

Feature Article

IMPACT OF THE 2022 INCREASES IN RETIREMENT AND RE-EMPLOYMENT AGES ON THE EMPLOYMENT OUTCOMES OF SENIOR WORKERS

OVERVIEW

The Retirement and Re-employment Act (RRA) was enacted in 2012. Over the years, the RRA has undergone several changes to bring Singapore closer to its eventual goal of setting the retirement age (RA) and re-employment age (REA) at 65 and 70 respectively by 2030. The most recent changes were in 2022 when the RA was raised from 62 to 63, and the REA was increased from 67 to 68.



FINDINGS

Finding 1:

The increase in the RA in 2022 raised the employment rate of senior workers in the treated group by 0.4 percentage-point (pp), relative to the control group.



Finding 2:

The increase in the REA in 2022 raised the employment rate of senior workers in the treated group by 0.7pp, relative to the control group. The positive impact of the increase in 2022 on employment was similar to that found for the earlier increase in 2017 (when the REA was raised from 65 to 67), suggesting that the policy of raising the REA had not reached diminishing returns.



POLICY TAKEAWAY

At their currently defined ages, the RA and REA remain relevant as they collectively provide legislative protection and set the social norms of retirement for senior workers. Given Singapore's increasing life expectancy and ageing population, the RA and REA protect senior workers and enable them to work longer if they wish to. This in turn allows employers to meet their manpower needs in a tight labour market.



EXECUTIVE SUMMARY

- The Retirement and Re-employment Act (RRA) was enacted in 2012. Over the years, the RRA has undergone several changes to bring Singapore closer to its eventual goal of setting the retirement age (RA) and re-employment age (REA) at 65 and 70 respectively by 2030. The most recent changes were in 2022 when the RA was raised from 62 to 63, and the REA was increased from 67 to 68.
- This study examined the impact of the 2022 increases in the RA and REA on the employment outcomes of senior workers. The results showed that the RA and REA increases raised the employment rates of senior workers, thus providing evidence that they had been effective in keeping senior workers in the workforce. For the REA, the positive impact of the increase in 2022 on employment was similar to that found for the earlier increase in 2017 (when the REA was raised from 65 to 67), suggesting that the policy of raising the REA had not reached diminishing returns.
- At their currently defined ages, the RA and REA remain relevant as they collectively provide legislative protection and set the social norms of retirement for senior workers. Given Singapore's increasing life expectancy and ageing population, the RA and REA protect senior workers and enable them to work longer if they wish to. This in turn allows employers to meet their manpower needs in a tight labour market.
- The Government has recently convened the Tripartite Workgroup on Senior Employment and an Alliance for Action on Empowering Multi-Stage Careers for Mature Workers to review and refresh Singapore's senior employment policies in two key areas: (i) empowering our senior workers to be productive and employable, and (ii) promoting age-friendly jobs and workplaces. These efforts, taken alongside upcoming increases to the RA and REA, should support both senior workers and employers in maximising the potential of Singapore's senior workforce.

The views expressed in this paper are solely those of the authors and do not necessarily reflect those of the Ministry of Manpower (MOM), Ministry of Trade and Industry (MTI), or the Government of Singapore.¹

INTRODUCTION

In 2012, the Retirement and Re-employment Act (RRA) was enacted to offer senior workers the opportunity to work longer, while granting employers the flexibility to continue tapping on the experience of senior workers. Specifically, the RRA protects senior workers from age-related dismissals before reaching the statutory retirement age (RA) and requires employers to offer re-employment to eligible senior workers until the statutory re-employment age (REA).

Over the years, the RRA has undergone changes to bring Singapore closer to its eventual goal of setting the RA and REA at 65 and 70 respectively by 2030. These changes were in 2017 when the REA was raised from 65 to 67, and in 2022, when the RA was increased from 62 to 63 and the REA was raised from 67 to 68.

This study examined the impact of the increases in RA and REA in 2022 on the employment outcomes of senior workers.

LITERATURE REVIEW

Past studies have shown that the enactment of the RRA and the 2017 increase in REA raised the employment rates of senior workers in Singapore and allowed them to remain active at work (see Lee et al., 2017; Chia et al., 2022).

Based on economic theory and empirical evidence from the literature, increases in statutory ages linked to retirement could influence retirement decisions and raise the employment of senior workers through three main channels (Exhibit 1).

¹ We would like to thank Ms Yong Yik Wei, Dr Kuan Ming Leong, Dr Andy Feng and Mr Kevin Low for their useful suggestions and comments. We are also grateful to Dr Tan Yi Jin, Ms Wen Jia Ying and Mr Alex Cheng for their additional analyses and inputs to the study. All remaining errors belong to the authors.

Exhibit 1: Channels Influencing Senior Employment from Increases in Statutory Ages

Financial Incentives	Legislative Protection	Social Norms
<ul style="list-style-type: none"> Statutory ages in many countries are tied to eligibility ages for social security or pension benefits. There could thus be financial disincentives to retire early (e.g., benefits are discounted) or to work beyond the RA (e.g., earnings-testing or means-testing of benefits). Börsch-Supan and Coile (2021) found that social security reforms increased financial incentives to work and contributed to higher senior employment across 12 countries between 1980 and 2015. 	<ul style="list-style-type: none"> Statutory ages provide legislative protection for senior workers. For example, in Singapore, (i) employers cannot retire or dismiss workers based on age before the RA, and (ii) employers must offer eligible workers re-employment up to the REA, transfer them to another firm, or make a one-off Employment Assistance Payment. Rabaté (2019) found that the increase in mandatory retirement age from 60 to 65 in France led to senior workers exiting from employment at a later age. 	<ul style="list-style-type: none"> Employees may anchor their retirement decisions at statutory ages. Employers may also adjust hiring expectations and be more willing to hire senior workers up to the statutory ages. Seibold (2021) showed that employment bunched at statutory ages in Germany, even when there were no financial incentives to retire at these ages. There was more bunching for workers who received information letters on their RA more frequently.

In Singapore, the increases in RA and REA are likely to affect the employment of senior workers mainly through the channels of legislative protection and social norms since there are no strong financial incentives tied directly to the statutory RA and REA.²

METHODOLOGY

This study exploited the eligibility cutoff for the new RA and REA implemented in 2022 to identify the causal impact of the increases in the RA and REA. Specifically, the increase in the RA (from 62 to 63) and REA (from 67 to 68) in July 2022 meant that only senior workers born on or after 1 July 1960 and 1 July 1955 respectively were directly affected by these changes.

In line with this, three groups of seniors were identified (Exhibit 2):

- The treated group comprised workers who benefitted directly from the extended legislative protection afforded by the increased statutory ages (i.e., those born on or after 1 July 1960 for the RA, and on or after 1 July 1955 for the REA). In addition, these workers could also be affected indirectly by changes in the social norms of retirement as the statutory ages increased (i.e., workers might re-anchor their retirement decisions to new statutory ages, while employers could adjust hiring expectations and become more willing to hire senior workers for longer).
- The semi-treated group comprised workers born in the same year as the treated group, but were not directly affected by the raising of the statutory ages (i.e., no legislative protection) because of the timing of the policy implementation (i.e., the semi-treated group was born before July). Nonetheless, these workers could be affected indirectly through the social norms channel.
- The control group was born in the year just before the treated and semi-treated groups (to improve their comparability with the treated and semi-treated groups) and was not affected by the increases in statutory ages.

² Although there are policies and schemes in Singapore that alter the financial incentives to employ senior workers by influencing demand (e.g., Senior Worker Early Adopter Grant for firms) and supply (e.g., increases in Central Provident Fund [CPF] contribution rates for senior workers) channels, they are not tied to the RA and REA. The CPF Payout Eligibility Age (i.e., earliest age at which workers can apply to start drawing down CPF savings via the Retirement Sum Scheme or CPF Life scheme) is also not linked to the RA and REA. Accordingly, the observed impact of changes in the RA and REA is unlikely to be driven by these policies and schemes.

Exhibit 2: Impact of Statutory Age Changes on Different Groups of Senior Workers

Group	Birth Cohort	Impact of Increase in RA	Possible Transmission Channels
Control	1959	Not affected: RA of 62	-
Semi-treated	Jan 1960 to Jun 1960	Born in the same year as treated group, but was not directly affected because of the timing of policy implementation: RA of 62	• Social norms
Treated	Jul 1960 to Dec 1961	Directly affected: RA of 63	• Legislative protection • Social norms

Group	Birth Cohort	Impact of Increase in REA	Possible Transmission Channels
Control	1954	Not affected: REA of 67	-
Semi-treated	Jan 1955 to Jun 1955	Born in the same year as treated group, but was not directly affected because of the timing of policy implementation: REA of 67	• Social norms
Treated	Jul 1955 to Dec 1956	Directly affected: REA of 68	• Legislative protection • Social norms

Thereafter, we used a difference-in-differences approach to estimate the causal impact of the increases in the RA and REA on the employment outcomes of (directly and indirectly) affected seniors over a period of 17 to 23 months³:

$$y_{ia} = \beta_1 \cdot trt_i \cdot 1 \text{ year post}_a + \beta_2 \cdot trt_i \cdot \text{after 1 year}_a + \beta_3 \cdot \text{semi } trt_i \cdot 1 \text{ year post}_a + \beta_4 \cdot \text{semi } trt_i \cdot \text{after 1 year}_a + \sum_{b=-2}^{-12} \gamma_b \cdot trt_i \cdot Q_b + \sum_{b=-2}^{-12} \eta_b \cdot \text{semi } trt_i \cdot Q_b + \theta_t + \lambda_g + \text{controls}_i + \varepsilon_{ia}$$

Where:

- y_{ia} denotes the outcome of interest (i.e., employment rates⁴) of individual i in month a
- trt_i / $\text{semi } trt_i$ is a dummy variable that takes on a value of 1 if an individual i belongs to the treated / semi-treated groups, and 0 otherwise
- 1 year post_a is a dummy variable that takes on a value of 1 if the age of individual i in month a is between the eligible RA / REA age prior to the policy change and after the policy change (i.e., between age 62 and 63 for the RA / between age 67 and 68 for the REA), and 0 otherwise
- after 1 year_a is a dummy variable that takes on a value of 1 if the age of individual i in month a is older than the new RA / REA (i.e., after age 63 for the RA / after age 68 for the REA), and 0 otherwise
- Q_b is a vector of dummies taking a value of 1 if individual i 's age in month a is b quarters before age 62 (i.e., RA prior to the policy change) / age 67 (i.e., REA prior to the policy change), where b ranges from -12 (i.e., 12 quarters before age 62 / age 67) to -2 (2 quarters before age 62 / age 67) (Q_{-1} is when an individual i is aged 61y 9m to 62y / 66y 9m to 67y, and it is the omitted period in the regression)
- θ_t, λ_g are the age-month and treated / semi-treated group fixed effects
- controls_i are control variables including race and proxies for wealth (e.g., CPF balance at age 54 / property type of individual)
- ε_{ia} represents the error term

The coefficients of interest $\beta_1, \beta_2, \beta_3, \beta_4$ capture the effects of the increase in RA and REA on the employment rates of the treated and semi-treated groups, relative to the control group. The γ_b, η_b coefficients indicate whether the trends in the employment rates of the treated / semi-treated groups and control group prior to the policy change were similar.

³ This study examined employment outcomes of seniors up to December 2023. For the treated group, we observed their employment up to 17 months after they turned age 62 and 67. For the semi-treated group, the observation window was up to 23 months as they were born up to six months earlier than the treated group.

⁴ The outcome of interest y_{ia} was detrended so that it was more reflective of structural trends rather than macroeconomic conditions. First, we ran a separate regression of \tilde{y}_{ia} [which took on a value of 1 if individual i was employed at month a with year-month fixed effects across a wider resident worker population to capture the impact of macroeconomic conditions on employment. A wider resident worker population was used as the restricted regression sample of senior workers was too small to sufficiently capture changes in macroeconomic conditions over time. Second, we computed the residuals from the regression, which would represent the component of \tilde{y}_{ia} that was unexplained by macroeconomic conditions, and used these residuals as the outcome of interest.

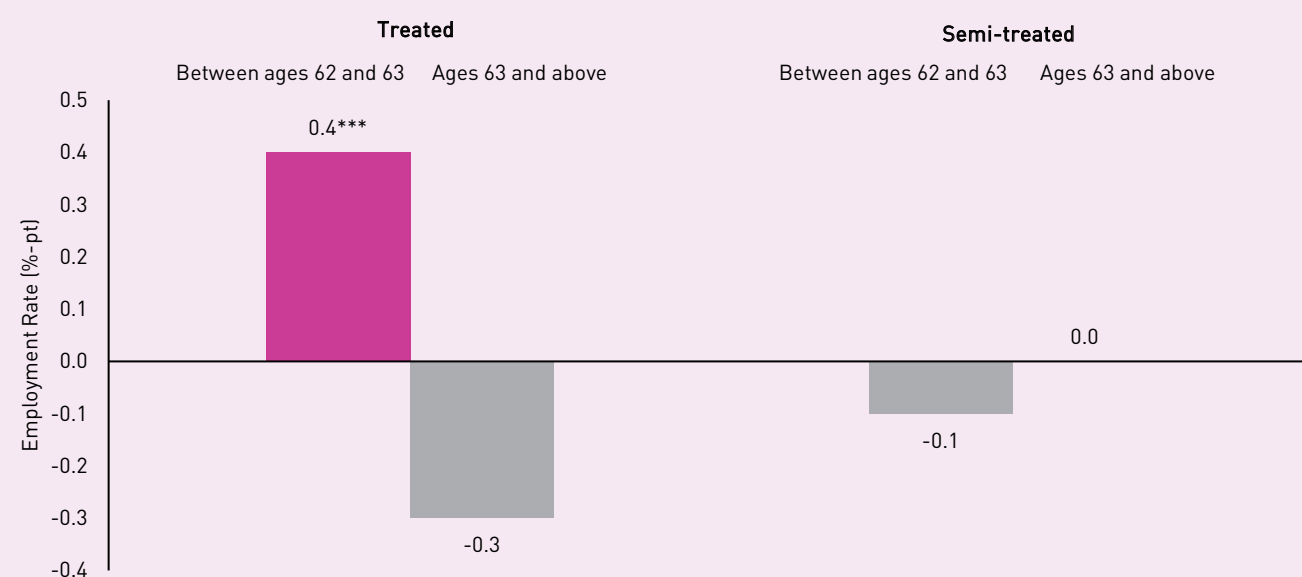
RESULTS AND DISCUSSION

Overall, the study found that the increases in the RA and REA in 2022 raised the employment rates of senior workers. For the RA, this was mainly through the legislative protection – rather than social norms – channel, as eligible workers could be re-employed up to the REA and might have mentally anchored their retirement decisions on the REA instead. For the REA, the positive impact on the employment rate of senior workers was similar in magnitude to that found for the earlier REA increase in 2017 (when the REA went up from 65 to 67), and reflected the effects of both legislative protection and social norms.

Impact of the 2022 Increase in RA on Senior Employment

The increase in the RA in 2022 raised the employment rate of senior workers in the treated group by 0.4 percentage-point (pp), relative to the control group (Exhibit 3). However, the impact was not sustained as there was no statistically significant difference in employment rate between the treated and control groups beyond the new legislated RA (i.e., 63 years of age). The increase in RA also did not affect the employment rate of the semi-treated group.

Exhibit 3: Impact of the Increase in RA on Employment Rates (Relative to Control Group)



*** indicates statistical significance at the 1% level. Grey-coloured bars are statistically insignificant at the 10% level.

Collectively, these results suggested that the RA affected employment outcomes mainly through the legislative protection channel. Specifically, the increase in the RA might have delayed the exit of two types of senior workers. The first would be senior workers who were not eligible for a re-employment offer and would have been retired by their employers at age 62 if not for the new legislated RA. The second would be senior workers who had a higher existing remuneration package than the re-employment offer⁵ and would have left at age 62 because their reservation wage⁶ was not met. However, with the raising of the RA to 63, these senior workers could remain in the workforce for an additional year on their existing remuneration package.

On the other hand, the absence of any impact on the semi-treated group suggested that the RA did not affect employment outcomes through the social norms channel. This was likely because senior workers would have mentally anchored their retirement decisions on the REA instead of the RA, since they could be offered re-employment up to the REA after reaching the legislated RA (see Lee et al., 2017).

In addition, the impact of the increase in the RA was found to vary by the sector and housing type of the senior workers. First, there was a larger positive impact on the employment rate of senior workers in outward-oriented sectors⁷ (Exhibit 4A). As the nature of their work tended to be more knowledge-intensive, outward-oriented firms could prefer younger workers with more updated skills and hence be incentivised to retire senior workers at the legislated RA. As such, the extension of legislative protection from the increase in the RA likely benefitted senior workers in these sectors as firms would only be able to retire them a year later.

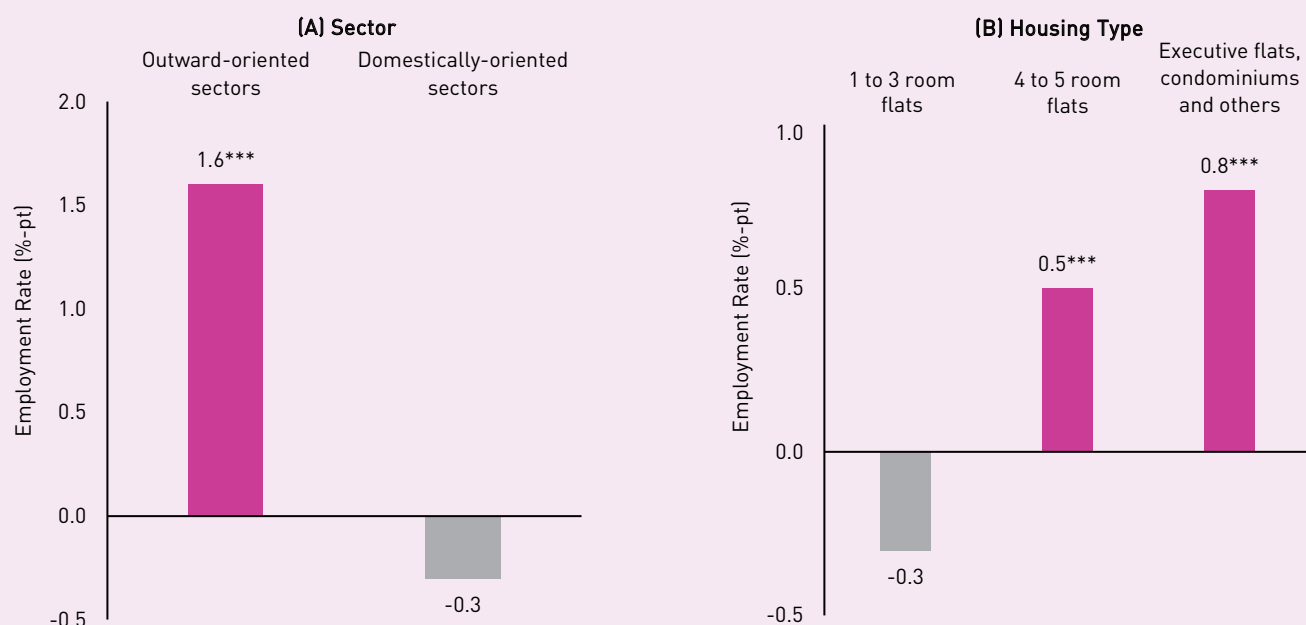
⁵ The RRA ensures that all eligible senior workers are given a re-employment offer when they reach the RA.

⁶ Reservation wage is defined as the lowest wage rate required to induce an individual to work.

⁷ Outward-oriented sectors include manufacturing and wholesale trade.

Second, the increase in the RA was more effective in raising the employment rate of senior workers who lived in executive flats, condominiums and other apartments (Exhibit 4B). As these senior workers were more likely to have reached retirement adequacy, they could be less willing to accept lower wages and employment benefits from re-employment. The extension of legislative protection from the increase in RA would have enabled them to maintain their remuneration package and incentivised them to remain in the workforce until the new RA (i.e., age 63).

Exhibit 4: Impact of the Increase in RA on Employment Rates by (A) Sector and (B) Housing Type (Relative to Control Groups)

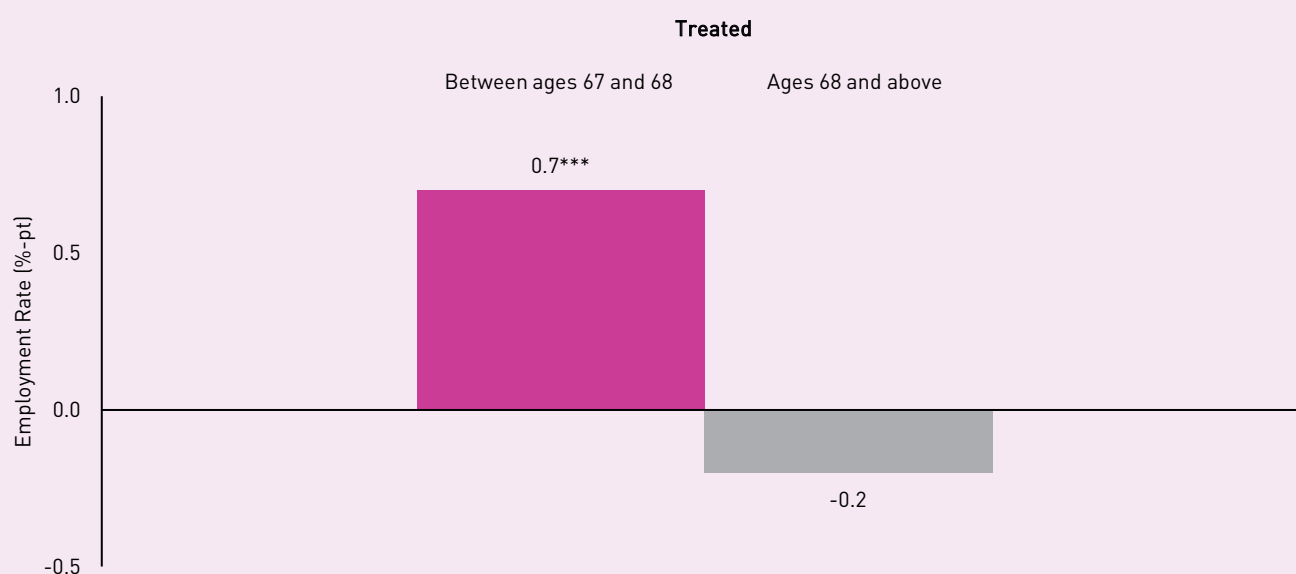


Estimates refer to the impact of the increase in RA on employment rates of the treated groups between ages 62 and 63 relative to control groups. *** indicates statistical significance at the 1% level. Grey-coloured bars are statistically insignificant at the 10% level.

Impact of the 2022 Increase in REA on Senior Employment

The increase in the REA in 2022 raised the employment rate of senior workers in the treated group by 0.7pp (relative to the control group), likely due in part to the legislative protection channel. However, the effects were not sustained as there was no statistically significant difference in the employment rate of the treated and control groups after the new legislated REA (i.e., age 68) (Exhibit 5).

Exhibit 5: Impact of the Increase in REA on Employment Rates (Relative to Control Group)



*** indicates statistical significance at the 1% level. Grey-coloured bars are statistically insignificant at the 10% level.

While this study was not able to robustly estimate the impact of the 2022 increase in REA on the semi-treated group⁸, a separate analysis examining the impact of the earlier 2017 increase in REA found that it had led to higher employment rates for the semi-treated group affected by the 2017 increase. This suggested that apart from the legislative protection channel, changes in the REA could also have an impact on the employment of senior workers by influencing the social norms of retirement (i.e., senior workers anchoring their retirement decisions on the legislated REA age).

This study yielded two other important insights. First, the positive impact of the 2022 increase in REA on the employment of the treated group found in this study was similar in magnitude to that found in the separate analysis on the impact of the 2017 increase in REA, indicating that successive increases in the REA had not caused the impact to diminish. This suggested that the REA remained relevant as a significant proportion of senior workers who remained employed up to the old REA (i.e., age 67) were willing and able to work beyond this age.

Second, comparing the impact of the RA and REA increases in 2022, the increase in REA had a slightly larger impact on the employment rate of senior workers. This finding is aligned with the policy intent and design of the statutory ages. Compared to the REA, the impact of increasing the RA on employment is likely to be smaller as firms still bear re-employment responsibilities and would have to offer re-employment contracts to most eligible senior workers at the prevailing RA.

CONCLUSION

This study found that increases in the RA and REA in 2022 raised the employment rates of senior workers, thus providing evidence that they had been effective in keeping senior workers in the workforce. For the REA, the positive impact of the increase in 2022 on employment was similar to that found for the earlier increase in 2017, suggesting that the policy of raising the REA had not reached diminishing returns.

At their currently defined ages, the RA and REA remain relevant as they collectively provide legislative protection and set the social norms of retirement for senior workers. Given Singapore's increasing life expectancy and ageing population, the RA and REA protect senior workers and enable them to work longer if they wish to. This in turn allows employers to meet their manpower needs in a tight labour market.

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⁸ While we tried to investigate the impact of the 2022 increase in REA on the employment rate of the semi-treated group, we were unable to establish a causal impact as there were pre-trends which suggested that the employment rate of the semi-treated group trended differently from the control group even before the policy change. This meant that the employment rate of the control group after the policy change would not provide a good counterfactual for the treated group.

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