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# Medium business income tax gap

How we estimate and reduce the medium business income tax gap for 2021–22.

**Published** 31 October 2024

## Latest estimate and trends



Compare the 2021–22 medium business income tax gap to trends from previous years.

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# Latest estimate and trends

Compare the 2021–22 medium business income tax gap to trends from previous years.

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For 2021–22, we estimate a net income tax gap for medium business of \$1,387 million or 7.3%. This means that we expect to collect more than 92% of the total amount income tax we should collect from medium businesses.

## Medium business population

We define the medium business population as:

- companies with a group turnover between \$10 million and \$250 million
- the individuals controlling these companies.

Most companies in our analysis had a turnover of less than \$50 million.

Entities linked to a high wealth group are excluded from this analysis and are included in the **high wealth income tax gap**. We recognise the tax effect where income earned from trusts and partnerships is distributed to companies or individuals in the medium business population.

The medium business income tax gap forms a part of our overall tax performance program. Find out more about the concept of **tax gaps and the latest gaps available**.

The medium business population represents a diverse group of businesses. As a result, the risks and behaviours driving tax errors differ greatly across the population.

Historically we have focussed on specific tax risks. This may shift as we take a more holistic approach to the compliance of medium business.

The medium business population includes:

- publicly listed businesses
- internationally controlled businesses

- privately-owned businesses
- not-for-profit organisations.

Medium businesses cover a wide turnover range between \$10 million and \$250 million. Approximately 80% have a turnover of less than \$50 million.

Some medium businesses are well established and closely resemble large businesses in their structure and behaviour. Publicly listed companies have additional regulatory and governance requirements that influence their tax decisions.

For medium businesses with international dealings, incorrect tax outcomes may be the result of how they interpret tax law or navigate complex international transactions.

Small businesses that experienced recent growth into a medium business may be at risk of incorrect tax outcomes because their systems, controls and governance no longer provide sufficient support for their expanding business.

Reasons businesses could be at risk of incorrect reporting, include:

- inadvertent omission of income
- overstated expenses
- not accounting for private use of business funds or assets
- miscalculation of capital gains.

## Overview of the latest estimates

The net tax gap estimate for the latest year has slightly increased to 7.3%. Our analysis tells us that the net tax gap has remained relatively steady since 2016–17, even as the number of medium businesses in the population has grown over the 6-year period.


**Table 1: Income tax gap – medium business, 2016–17 to 20**

Element	2016–17	2017–18	2018–19	2019–20	2020–21
Population	38,344	39,545	40,358	41,143	43,143

<b>Gross gap (\$m)</b>	1,228	1,215	1,157	1,244	1
<b>Amendments (\$m)</b>	303	195	196	181	
<b>Net gap (\$m)</b>	925	1,020	961	1,063	1
<b>Expected collections (\$m)</b>	12,979	13,220	12,339	13,150	16
<b>Theoretical liability (\$m)</b>	13,904	14,240	13,300	14,213	17
<b>Gross gap (%)</b>	8.8%	8.5%	8.7%	8.8%	
<b>Net gap (%)</b>	6.7%	7.2%	7.2%	7.5%	

Figure 1 displays a trend of the medium business tax gap as a percentage over the same period.

**Figure 1: Gross and net tax gap (percentage) – medium business, 2016–17 to 2021–22**

 Figure 1 shows the gross and net gap in percentage terms, as outlined in Table 1.

## What's driving the gap

Most medium businesses pay the right amount of tax on time. When they make mistakes, they readily correct them. When we identify errors during a review, they often make a voluntary disclosure.

Where medium businesses make mistakes, it is generally in how they interpret tax law or because they do not understand their tax obligations.

The most common issues we see are:

- incorrectly recording transactions or not reporting transactions outside the normal course of business, including large one-off or unusual transactions
- arrangements that extract wealth from private companies while avoiding the appropriate amount of tax omitting domestic or foreign-sourced income.

A very small number of businesses seek to evade paying the right amount of tax. They take advantage of closely held structures and use artificial and non-commercial arrangements intentionally designed to evade tax. Where we detect deliberate tax evasion, we apply firmer actions such as penalties and prosecutions.

With improved data analytics, it is increasingly difficult for taxpayers to evade tax without detection.

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## ATO action to reduce the gap

How we support our clients to meet their compliance obligations.

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Medium businesses report around 92% of tax voluntarily, without our intervention. Our engagement activities increase this to almost 93%.

Our primary strategy for reducing the tax gap is increasing voluntary compliance. We do this by making it easy for medium businesses to get their tax right and keeping the system fair by tackling tax avoidance.

We make it easier by:

- Helping businesses to navigate complex tax law with clear and practical advice and guidance. Our compliance guidelines and taxpayer alerts give businesses certainty on our view of the law so they can make decisions with confidence.

- Providing timely access to tailored support, including our **early engagement** and **commercial deals** services. To help businesses get it right they can talk to us when they are considering complex or large transactions.
- Supporting transition and growth by providing the right tools for growing businesses. We provide businesses with information for managing obligations with less chance of error and mistake through **good tax governance and record-keeping practices**.

We keep the system fair by taking firm action against tax avoidance and those who deliberately evade their obligations.

Tax performance across both the high wealth and medium business populations is administered through our **Tax Avoidance Taskforce programs**.

We seek to improve voluntary compliance in the tax and super system for medium businesses through our engagement and assurance and risk-based strategies across the:

- **Medium public and multinational business engagement program**
- **Medium and emerging private groups tax performance program.**

Through our programs, we:

- use risk models and data analytics to identify trends and behaviours and design strategies to mitigate risks across the population
- engage one-to-one with taxpayers to influence behaviour towards voluntary compliance
- work with businesses experiencing rapid growth or looking to expand offshore
- encourage compliance by informing medium business of what current tax risks and behaviours attract our attention so they can make informed decisions
- work with advisers to increase awareness of what attracts our attention and support them to provide appropriate advice to their clients.

Through our Tax Avoidance Taskforce, we have seen an increase in businesses willingly participating in the tax and super system as seen in Table 2.

## Methodology

What method we use to estimate the medium business income tax gap.

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### The methods in detail

We apply 2 bottom-up statistical methods to estimate the medium business income tax gap estimate.

The method and results are outlined below and combined in **Table 1**.

- [Calculation – medium business individuals](#)
- [Calculation – medium business companies](#)
- [Limitations](#)
- [Updates and revisions to previous estimates.](#)

### Calculation – medium business individuals

The following 5 step regression is applied to estimate the medium individual tax gap.

#### Step 1: Apply a logistic regression

A logistic regression is applied in our model in order to calculate the probability of each individual having a tax gap.

The results of ATO-initiated compliance activities as well as client-initiated amendments (positive amendments only) are used to estimate the unique probability that each individual has a tax gap. We analyse the income tax return data to identify relevant demographic and financial variables that would contribute to the prediction of whether or not individuals have a tax gap.

The observations for these variables are then weighted based on the individuals' propensities of being selected for compliance activity, before being included in the logistic regression that models the probability of an individual being non-compliant, resulting in a tax gap.

## **Step 2: Apply a Poisson Pseudo Maximum Likelihood regression**

We identify individuals that have been subject to ATO-initiated compliance activity with a positive compliance result. We then determine the variables which are most highly associated with having a positive compliance result. This is based on analysing the correlation coefficients in the regression output, while also considering the collinearity of variables with each other.

After that, the observations for those variables are adjusted using the same weights in the logistic regression above to account for potential selection bias. We apply the Poisson Pseudo Maximum Likelihood regression because it better fits data with a high concentration of observations with zero values in the population.

The key difference between steps 1 and 2 is that step 1 calculates the likelihood of an individual having a tax gap while step 2 calculates the size of each individual's potential tax gap.

## **Step 3: Combine the results from the 2 models**

For each individual in the population and each financial year, the estimated unreported tax is multiplied by the estimated probability of non-compliance. These amounts are then summed on a financial year basis to arrive at the total estimated unreported tax for each year.

## **Step 4: Apply a non-detection uplift factor and non-pursuable debt**

We uplift the estimates preceding this step to account for non-compliance that is not detected. This results in a final estimate that has a lower likelihood of understating the true size of gap in the system, which is not directly observable.

We also seek to quantify the tax gap effects of unreported offshore income by Australians. A main assumption of the unreported offshore income estimate method is that it is only borne by individuals (not companies). The estimate is allocated based on the share of net tax of

individuals in each gap population. The estimated amount is then added to the non-detection uplift amount.

We also add in the value of non-pursuable debt. This is debt that the Commissioner of Taxation has assessed as:

- not legally recoverable
- uneconomical to pursue
- unable to be pursued due to another Act.

## Step 5: Consolidate the tax gap estimates

We calculate the gross gap by adding the unreported amounts or total expected amendments from step 3 to the non-detection uplift and non-pursuable debt from step 4.

We calculate the net gap by subtracting the total amendment amount from the gross gap. Then we add the net gap to the expected collections to estimate the total theoretical liability.

**Table 2: Summary of the estimation process for medium business**

Step	Description	2016–17	2017–18	2018–19*	2019–20*
<b>1</b>	Total population (count)	6,627	6,781	6,564	6,657
<b>2</b>	Total expected amendments (\$m)	123	117	109	105
<b>3.1</b>	Non-detection (\$m)	74	72	66	67
<b>3.2</b>	Non-pursuable debt (\$m)	4	4	4	4
<b>4.2</b>	Gross gap (\$m)	201	192	179	176

<b>4.3</b>	Amendments (\$m)	103	20	40	49
<b>4.4</b>	Net gap (\$m)	98	173	139	127
<b>4.5</b>	Expected collections (\$m)	1,341	1,471	1,283	1,383
<b>4.6</b>	Total theoretical liability (\$m)	1,438	1,643	1,422	1,510
<b>4.7</b>	Gross gap (%)	14.0%	11.7%	12.6%	11.7%
<b>4.8</b>	<b>Net gap (%)</b>	<b>6.8%</b>	<b>10.5%</b>	<b>9.8%</b>	<b>8.4%</b>

## Calculation – medium business companies

The following 5 step bottom-up regression is applied to estimate the medium company tax gap.

### Step 1: Apply a logistic regression

We analyse the tax return data of companies that have been subject to amendment activities to identify relevant demographic and financial variables that would contribute to the prediction of whether or not businesses have a tax gap.

The observations for these variables are then weighted based on the businesses' propensities of being selected for compliance activity before being included in the logistic regression that models the probability of a company being non-compliant.

We then undertake a Monte Carlo simulation to determine each company's binary status of being either compliant or non-compliant.

### Step 2: Apply a linear regression

We analyse the tax return data of known non-compliant companies to identify characteristics of businesses that would contribute to the

prediction of the tax gap size if the company were found to be non-compliant.

We apply weights to account for selection bias. Then we apply the linear regression to each company to estimate the potential size of the tax gap.

The key difference between steps 1 and 2 is that step 1 calculates the likelihood of a company having a tax gap while step 2 calculates the size of each company's potential tax gap.

### **Step 3: Combine the results from the 2 regressions**

We calculate the estimated unreported tax amount for each simulation by adding together the non-compliance amounts from step 2 for all non-compliant businesses predicted in step 1.

We estimate total unreported tax (including amendments) by taking an average of the results from 20,000 simulations.

### **Step 4: Apply a non-detection uplift factor and non-pursuable debt**

We uplift the estimates preceding this step to account for non-compliance that is not detected. This results in a final estimate that has a lower likelihood of understating the true size of gap in the system, which is not directly observable.

We also add in the value of non-pursuable debt. This is debt that the Commissioner of Taxation has assessed as:

- not legally recoverable
- uneconomical to pursue
- unable to be pursued due to another Act.

### **Step 5: Consolidate the tax gap estimates**

We calculate the gross gap by adding the unreported amounts from step 3 to the non-detection uplift and non-pursuable debt from step 4.

We calculate the net gap by subtracting the total amendment amount from the gross gap. Then we add the net gap to the expected collections to estimate the total theoretical liability.

**Table 3: Summary of the estimation process for medium business**

Step	Description	2016–17	2017–18	2018–19*	2019–20*
<b>1–2</b>	Total population (count)	31,717	32,764	33,794	34,480
<b>3</b>	Total expected amendments (\$m)	646	645	615	675
<b>4.1</b>	Non-detection (\$m)	323	322	308	338
<b>4.2</b>	Non-pursuable debt (\$m)	58	55	55	58
<b>5.1</b>	Gross gap (\$m)	1,027	1,023	979	1,068
<b>5.2</b>	Amendments (\$m)	200	176	157	133
<b>5.3</b>	Net gap (\$m)	827	847	822	935
<b>5.4</b>	Expected collections (\$m)	11,639	11,750	11,056	11,760
<b>5.5</b>	Total theoretical liability (\$m)	12,466	12,597	11,878	12,703
<b>5.6</b>	Gross gap (%)	8.2%	8.1%	8.2%	8.4%
<b>5.7</b>	<b>Net gap (%)</b>	<b>6.6%</b>	<b>6.7%</b>	<b>6.9%</b>	<b>7.4%</b>

Find out more about our research methodology, data sources and analysis used for creating our tax gap estimates.

## Limitations

The following caveats and limitations apply when interpreting this tax gap estimate:

- There is a considerable delay between an income year and the completion of our compliance activities for that year. This means gap estimates are subject to revisions for a considerable period. Amendment results for companies and individuals are projected for 2019–20 to 2021–22. They are expected to be subject to revisions over coming years. Provisions are made for non-pursuable debt for all years, excluding 2016–17.
- There is no independent data source that can provide a credible or reliable macroeconomics-driven estimate (unlike indirect taxes).
- The true extent of non-detection is unknown and is extremely challenging to measure. There is no international proxy we can apply to the individuals or companies in this population.


## Updates and revisions to previous estimates

Each year we refresh our estimates in line with the annual report. Changes from previously published estimates occur for a variety of reasons, including:

- improvements in methodology
- revisions to data
- additional information becoming available.

The updated net gap percentages for medium business – individuals for this year are slightly higher using the regression model (formerly EVT) with a combination of logistic and Poisson Pseudo Maximum Likelihood (PPML) regression models.

**Figure 2: Comparison of previous and current net tax gap estimates (%), 2012–13 to 2021–22**

 Figure 2 shows the net medium business tax gap estimates from previously published years, as outlined in Table 4.

This data is presented in Table 4 as a percentage.

**Table 4: Current and previous net medium business income**

Year	2012–13	2013–14	2014–15	2015–16	2016–17
2024 program	n/a	n/a	n/a	n/a	6.7%
2023 program	n/a	n/a	n/a	6.7%	7.1%
2022 program	n/a	n/a	6.7%	5.9%	7.1%
2021 program	n/a	5.7%	6.2%	6.2%	6.3%
2020 program	6.3%	6.1%	6.4%	6.6%	6.8%

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# Reliability


How we make sure the tax gap estimate is reliable.

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We seek feedback and advice about how we estimate the gap from our external and internal subject matter experts. Based on the advice, the reliability for this estimate is **medium** with a score of 19.

While the current method is considered acceptable, it is possible to use a random enquiry model on this population. This would provide more granular insights into the gap estimate and overall compliance for this population. In addition, this year's gap estimates maintain the current approach to debt, underestimating the final gap estimate. As a result, we have examined more closely the reliability rating to reflect this. For this gap we have downgraded the overall reliability rating but it still remains medium.

**Figure 3: Reliability rating scale from very low to very high – medium business income tax gap**

Figure 3: This image shows a graph that represents the reliability rating for the current medium business tax gap estimate. The rating scale includes: - Very low which is a score between 0 and 10 - Low which is a score between 11 and 15 - Medium which is a score between 16 and 20 - High which is a score between 21 and 25 - Very high which is a score between 26 and 30. The graph shows the medium business gap estimate has a rating of 19, which is medium.

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