



POLICY AND REGULATORY STEWARDSHIP

Tax policy report: High-Wealth Individuals Research Project: listed company workstream

Date:	18 August 2022	Priority:	Low
Security level:	In-confidence	Report number:	IR2022/395

Action sought

	Action sought	Deadline
Minister of Revenue	Note the contents of this report Refer a copy of this report to the Minister of Finance for their information	NA

Contact for telephone discussion (if required)

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18 August 2022

Minister of Revenue

HWI Research Project – listed company workstream

Executive summary

1. This report provides information on a subproject of the High-Wealth Individuals Research Project (the Project). It reports preliminary results on effective tax rates for income from listed company holdings for high-wealth individuals (HWIs).
2. Sixty members of the Project population were identified as having declared holdings in sixty-one NZX listed companies (this includes holdings through trusts). These individuals are the population for this report.
3. We compare the listed company population's average effective tax rate (ETR) on taxable income to the ETR when their income from investments in listed companies is included. The additional income included is share price gains and losses on significant holdings of listed companies. Company tax is included as tax in the ETR.
4. Because this ETR analysis only requires access to Inland Revenue tax records and public information on the listed companies, we have done this analysis over a longer period than generally applies for the Project – from 2005 to 2021. For robustness we also use the period 2008-2019, to cover a single, full business cycle (referred to as the BCS scenario).
5. The population earned \$954 million in taxable income over the period. By comparison, capital gains earned through listed company holdings totalled \$3.4 billion. However, capital gains were heavily concentrated (the top quartile earned 96% of measured income).
6. We have calculated ETRs over the whole period (rather than annually), given there is significant volatility in listed company income. We present results based on the ETR of the whole listed company population and based on individuals' ETRs. The whole population measure is equivalent to the (income) weighted mean.
7. The results show an ETR for taxable income, for the whole population (or weighted mean), over the period of 34.5% (BCS: 33.9%).¹ When capital gains from the listed company investments are included, together with an attribution of company tax, the whole population ETR is reduced to 11.1% (BCS: 14.3%).
8. For individual measures, the median individual had an ETR of 26.5% (BCS: 26.3%). That is, 50% of the population had an ETR above approximately 26% and 50% had an ETR below approximately 26%.
9. Several individuals have an ETR significantly lower than the taxable income ETR; 28% (BSC: 31%) of the population have an ETR between 0% - 15%. While low ETRs occurred across the distribution, those with the highest capital gains tended to have a low ETR. Lower ETRs are generated when an increase in share price (capital gain) is not mirrored by an increase in the listed company's taxable income.
10. The population ETR (11.1%) is lower than the median individual ETR as individuals with higher capital gains tend to have lower ETRs and contribute a larger proportion to the population ETR.

¹ The period includes some years when the maximum personal tax rate was 38% or 39%.

Recommended action

We recommend that you:

11. **note** the contents of this report.

Noted

12. **refer** a copy of this report to the Minister of Finance for their information.

Referred/Not referred

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/ /2022

Background

13. The High-Wealth Individuals (HWI) Research Project (the Project) is measuring average effective tax rates (ETRs) for high-wealth individuals based on three measures of income: taxable income, gross-cash income (broadly, including realised capital gains) and economic income.
14. The Project will test the impact of the inclusion of different income sources (and associated tax) on a baseline ETR (as well as calculating an all-income source ETR). This paper presents preliminary results for the project workstream that seeks to measure the ETR of income from significant investments in listed companies (referred to as significant listed companies, or SLC). This workstream compares the ETR on personal taxable income to the ETR when listed company income is included, for a subset of the research population with SLC holdings.
15. For this paper, listed company income includes both dividends and (realised and accrued) capital gains and losses from the change in share price. These are components of economic income. Company tax (both foreign and domestic) is included within the measure of tax.
16. The analysis in this paper therefore measures the ETR on:
 - taxable income from all sources for individuals who own SLCs; and
 - taxable income from all sources and the component of economic income from investments in SLCs for individuals who own SLC.
17. Several assumptions are made in the analysis (such as the use of traded prices for sold shares) which mean that the results should be seen as approximations rather than precise estimates.

Methodology

Population and timeframe

18. Listed companies are included in this data set where an individual in the high-wealth population is listed as a significant shareholder on the New Zealand Stock Exchange (NZX). In general, these individuals will hold at least 5% of the company, but may alternatively be an office holder. Holdings through trusts and nominees will also be captured.
19. There are 61 companies and 60 individuals in this population.
20. Effective tax rates are calculated for two periods:
 - 20.1 First 2005 – 2021.² This is the longest period for which we were able to obtain data. This analysis can be undertaken over a longer period than the analysis for the rest of the Project as it is based on tax records and public data from the NZX.
 - 20.2 Second 2008 - 2019. Estimates over the 2005 – 2021 period may be biased if certain phases of a business cycle are overrepresented. For robustness, the analysis also restricts data to 2008-2019 which some consider as the last full business cycle experienced in New Zealand. Estimates over this business cycle are denoted by BCS. The BCS has 55 companies and 51 individuals.

² All calculations are average effective tax rates (rather than marginal effective tax rates) – that is total tax divided by total income.

21. ETRs are calculated based on the total tax and total income of the population – this is equivalent to the weighted mean. They are also calculated for individuals (that is, each individual’s total tax divided by total income over the period). ETRs are calculated over the entire period given that there is considerable volatility in an annual measure due to share price movements being volatile.

Effective tax rate on taxable income

22. The ETR on taxable income is calculated from IRD tax data as personal tax/taxable income. Taxable income includes income from salary, wages, interest, and dividends. Some points to note are:
- imputation credits on dividends received are included as tax paid;
 - foreign tax paid (and eligible for a foreign tax credit) by the taxpayer on foreign income will be included in tax; and
 - taxable income is gross of imputation credits and foreign tax credits (to ensure that taxable income is a pre-tax amount).

Effective tax rate on taxable income plus capital gains from investment in significant listed companies

23. To estimate the impact on effective tax rates of listed company income, income and tax from listed companies is added to taxable income and personal tax as follows.
- 23.1 The additional income included is the realised and unrealised gain or loss from owning the shares in the SLC. Capital gains are calculated by taking the individual’s holdings at the last day of each quarter multiplied by the change in share price for the next quarter. Realised gains are thus included through changes in holdings and valued at the end of quarter trading price. We call this “measured income”.
- 23.2 The additional tax included is company tax (both New Zealand and foreign) paid by the SLC attributable to the shares owned by the individual.³ The company tax is reduced by imputation credits (IC) attached to dividends from the company that are received by the taxpayer (to prevent double counting of the company tax). These adjustments effect both the numerator (tax) and denominator (which includes gross income) of the ETR formula.⁴

24. This means the ETR formula is:

$$\text{ETR} = \frac{\textit{Personal tax plus attributed company tax minus IC}}{\textit{Taxable income plus capital gains from SLC plus attributed company tax minus IC}}$$

Summary of results

The ETR on taxable income corresponds to the expected average statutory tax rate for high income earners

25. The results show an ETR for the whole population (or weighted mean ETR) based on taxable income alone over the period of 34.5% (BCS: 33.9%). Note, the period

³ Tax on companies held in trusts may be marginally understated as we do not include any additional tax paid on dividends by the trust in addition to the amount paid at the company level (i.e., the difference between the 28% corporate tax rate and 33% trust rate). We do not think this will be significant given the size of capital gain income versus dividend income.

⁴ PIE income and tax are not included in this measure. GST or indirect taxes or levies paid by the individuals are not included as tax.

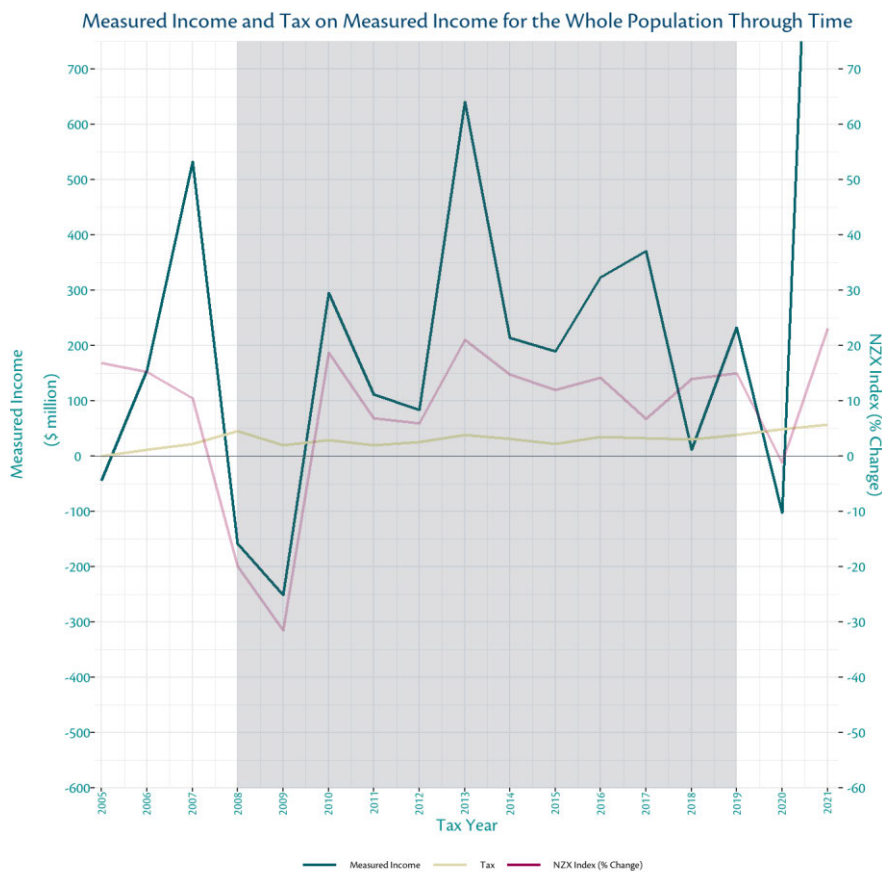
includes some years when the maximum personal tax rate was 38% or 39% (less of these years are included in the BCS resulting in a lower taxable income ETR).⁵

26. This result is to be expected under the progressive rate system that applied over the period. For comparison the average effective tax rate for someone earning \$250,000 in 2018 (when the top tax rate was 33%) would be just under 30%⁶.

Capital gains are volatile and have little relationship to tax paid

27. The graph below presents the total measured income and total tax of the whole population on an annual basis over the whole period. The population earned \$954 million in taxable income over the period. By comparison, capital gains earned through listed company holdings totalled \$3.4 billion. The graph also shows the percentage change in the NZX index.

28. It demonstrates that there is little correlation between capital gains from listed companies and tax paid (personal and corporate) on an annual basis. It also shows that capital gains income is highly volatile and there can be periods of gains and periods of losses (where ETRs will be negative). There appears to be a reasonable correlation between the income of this cohort and the change in value of the NZX.⁷



While there are a range of individual ETRs, higher capital gains are associated with lower ETRs

29. When capital gains from the listed company investments are included, together with an attribution of company tax for each year, the median ETR is 26.5% (BCS:

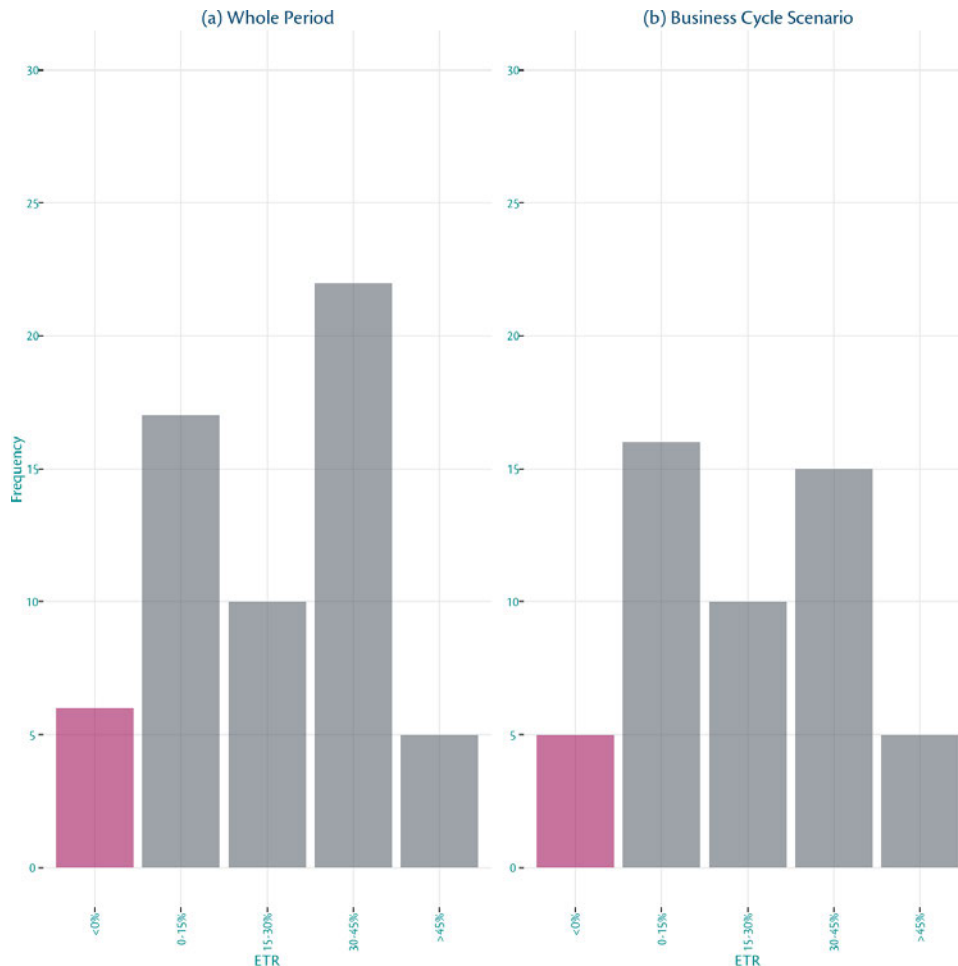
⁵ The top personal income tax rate was 33% from 1 April 2011 to 1 April 2021. It was 39% for income over \$60,000 from 1 April 2000 to 30 September 2008 and on income over \$70,000 from 1 October 2008 to 31 March 2009. It was 38% on income over \$70,000 from 1 April 2009 to 30 September 2010.

⁶ Treasury analysis.

⁷ Note that the shaded area represents the Business Cycle Scenario (BCS).

26.3%). This means that in each scenario 50% of the population had an ETR less than around 26.5%, and 50% had an ETR more than around 26.5%. The median is slightly below the ETR on taxable income for the population and the tax rate on corporate profits.⁸

30. The histogram below presents the number of individuals by ETR band for both scenarios (the pink bar is those with negative ETRs).

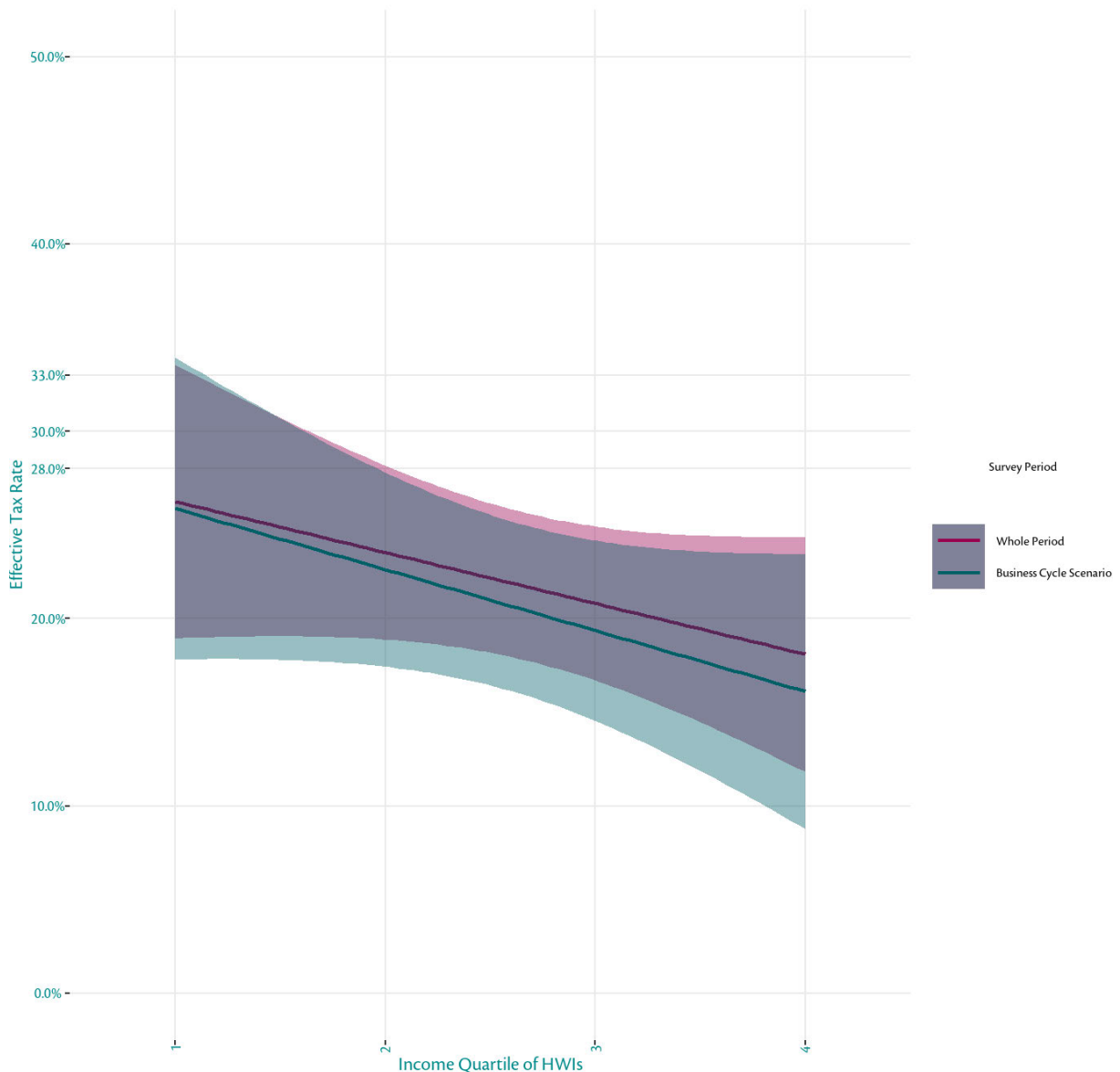


31. Around a quarter of the population had an ETR between 30-35% in the whole period scenario (20% in the BCS). For these individuals, corporate profits broadly approximated capital gains and dividend income over the period.
32. However, several taxpayers had ETRs that were significantly lower than the ETR on taxable income; 28.3% of individuals (BCS: 31.4%) had an ETR between 0%- 15%. While low ETRs are seen across the population’s income distribution, individuals with higher capital gains tended to have lower ETRs. The median ETR for the top quartile of measured income is 8.9% (BCS: 7.8%).
33. A low ETR occurs where a taxpayer earned significant capital gains compared to company profits. In these cases, taxation of company profits and dividends did not well approximate the income to the individual (from capital gains and dividends), and hence these individuals have low ETRs compared to personal tax rates.

⁸ The corporate tax rate was 30% prior to 1 April 2011, and 28% from then.

- 34. ETRs could also be negative (where the individual made negative capital gains over the whole period, but the company still paid tax) or significantly above personal tax rates when capital gain income is low compared to corporate profits over the period.
- 35. In the graph below individuals are ordered by size of measured income (in quartiles) and a line-of-best-fit plotted for the whole period and business cycle scenario. In each scenario the ETR declines as measured income increases. This demonstrates that higher capital gains are generally associated with a lower ETR.
- 36. The line-of-best-fit is steeper for the business cycle scenario because by removing the gains made following 2019, some of the HWIs with relatively high ETRs are removed from the top decile (i.e., prior to the rise in the NZX in 2020 some HWIs had low levels of capital gains) and are placed in lower deciles. Note that this graph for the line-of-best-fit excludes observations that have an ETR greater than 50% and less than 0%.

Trend Line of Effective Tax Rates Across the Distribution of Measured Income



Capital gains reduce the weighted average ETR compared to the median

37. For the whole population or weighted mean (i.e., when all the income and tax for the whole population is summed or each ETR is weighted by its share of income) the ETR over the period is 11.1% (BCS: 14.3%).
38. This is significantly lower than the median individual ETR, as the highest measured income taxpayers have a significant impact on the whole population measure due to their relatively high income (the top quartile earned 96% of measured income). These individuals with high measured income have a lower ETR making the weighted mean less than the median.
39. Several sensitivity checks were completed on the group ETRs.⁹ These did not materially alter the results and were generally in the order of 1 percentage point.

Consultation

40. The Treasury has been consulted on this report.

Next steps

41. Officials will continue to work on additional ETR analyses as data from the disclosure statements are received. These will add information on:
 - Real property ownership;
 - Portfolio investments;
 - Non-portfolio entities (more-than 10%-owned that are not publicly listed).
42. Further additions to the listed company methodology will be to add in companies listed on other exchanges and held by the HWI population and to calculate a realised capital gains only measure of income from listed companies for the purpose of the gross-cash income.

⁹ For example, the results presented here include years the individuals were tax resident and had holdings in the SLC. Also including years when the individual did not have holdings or was not a tax resident in the period had a minimal effect on the population ETR. Including company tax in the denominator had an impact of decreasing the ETR by .4 percentage points (BCS: .7 percentage points).

Appendix – ETR data sources

Calculation of the ETR

The ETR formula is:

$$ETR = \frac{\text{Personal tax plus attributed company tax minus IC}}{\text{Taxable income plus capital gains from SLC plus attributed company tax minus IC}}$$

The table below explains the components of the formula.

Component	Explanation	Data source
Income	Personal taxable income Only years the individual was a tax resident are included.	Inland Revenue tax records
Income	Capital gains of listed shares, calculated as: Individuals end of prior quarter holdings * quarterly change in share price for quarter. Price data is the closing traded price on the last trading day of each quarter. The results in this paper only include years the individual had a holding in the relevant SCL.	S&P CapIQ database
Personal Tax	Tax assessed on personal taxable income (includes any amount met with imputation credits)	Inland Revenue tax records
Corporate Tax	Corporate tax, domestic and foreign	S&P Cap IQ (Income Taxes Paid).
Imputation credits	Calculated as the difference between gross and net dividends for the SLC multiplied by the individuals holding in the SLC	Bloomberg