-data/). The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

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# SUI analysis report Redundancy

This analysis provides some initial costings of a Social Unemployment Insurance (SUI) payment for job losses related to health conditions and redundancy under a range of scenarios. As this is a new payment, the accuracy of the modelled results are strongly dependent on the input assumptions. These assumptions have been specified by the SUI working group and are not data driven.

Note that these modelling results are subject to increased uncertainty when compared to standard TAWA results, due to the behavioural assumptions and limited data on the reason for job losses. Some of the behavioural responses specified in the request are significant and could have flow on impacts that cannot be modelled using microsimulation techniques, which do not account for the macroeconomic effects of different scenarios. The scenarios with large behavioural responses assume a large share of people who currently experience no gap in employment after redundancy then have a large gap. By removing the income, the model assumes that the jobs that displaced workers are deciding to forego in favour of UI are not filled by anyone in the economy – the income has simply been removed from the distribution.

# **Request Outline**

#### Requestor

SUI working group

#### Context

This request provides detail fiscal breakdowns for the scenarios described below. These estimates will inform SUI working group about social unemployment insurance related advice.

#### Time frame

Thursday 02 September 2021.

Sent on: 08 September 2021.

### Outputs

TUI analysis results (fiscal costs in an html document) for the below settings changes will be provided for tax year 2019 (from 1 April 2018 to 31 March 2019).

All modelled outputs will use HES 19 input data and BEFU21 inflators and benchmarks, estimated amounts in this report are in 1 July 2018 dollars.

#### Scenarios

This report contains 2 requested scenarios. Each have been modelled for a range of maximum durations (the maximum number of months that SUI can be received). The technical parameters as specified in the model are given in the table below and were chosen to satisfy the following requirements.

- R HES assumes that:
  - 13.29% 15.42% of job ends are due to redundancies (increasing as the months of entitlement increases);
  - the wage/salary distribution of people losing jobs due to redundancy is based on their observed income in HES (i.e. no adjustment has been made);
  - gaps greater than 0 have been increased by 29%-88% (increasing as the months of entitlement increases). Gap is defined as the time between a job end and a subsequent job start; and
  - all gaps greater than 0 have been increased to match the distribution of gaps greater than 0.
- R all-jobs assumes that:
  - 13.29% 15.42% of job ends are due to redundancies (increasing as the months of entitlement increases);
  - the wage/salary distribution of people leaving work due to redundancy is similar to the distribution of all wage/salary jobs;
  - gaps greater than 0 have been increased by 29%-88% (increasing as the months of entitlement increases). Gap is defined as the time between a job end and a subsequent job start; and
  - all gaps greater than 0 have been increased to match the distribution of gaps greater than 0.

#### Scenarios

Scenarios	Earnings distribution scaled or not	Maximum duration	Proportion of job ends assumed to be due to HCD or Rdundancy	Remove a proportion of those with gap > 0	Proportional increase in 1+ distribution	Proportion of zeros to replace with 1+ distribution	Proportional increase/decrease in gap distribution
		1	0.13860		0.39	1	0.39
	No	6	0.13290		0.29	1	0.29
B.U50		7	0.13710		0.39	1	0.39
R HES		8	0.14055		0.49	1	0.49
		9	0.14385		0.59	1	0.59
		12	0.15420		0.88	1	0.88
R all-jobs	Yes	1	0.13860		0.39	1	0.39
		6	0.13290		0.29	1	0.29
		7	0.13710		0.39	1	0.39
		8	0.14055		0.49	1	0.49

Scenarios	Earnings distribution scaled or not	Maximum duration	Proportion of job ends assumed to be due to HCD or Rdundancy	Remove a proportion of those with gap > 0	Proportional increase in 1+ distribution	Proportion of zeros to replace with 1+ distribution	Proportional increase/decrease in gap distribution	
		9	0.14385		0.59	1	0.59	
		12	0.15420		0.88	1	0.88	

#### **Risk/reliability assessment**

The Treasury considers these results to have low reliability and high risk.

#### **Fiscal summary**

This table contains estimates of the total SUI paid under each scenario, total SUI entitlement amount, and offsets from PAYE and transfer payments.

SUI entitlement is the maximum amount of SUI a person would get if they received 80% of their earnings (capped at 130,000) over the entire entitlement period.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

Fiscal costs and savings (\$)

Туре	Scenarios	Maximum duration	SUI Payments	SUI Capped Entitlement	Total including Offsets	PAYE Tax	Core Benefits	Accommodation Supplement	Winter Energy	W₀ Fa
		1 Month	\$344,400,000	\$371,400,000	\$868,000,000	\$382,200,000	\$800,000	\$55,700,000	\$0	\$5
		6 Month	\$1,468,600,000	\$2,116,900,000	\$1,561,900,000	\$90,900,000	-\$37,900,000	\$8,300,000	-\$1,000,000	\$1
	R HES	7 Month	\$1,709,300,000	\$2,517,500,000	\$1,753,300,000	\$58,200,000	-\$46,000,000	\$4,400,000	-\$1,200,000	\$9
	K HES	8 Month	\$1,976,500,000	\$2,978,800,000	\$1,975,400,000	\$30,900,000	-\$54,500,000	-\$1,700,000	-\$1,700,000	\$6
		9 Month	\$2,229,100,000	\$3,403,700,000	\$2,179,900,000	-\$400,000	-\$64,000,000	-\$5,400,000	-\$2,000,000	\$2
Redundancy		12 Month	\$2,987,400,000	\$4,823,400,000	\$2,784,400,000	-\$104,800,000	-\$87,600,000	-\$19,500,000	-\$2,700,000	-\${
Redundancy		1 Month	\$411,000,000	\$442,000,000	\$1,055,100,000	\$476,500,000	\$400,000	\$66,200,000	\$0	\$6
		6 Month	\$1,753,900,000	\$2,531,500,000	\$1,871,300,000	\$107,500,000	-\$35,600,000	\$8,900,000	-\$1,000,000	\$1
	R all-jobs	7 Month	\$2,047,700,000	\$2,996,100,000	\$2,113,300,000	\$76,000,000	-\$44,400,000	\$2,500,000	-\$1,300,000	\$8
	K all-jobs	8 Month	\$2,345,800,000	\$3,509,500,000	\$2,352,500,000	\$33,700,000	-\$51,400,000	-\$2,800,000	-\$1,800,000	\$4
		9 Month	\$2,662,200,000	\$4,040,300,000	\$2,606,200,000	-\$9,500,000	-\$59,700,000	-\$9,500,000	-\$2,000,000	\$2
		12 Month	\$3,557,200,000	\$5,717,300,000	\$3,324,700,000	-\$133,700,000	-\$82,700,000	-\$26,300,000	-\$2,800,000	<b>-</b> \$`

## Distribution of payments

#### Weekly SUI payment

These results show the distribution of the average amount of SUI received per week. Each income band includes the hightest but **not** the lowest. For example, the band "\$0 - \$200" includes people who receive \$200 per week and exclude the \$0's.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month	7 Month 8 Month	9 Month	12 Month	Data			
6 Month							
Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
R HES	6 Month	28000	28400	27800	22200	13700	23900
R all-jobs	6 Month	19100	23000	26600	24300	18000	32800
7 Month							
Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
R HES	7 Month	30600	31000	29300	23200	15000	25000
R all-jobs	7 Month	21800	25400	28400	26000	19400	34200
8 Month							
Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
R HES	8 Month	33200	33200	31500	25100	15500	26700
R all-jobs	8 Month	23500	27800	30200	28000	19600	36700

9 Month

Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
R HES	9 Month	36700	35600	33500	26900	16400	28300
R all-jobs	9 Month	25700	29600	32500	30000	20800	39100
12 Month Scenarios	Maximum duration	\$0-\$200	\$200-\$400	\$400-\$600	\$600-\$800	\$800-\$1,000	greater than \$1,000
R HES	12 Month	45600	43600	38200	31200	19100	33100
R all-jobs	12 Month	32600	36800	37100	34000	24300	45100

#### Total SUI over a tax year

The TAWA model considers a fixed tax year. This means that the estimated "Total SUI" for each recipient in the TAWA year may not cover their full period of entitlement; some will have started receiving SUI some months before the start of the tax year and some may carry on receiving SUI after the tax year ends. As such, we advise that the weekly amount in the above results is easier to interpret.

Each income band includes the hightest but **not** the lowest. For example, the band "\$0 - \$500" includes people who receive \$500 per week and exclude the \$0's.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month 7 Month 8 Month 9 Month 12 Month Data

#### 6 Month

Maximum \$0-\$500 \$500-\$1,000 \$1,000-\$1,500 \$1,500-\$2,000 \$2,000-\$3,000 \$3,000-\$4,000 \$4,000-\$6,000 \$6,000-\$8,000 \$8,000-\$10,( Scenarios duration 14000 11600 R HES 6 Month 7500 6600 5800 6000 11700 9900 17200 R all-jobs 6 Month 5500 4400 4000 4400 9200 9400 16600 13800 11700

7 Month

Scenarios	Maximum duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,0
R HES	7 Month	7800	7200	5900	6000	11200	10300	17900	14800	11800
R all-jobs	7 Month	5700	5200	4200	4800	8800	9200	17400	14400	12000

8 Month

Scenarios	Maximum duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,0
R HES	8 Month	7900	7200	6700	6200	12300	10300	17900	15100	12700
R all-jobs	8 Month	5900	5600	4900	4500	10200	9100	16900	14600	12700

9 Month

	Maximum									
Scenarios	duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000-\$6,000	\$6,000-\$8,000	\$8,000-\$10,0
R HES	9 Month	8800	7700	7100	6800	12300	11200	18400	15200	13200
R all-jobs	9 Month	6500	5800	5300	5200	10100	9100	17500	14900	13200

12 Month

Scenarios	Maximum duration	\$0-\$500	\$500-\$1,000	\$1,000-\$1,500	\$1,500-\$2,000	\$2,000-\$3,000	\$3,000-\$4,000	\$4,000 <b>-</b> \$6,000	\$6,000-\$8,000	\$8,000-\$10,0
R HES	12 Month	10000	9800	7900	7300	13100	12400	21200	16600	15200
R all-jobs	12 Month	7800	6700	5700	6200	10500	11000	18500	16200	14900

#### Abatement of SUI

These results show the proportion of the SUI entitlement amount paid out after abatement against subsequent earnings. SUI entitlement is the maximum a person would receive if they received 80% of their lost job earnings (capped at 130,000) over the entire entitlement period. E.g. they had no job or no increase in earnings from other jobs they had.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month 7 Month 8 Month 9 Month 12 Month Data

Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Deci <b>l</b> e 7	Decile 8	Decile 9	Decile 10
R HES	6 Month	0.674	0.708	0.687	0.705	0.697	0.699	0.691	0.685	0.675	0.707
R all-jobs	6 Month	0.701	0.715	0.7	0.691	0.686	0.685	0.666	0.69	0.678	0.717
7 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Deci <b>l</b> e 7	Decile 8	Decile 9	Decile 10
R HES	7 Month	0.652	0.698	0.677	0.68	0.688	0.683	0.665	0.663	0.651	0.704
R all-jobs	7 Month	0.684	0.704	0.687	0.691	0.685	0.66	0.658	0.676	0.65	0.723
8 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Deci <b>l</b> e 7	Decile 8	Decile 9	Decile 10
R HES	8 Month	0.667	0.688	0.686	0.673	0.669	0.671	0.651	0.641	0.635	0.687
R all-jobs	8 Month	0.691	0.69	0.681	0.674	0.665	0.657	0.637	0.665	0.625	0.71
9 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Deci <b>l</b> e 7	Decile 8	Decile 9	Decile 10
R HES	9 Month	0.672	0.662	0.678	0.68	0.667	0.648	0.65	0.642	0.629	0.67
R all-jobs	9 Month	0.692	0.688	0.694	0.668	0.653	0.662	0.652	0.634	0.622	0.689
12 Month											
Scenarios	Maximum duration	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Deci <b>l</b> e 7	Decile 8	Decile 9	Decile 10
R HES	12 Month	0.594	0.642	0.653	0.65	0.647	0.63	0.599	0.608	0.596	0.629
R all-jobs	12 Month	0.624	0.655	0.66	0.643	0.643	0.607	0.596	0.607	0.597	0.645

#### Gains and losses

#### Families gaining by income decile

The modelling suggests that recipient families are more likely to be in the top end of the family income distribution, although there are still a considerable number in the bottom. The number of families receiving SUI peaks in the 8th decile.

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month 7 Month 8 Month 9 Month 12 Month Data

6 Month				
Name	Maximum duration	Scenarios	Detail	Value
			Decile1	9000
			Decile2	10200
			Decile3	11700
	1		Decile4	11500
			Decile5	13300
		R HES	Decile6	15800
			Decile7	17000
			Decile8	20700
	6 Month		Decile9	17000
Recipient Families			Decile10	15500
Recipient rainines			Decile1	6200
			Decile2	7900
			Decile3	9300
			Decile4	10100
		P all joba	Decile5	13100
		R all-jobs	Decile6	15700
			Decile7	16800
			Decile8	23200
			Decile9	20000
			Decile10	19000

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Name	Maximum duration	Scenarios	Detail	Value
			Decile1	9500
			Decile2	10900
			Decile3	12300
			Decile4	12400
			Decile5	14200
		R HES	Decile6	16600
			Decile7	17800
			Decile8	22800
			Decile9	18700
Pasiniant Familias	7 Month		Decile10	15800
Recipient Families			Decile1	6800
			Decile2	8700
			Decile3	10300
			Decile4	10800
		Delliste	Decile5	14000
		R all-jobs	Decile6	17900
			Decile7	18100
			Decile8	24700
			Decile9	21200
			Decile10	19600
) Marinala				
⊧ Month Name	Maximum duration	Scenarios	Detail	Value
			Decile1	10000
			Decile2	11500
			Decile3	13400
			Decile4	12800
			Decile5	15400
		R HES	Decile6	17500
			Decile7	18800
			Decile8	24400
			Decile9	20600
			Decile10	17200
Recipient Families	8 Month		Decile1	7400
			Decile2	9100
				9100 11000
			Decile3	11000
			Decile3 Decile4	11000 12200
		R all-jobs	Decile3	11000 12200 14900
		R all-jobs	Decile3 Decile4 Decile5 Decile6	11000 12200 14900 18400
		R all-jobs	Decile3 Decile4 Decile5 Decile6 Decile7	11000 12200 14900 18400 19300
		R all-jobs	Decile3 Decile4 Decile5 Decile6 Decile7 Decile8	11000 12200 14900 18400 19300 26000
		R all-jobs	Decile3 Decile4 Decile5 Decile6 Decile7 Decile8 Decile9	11000 12200 14900 18400 19300 26000 23100
		R all-jobs	Decile3 Decile4 Decile5 Decile6 Decile7 Decile8	11000 12200 14900 18400 19300 26000
9 Month	Meningan dangar		Decile3 Decile4 Decile5 Decile6 Decile7 Decile8 Decile9 Decile10	11000 12200 14900 18400 19300 26000 23100 21000
Name	Maximum duration	Scenarios	Decile3 Decile4 Decile5 Decile6 Decile7 Decile8 Decile9 Decile10	11000 12200 14900 18400 19300 26000 23100 21000 <b>Value</b>
Name	Maximum duration 9 Month		Decile3 Decile4 Decile5 Decile6 Decile7 Decile8 Decile9 Decile10	11000 12200 14900 18400 19300 26000 23100 21000 <b>Value</b> 11600
Name		Scenarios	Decile3 Decile4 Decile5 Decile6 Decile7 Decile8 Decile9 Decile10 <b>Detail</b> Decile1 Decile2	11000 12200 14900 18400 19300 26000 23100 21000 <b>Value</b> 11600 12200
9 Month Name Recipient Families		Scenarios	Decile3 Decile4 Decile5 Decile6 Decile7 Decile8 Decile9 Decile10	11000 12200 14900 18400 19300 26000 23100 21000 <b>Value</b> 11600

Name	Maximum duration	Scenarios	Detail	Value
			Decile5	16800
			Decile6	18900
			Decile7	19700
			Decile8	25800
			Decile9	22000
			Decile10	18500
			Decile1	8000
			Decile2	10000
			Decile3	11900
			Decile4	12900
			Decile5	15900
		R all-jobs	Decile6	19400
			Decile7	20400
			Decile8	28300
			Decile9	24600
			Decile10	22500
2 Month				
Name	Maximum duration	Scenarios	Detail	Value
			Decile1	13400
			Decile2	14800
			Decile3	16600
			Decile4	17000
		R HES	Decile5	19500
		it i let	Decile6	21900
			Decile7	24200
			Decile8	30200
			Decile9	25800
Recipient Families	12 Month		Decile10	21900
Neoplent rainilles			Decile1	9500
			Decile2	11600
			Decile2 Decile3	11600 13600
			Decile3	13600
		R all-jobs	Decile3 Decile4	13600 15200
		R all-jobs	Decile3 Decile4 Decile5	13600 15200 18600
		R all-jobs	Decile3 Decile4 Decile5 Decile6	13600 15200 18600 22700
		R all-jobs	Decile3 Decile4 Decile5 Decile6 Decile7	13600 15200 18600 22700 24100

#### Average weekly change by income decile

In the 7 month scenarios, some families are worse off on average. Families in the lowest 3 deciles are better off on average, families in the deciles 4 to 7 are marginally worse off on average, and families in 3 highest deciles are increasing worse off on average (this partly reflects the 80% replacement rate up to a cap of 130,000K pa). These scenarios assumed a large behavioural response to the introduction of SUI, which for many people increased the time between losing a job and starting a new one. Some wage and salary earnings are lost and the amount of SUI received is less than they would have earned otherwise. While in some deciles, families are worse off on average, most families are not impacted (that is, those that didn't experience a redundancy), some of those that experienced a redundancy are better off (they received SUI when otherwise they would have had no earnings for a period of time), and some are worse off (they received less SUI than they would have earned from a new job they delayed starting).

"Within the TAWA years" refers to those who were reveiving SUI at some time during the TAWA year.

6 Month 7 Month 8 Month 9 Month 12 Month Data

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Name	Maximum duration	Scenarios	Detail	Value
			Decile1	140
			Decile2	150
			Decile3	110
			Decile4	-10
		5	Decile5	-80
		R HES	Decile6	-50
			Decile7	-60
			Decile8	-180
			Decile9	-210
			Decile10	-280
Average Change	6 Month		Decile1	180
			Decile2	220
			Decile3	160
			Decile4	0
			Decile5	-40
		R all-jobs	Decile6	-50
			Decile7	-50
			Decile8	-170
			Decile9	-220
			Decile10	-310
Month Name	Maximum duration	Scenarios	Detail	Value
vanie		ocenanos	Decile1	140
			Decile2	140
			Decile3	120
			Decile4	-30
			Decile5	-30
		R HES		-30
			Decile6	
			Decile7	-10
			Decile8	-100
			Decile9	-200
Average Change	7 Month		Decile10	-240
			Decile1	170
			Decile2	220
			Decile3	160
			Decile4	10
			Decile5	-30
		R all-jobs		
		R all-jobs	Decile6	0
		R all-jobs	Decile6 Decile7	0 -20
		R all-jobs		
		R all-jobs	Decile7	-20
		R all-jobs	Decile7 Decile8	-20 -110
Month		R all-jobs	Decile7 Decile8 Decile9	-20 -110 -210
Month <b>Name</b>	Maximum duration	R all-jobs Scenarios	Decile7 Decile8 Decile9	-20 -110 -210
Name	Maximum duration 8 Month		Decile7 Decile8 Decile9 Decile10	-20 -110 -210 -230
Name		Scenarios	Decile7 Decile8 Decile9 Decile10 Detail	-20 -110 -210 -230 Value
		Scenarios	Decile7 Decile8 Decile9 Decile10 Detail Decile1	-20 -110 -210 -230 <b>Value</b> 140

Name	Maximum duration	Scenarios	Detail	Value
			Decile5	-20
			Decile6	0
			Decile7	0
			Decile8	-90
			Decile9	-130
			Decile10	-190
			Decile1	200
			Decile2	220
			Decile3	160
			Decile4	30
			Decile5	0
		R all-jobs	Decile6	30
			Decile7	0
			Decile8	-80
			Decile9	-150
			Decile10	-200
9 Month	Manimum dumáinn	Commiss	Detail	Value
Name	Maximum duration	Scenarios	Detail	
			Decile1	150
			Decile2	160
			Decile3	120
			Decile4	-10
		R HES	Decile5	-40
			Decile6	10
			Decile7	10
			Decile8	-50
			Decile9	-90
Average Change	9 Month		Decile10	-160
			Decile1	190
			Decile2	220
			Decile3	170
			Decile4	30
		R all-jobs	Decile5	0
		R all-jobs	Decile6	20
			Decile7	20
			Decile8	-30
			Decile9	-90
			Decile10	-190
12 Month				
12 Month Name	Maximum duration	Scenarios	Detail	Value
Average Change	12 Month	R HES	Decile1	170
Aronage onalige		NILO	Decile2	150
			Decile2	120
			Decile4	20
			Decile5	30
			Decile6	60
			Decile7	50

Decile8 30

Name	Maximum duration	Scenarios	Detail	Value
			Decile9	0
			Decile10	-60
			Decile1	220
			Decile2	210
			Decile3	170
			Decile4	60
		R all-jobs	Decile5	60
		R all-jobs	Decile6	70
			Decile7	70
			Decile8	40
			Decile9	0
			Decile10	-40

#### Social Unemployment Insurance (SUI) Modelling assumptions

- 1. The SUI payment is considered taxable income, income for the purposes of benefit abatement, income for the purposes of calculating working for family and independent earner tax credit payments, and income for the purposes of in-work tax credit calculation.
- 2. The SUI payment can be received at the same time as core benefits (JSS, SLP, SPS), Working for Families payments, New Zealand Superannuation, Student Allowance, and paid parental leave.
- 3. The SUI payment along with wage and salary and self-employment income cannot exceed total income received before the job loss event. 4. Job loss in self-employment is not considered in the SUI model.
- 5. Data limitations increase the uncertainty (compared to standard TAWA modelling) and mean that some aspects of the model are purely assumption-driven (as opposed to data-driven).
- 6. The SUI model has moderate predictive power, which implies that the distributional impacts may be muted compared to reality.
- 7. The possible incentives for people to enter work to qualify for the scheme is not accounted.

## TAWA Modelling assumptions

- 1. This analysis was carried out using Treasury's micro-simulation model of the tax and welfare system TAWA. All calculations should be considered as estimations.
- 2. Estimates are for the 2018/2019 tax year using HES 2018/19 augmented using IDI data.
- 3. The modified OECD equivalisation scale is used to calculate equivalised incomes.
- 4. Apparent inconsistencies in totals are due to rounding and/or suppression, with estimates being suppressed if they did not meet the confidentiality requirements of Statistics NZ.
- 5. Our reporting uses 95% confidence intervals, calculated as the estimate plus or minus the margin of error (MoE). The MoE is calculated as 1.96 multiplied by the standard error of the estimate.

### Disclaimer

These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which is carefully managed by Stats NZ. For more information about the IDI please visit https://www.stats.govt.nz/integrated-data/ (https://www.stats.govt.nz/integrated-data/). The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

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