Canada Revenue Agency | Agence du revenu du Canada

TAX ASSURED AND TAX GAP FOR THE FEDERAL PERSONAL INCOME TAX SYSTEM

Canada

Contents

Executive Summary

- Acting on the Minister of National Revenue's commitment to work to estimate the tax gap, in June 2016, the Canada Revenue Agency (CRA) released two reports: *Tax Gap in Canada: A Conceptual Study, and Estimating and Analyzing the Tax Gap Related to the Goods and Services Tax/Harmonized Sales Tax.*[1]

    - The first report examined key considerations for tax administrations undertaking tax gap estimation, outlined the approaches used by tax administrations in other countries, and discussed the advantages and limitations of tax gap estimation.

    - The second report was prepared by the Department of Finance and examined the tax gap for Canada's Goods and Services Tax/Harmonized Sales Tax (GST/HST). It estimated that on average, between 2000 and 2014, 5.6% of potential GST/HST revenues were foregone due to non-compliance.

- Building on these previous reports, this paper reviews the personal income tax system and provides an in-depth analysis of the level of compliance with Canada's federal personal income tax laws using the concepts of tax assured and tax gap. Tax assured is a concept developed by the Organisation for Economic Co-operation and Development (OECD), which identifies portions of the tax base where the tax administrator has assurance of a low risk of non-compliance. The tax gap indicators presented in this report include the tax gap related to the non-payment of personal income taxes, and the gap resulting from unreported income earned in the domestic underground economy (UE).

- In reviewing the key systemic features of the personal income tax system, this paper finds that extensive third-party information reporting in combination with other features contribute to a tax base that is largely assured or at low risk of non-compliance with minimal direct CRA intervention. For the 2014 tax year, the reports finds that 86% of income assessed, 74% of deductions reported and 83% of credits claimed were assured.

- These findings support CRA's risk-based compliance strategy which aims to minimize compliance burden for the vast majority of taxpayers reporting correctly while dedicating valuable resources to high-risk areas.

- Using tax gap analysis, this report then estimates: 1) assessed taxes not collected by the CRA at about $2.2 billion for the 2014 tax year; and, 2) the contribution of domestic unreported income earned in certain key UE activities to federal tax loss at about $6.5 billion in the 2014 tax year. Combined, these tax gaps amount to $8.7 billion or 6.4% of personal income tax revenues in 2014.

- Of note, self-employment income is a completely non-assured income base, due to a near-complete lack of third-party reporting and a more complex reporting process. As well, the analysis in this paper suggests that self-employed individuals may contribute

[1] The two reports can be found at these links: http://www.cra-arc.gc.ca/gncy/tx-gp/menu-eng.html, http://www.cra-arc.gc.ca/gncy/stmtng-nlyzng-tx-gp/stmntg-nlyzng-tx-gp-eng.html

disproportionately to tax loss resulting from UE activity. While this does not mean that all self-employment income is reported inaccurately, it is at higher risk of reporting non-compliance, be it unintentional or intentional. Such findings have helped inform CRA outreach and the design of compliance efforts in this area of higher compliance risk.

- This report does not estimate the international component of the tax gap. The CRA is carefully studying the matter and is committed to producing a study on this issue in 2018.

1. Introduction

An effective personal income tax system depends on taxpayers reporting and paying the right amount of tax at the right time. While a significant majority of Canadians do meet this standard, some do not. Whether intentional or not, this non-compliant behaviour can lead to a tax gap.

The tax gap represents the difference between the taxes that would be paid if all obligations were fully met in all instances, and the tax actually paid and collected. As a tool, tax gap estimates, combined with other data on non-compliant behaviour, can provide tax administrations and governments with valuable insights into the general health of the tax system and the levels of non-compliance with tax laws.

Building on the research presented in previous reports, this paper will review the key characteristics of the personal income tax system and provide an in-depth analysis of the level of compliance with Canada's federal personal income tax laws using the concepts of tax assured and tax gap.

As discussed in the conceptual tax gap paper published in June 2016, direct tax gaps like income tax gaps are best measured using bottom-up methodologies that rely on a tax administrator's internal administrative data to estimate the amount of taxes theoretically owing. A statistically representative sub-set of taxpayers is used to estimate non-compliance, usually through a random audit program, and the results are then extrapolated to the full taxpayer population to produce a tax gap estimate.

While the CRA does have a random audit program to estimate non-compliance for small- and medium-sized businesses (both the self-employed individuals and incorporated businesses), the CRA's compliance strategy for personal income taxes does not include a comprehensive random audit program that covers the remainder of the individual population. Instead, the CRA applies a risk-based approach to compliance efforts, audits and review processes, and dedicates resources to targeted audits where the risk of non-compliance is greater. This approach helps to minimize the compliance burden on taxpayers, while ensuring a high degree of compliance.

In light of the above, this paper takes the following complementary approaches to analyzing personal income tax non-compliance. It first uses a tax assured framework to identify the portions of the assessed tax base that are at low risk of non-compliance. The tax assured concept was coined by the Organisation for Economic Co-operation and Development (OECD)[2] as being a "very strong measure because it summarises information on core compliance outcomes. It demonstrates where there is voluntary compliance, which is just as useful as identifying where there is non-compliance." The tax assured analysis presented in this paper involves identifying income, deduction and credit amounts that are assessed and verified by the CRA by matching information reported by

[2] OECD, Measures of Tax Compliance Outcomes: A Practical Guide, 2014.

taxpayers with information provided by arm's-length third parties (e.g., T4 slips issued to employees by their employer).[3] It is worth noting that our definition of tax assured is a conservative one in that the CRA carries out a number of verification activities beyond matching of third-party information that also lower the risk of non-compliance prior to intervention, but which are not added to tax assured amounts. Nevertheless, about 86% of income assessed in 2014 was considered tax assured. While the remaining 14% of income was considered to be at a higher risk of non-compliance than assured income, it does not necessarily mean it was reported inaccurately as it would have been subject to other compliance activities.

To discuss federal tax loss due to non-compliance, the report uses tax gap analysis to estimate assessed taxes not collected by the CRA, and to estimate the contributions to the tax gap of unreported income earned in the underground economy (not detected by the CRA).

Overall, this report finds that a relatively high proportion of amounts reported to the CRA is assured or reported accurately with minimal CRA intervention. The findings are consistent with CRA's risk-based compliance strategy which has the objectives of minimizing compliance burden on the vast majority of taxpayers reporting correctly while dedicating valuable resources in high-risk areas.

The report also finds the tax gap related to the activities of the underground economy within the scope of this report to be about $6.5 billion while the gap related to payments is estimated to be about $2.2 billion for the 2014 tax year. Combined, these gaps amount to $8.7 billion, 0.4% of GDP or 6.4% of personal income tax revenues in 2014.

Of note, this report does not estimate the international component of the tax gap. The CRA is carefully studying the matter and is committed to producing a study on this issue in 2018.

The report is organized as follows. Section 2 first reviews the fundamental features of the personal income tax administration system, types of non-compliance and how to measure compliance. Section 3 presents the report's first set of compliance indicators: tax assured indicators that reflect CRA's confidence that tax information is reported correctly. This discussion complements the subsequent discussion of a second set of indicators: tax gap estimates. Section 4 presents an estimate of the payment gap and section 5 presents estimates of the tax gap related to income earned in the underground economy. Concluding thoughts are presented in Section 6.

[3] See Annex 3 for additional details.

2. Canada's Self-Assessment System for Personal Income Taxes

> *"A well-functioning tax system is the foundation stone of the citizen-state relationship, establishing powerful links based on accountability and responsibility."*[4]
>
> **Angel Gurría, Secretary-General, Organisation for Economic Co-operation and Development**

To maintain an efficient and effective tax administration system, it is important that personal income tax obligations be well understood by Canadians, and that the CRA be able to identify, monitor and address areas at risk of potential tax loss. This is even more critical given the reliance on personal income tax revenues to fund programs and services to Canadians. The federal Budget 2017 projects personal income tax revenues to be the largest source of federal revenues in 2016-17, accounting for $143.2 billion – or almost 50% of total federal government revenues.[5]

This section reviews the fundamental features of the personal income tax administration system, types of non-compliance, as well as the CRA's compliance actions to protect the integrity of the tax base.

2.1 Self-Assessment System

Filing a tax return every calendar year is a legal obligation for many Canadians. Individuals are generally required to file an Income Tax and Benefit Return (T1 Return) if they have any tax payable in a given tax year and to pay these amounts by April 30 of the following tax year. The CRA processes about 27 million returns each year.

Canada's personal income tax system is based on self-assessment – like in many developed countries around the world. Under a self-assessment system, individual taxpayers are responsible for ensuring the information they report on their tax returns is accurate and complete. Individuals must report all sources of taxable income[6], such as income from employment, investment, and self-employment, and the taxpayer is responsible for claiming any deductions and tax credits to which they are entitled.

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[4] Brochure, OECD Work on Taxation, 2016-17. (http://www.oecd.org/tax/centre-for-tax-policy-and-administration-brochure.pdf)

[5] Federal Budget 2017.

[6] Canadian residents are required to report income earned in Canada as well as income earned from abroad while non-residents are required to report income earned in Canada. Canadian residents may be able to claim a credit if foreign taxes were paid on income received from outside Canada and reported on the Canadian tax return. In general, non-residents of Canada are required to pay tax on income received from sources in Canada, such as income earned in Canada if they are employed in Canada, carry on a business in Canada, or have disposed of taxable Canadian property, subject to any tax treaties Canada has signed with the countries of residence of these individuals.

In the absence of adequate administrative controls, a self-assessment system may be susceptible to higher levels of non-compliant behaviour. This non-compliance can take the form of deliberate acts of tax evasion or honest mistakes in interpretation and calculation. To help mitigate these risks, Canada's self-assessment system is supported by accessible client services and information products, extensive withholding and instalment requirements, a strong mandatory third-party reporting regime, the use of advanced digital technologies for administrative and intelligence-gathering purposes, and a robust risk-based approach to the identification and correction of non-compliance.

- *Client Services and Information Products*: In a self-assessment system, the CRA must provide timely and accurate information to taxpayers to help them meet their tax obligations and receive the benefits to which they are entitled. The CRA uses its website as its principal means of communication, while also using other channels such as social media, written communication, and call centres.

- *Withholding/Instalments*: Income taxes are required to be withheld at source for most forms of income in Canada, including employment and pension income. The payer (for example, an employer) withholds income tax from sums paid to the employee and remits them to the Government of Canada on the payee's behalf (in this example, the employee). When the income earned has no tax withheld or does not have enough tax withheld for more than one year, individuals may be required to pay tax by instalment. The need to pay by instalments is often triggered when an individual is in receipt of income which is not deducted at source such as rental income, investment income, or self-employment income.

- *Mandatory third-party reporting*: Third parties are required to report certain types of payments made to individuals directly to the CRA. For instance, employers providing T4 slips to employees regarding their employment income, and organizations providing T5 slips to individuals receiving certain types of investment income, are both required to file this information directly with the CRA. This regulated system of third-party reporting allows the CRA to verify income reported by individuals on their tax returns by matching it against information from these third parties. This process is called "data matching" (see Section 3 for more details).

- *Use of Technology*: The CRA is continuously refining its capability to detect and address suspected non-compliance by employing new and emerging tools. Using advanced analytics, the CRA can gather information from different sources to identify potential instances of non-compliance and focus the deployment of its resources for compliance follow-up. To stop non-compliance before it occurs, the CRA has employed new tools to conduct predictive analysis, which uses historical data as a basis for predicting taxpayers' behaviour. These techniques have been applied by the CRA, for example, to identify non-filers and to design more effective strategies for dealing with tax debtors.

- *Risk-based compliance review*: The CRA carries out a number of activities to assess non-compliance risk and aims to select the most appropriate interventions to address a given type of non-compliance risk. This means that the CRA usually employs the least intrusive and most efficient approach to encourage taxpayers to comply with their tax obligations, while coercive enforcement interventions are reserved for those who do not intend to comply. This risk-based approach also underlies the CRA's audit interventions. Overall, this contributes to the overall cost effectiveness of tax administration by allowing the CRA to focus the bulk of its resources on areas of greater risks.

These five key features of Canada's self-assessment system are critical for maintaining an efficient and effective tax administration. They also help to minimize the compliance burden on taxpayers, while ensuring a high degree of compliance.

Box 1: Advanced Analytics at the Canada Revenue Agency

The Agency uses advanced statistical techniques to leverage its data holdings in order to efficiently fulfil its mandate of ensuring compliance and improving services for Canadians. In particular, advanced analytics allow for a better focus of resources to target material non-compliance with the most appropriate interventions, while maximizing outreach to taxpayers through education and assisted compliance treatments.

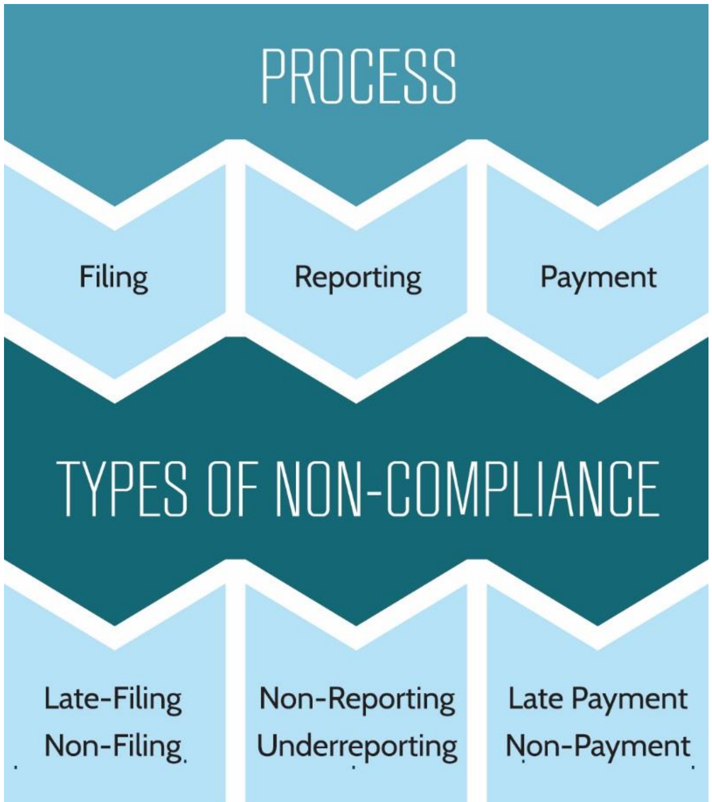
The Agency employs a range of analytical techniques including descriptive analytics, prediction, and prescriptive analytics. For example, predictive modelling techniques leverage knowledge from available data to predict taxpayer non-compliance behaviours. The application of these analytical techniques significantly enhances the ability to identify risks and to develop strategies that address non-compliance in specific segments of the population.

2.2 Compliance Activities

The CRA's compliance activities help to protect the integrity and fairness of Canada's self-assessment system by identifying and dealing swiftly with those who do not file when required, do not accurately report income, deductions and credits, or do not pay what is due when it is due. Compliance interventions follow an escalating approach, from encouraging compliance to enforcing it. The interventions seek to positively influence compliance attitudes through targeted taxpayer outreach, by providing high quality and easily accessible client services, and through ongoing awareness and education campaigns. The CRA also conducts examinations, audits, and investigations domestically and internationally to ensure individuals are in compliance with their tax obligations.

Compliance challenges are present at the three key stages in the tax administration process – filing, reporting and payment (Figure 1).[7] Each of these three types of non-compliance are discussed below.

Figure 1: Stages in the Tax Administration Process and Types of Non-compliance



2.2.1 Late-filing/Non-filing

As the Canadian income tax system for individuals is based on self-assessment, the first instance of non-compliance arises when individuals do not file their tax returns. There are many reasons why individuals do not file tax returns even when they are required to do so. Apart from those who consciously decide not to file to avoid paying taxes, some individuals may not be aware of their legal obligation to file, may not know how, or may forget. Late-filing is also a form of filing non-compliance and late filers are charged interest and/or assessed a penalty based on their outstanding tax debt and how late the return is received.

There are several dedicated CRA programs aimed at identifying non-filers and encouraging them to comply with their tax obligations. These programs identify individuals who have not filed a return but have had a previous reporting relationship with the CRA or who have third-party-reported amounts, and are determined likely to have taxes owing. In general, the CRA's enforcement actions begin with letters asking or demanding the taxpayer to file. If unsuccessful, compliance actions may

[7] While there are other stages in tax administration for businesses, including registration, withholding and remitting, these are either outside the scope of this report or are subsumed by the tax gaps presented in this report.

escalate and take the form of calls or visits to the taxpayer's home or place of business. If, despite these efforts, an individual still does not file, the CRA may assess an individual's tax liability based on available information[8] or the non-filer may be served a legal requirement to file. Failure to comply with a legal requirement can result in prosecution.

2.2.2 Non-reporting/Under-reporting

Once individuals have filed their returns, a second potential compliance challenge arises in regards to reporting. Individuals may fail to provide complete and/or accurate information in their tax return by under-reporting income, over-stating deductions, and/or claiming credits they are not entitled to. Reporting non-compliance can be intentional or unintentional.

To ensure that returns are filed correctly, the CRA undertakes the following steps in the processing of returns.

- First, once returns have been filed with the CRA, they are reviewed for apparent errors and omissions.
- Second, certain files are selected for a secondary review based on level of risk, using selection criteria such as amount of the claim, tax potential, and the taxpayer's compliance history.
- Third, once issues are resolved, the CRA processes the return and sends taxpayers Notices of Assessment, which explain the details of any changes made by the CRA to their returns, and indicate tax refund amounts or the amount of taxes owing.
- Fourth, certain returns are flagged for re-examination or audit. This could be the result of returns having a certain risk profile, based on random selection, or at the request of the taxpayer (who, for instance, has additional information to provide). This may require that the CRA reach out to the taxpayer to request additional information.
- Lastly, the CRA re-assesses the taxpayer's return based on any additional information received or uncovered during the re-assessment process. Taxpayers who are re-assessed are issued a Notice of Re-Assessment.

Section 3 of this report provides additional details about the reporting stage.

[8] Under subsection 152(7) of the *Income Tax Act*.

Box 2: Compliance Challenges related to Technological Change

The increased availability of technology has changed how individuals engage in economic activity and participate in the labour market. It has also increased the potential speed of these transactions and the distance over which they can occur. One example of this is the recent expansion of the "sharing economy", in which individuals pool, loan and share their resources through networks of trust. These networks are supported by today's social, digital, mobile and location-based technologies that allow users to easily connect, exchange reviews, build reputation, and pay and receive funds. While these developments may create new compliance risks for the CRA to monitor and manage, advances in technology also have the potential to make it easier for taxpayers to self-assess and pay their taxes.

High net worth individuals

Aggressive tax planning represents a significant threat to the tax base in Canada and in other countries. While some high net worth individuals may have genuinely complicated affairs that make it difficult to ensure they comply fully with their tax obligations, some wealthy individuals and related parties use private corporations and/or complex schemes to purposefully and inappropriately reduce or defer tax.

> *"High net worth individuals pose significant challenges to tax administrations because of the complexity of their affairs, their revenue contribution, the opportunity for aggressive tax planning and the impact of their compliance behaviour on the integrity of the tax system."*
>
> ***OECD, Engaging with High Net Worth Individuals on Tax Compliance, 2009***

The CRA is committed to combatting aggressive tax planning schemes used by individuals. In particular, the government has recently expanded the scope of a key audit program focussed on high net worth individuals and their related entities. The Related Party Initiative (RPI) was enhanced in Budget 2016 to include new risk assessment strategies and additional audit teams. The RPI is responsible for identifying and managing high-risk compliance issues involving high net worth individuals and their related entities. In this context, these individuals are considered to be those who alone, with family, or together with related entities control business activities in multiple entities and control at least $50 million of net worth. The RPI program reviews the tax risk of the entities within these corporate webs including a thorough risk assessment of the high net worth individual and related entities. This holistic approach is undertaken by examining the role of the various corporations, personal trusts, private foundations, joint ventures, and partnerships in the structure as well as evaluating the impact of offshore activities or investments.

Compliance issues detected through these reviews have been diverse including a wide range of complex and tailored tax avoidance arrangements.

To the extent that high net worth individuals engage in offshore activities, other CRA projects and initiatives are underway to curb offshore tax evasion and aggressive tax avoidance, including:

- Reviewing high-value money transfers as they cross borders to and from Canada and studying specific offshore locations and certain financial institutions;
- Collaborating and sharing information with international partners, through work with the OECD, aimed at promoting international tax standards, reducing tax barriers, and increasing transparency around global tax issues; and,
- Identifying international non-compliance and abuses through the exchange of information facilitated by Tax Information Exchange Agreements and through the multilateral Convention on Mutual Administrative Assistance in Tax Matters.

Box 3: Tax Avoidance

Tax avoidance is a challenging piece to fit into the compliance measurement framework. Tax avoidance occurs when actions are taken to minimize tax, and when – while within the letter of the law – those actions contravene the intent and spirit of the law. In contrast, tax evasion typically involves deliberately contravening a specific part of the law in order to reduce tax liability. Tax evasion, unlike tax avoidance, has criminal consequences. Due to the highly complex nature of certain transactions, however, it can be difficult to distinguish between tax avoidance and evasion based on the information immediately available to tax administrations.

The CRA uses a variety of strategies to combat aggressive tax avoidance including monitoring tax avoidance trends and adapting approaches to auditing to include reviews of potential avoidance issues. The specific anti-avoidance rules in the *Income Tax Act* and the General Anti-Avoidance Rule provide the CRA with legislative mechanisms to identify and reject incorrect tax benefits claimed and other tax arrangements that might comply with a literal interpretation of the legislation, but are not in accordance with the object, spirit, or intent of the law.

Tax avoidance cases identified by the CRA can end up in dispute when individuals file objections against the CRA's interpretation of the tax treatment of certain personal income, deductions, or credits. Should individuals disagree with the outcome of the CRA's internal objection process, they can appeal it through the court system. While individuals generally do not need to pay income tax amounts in dispute until the CRA's review or the relevant court decision has been rendered, interest charges continue to accrue during these periods on outstanding amounts. Should the courts decide in the disputing individuals' favour, however, they will not be liable for any of the amounts that were successfully disputed, or any related penalties or interest charges.

Self-employed individuals

Since self-employment income is not subject to third-party information reporting or withholding requirements, it is at a relatively higher risk of not being reported accurately. The CRA may not be able to detect this income other than by targeted intervention. As well, the deductions that can be claimed against this income are generally not reported by third parties and therefore generally cannot be *data matched* by the CRA.

As for the general population, the overall compliance strategy for the self-employed is about applying the right intervention for the risk. Interventions are tailored to detect, address, and facilitate compliance and deter non-compliance. The CRA dedicates resources to the audit and verification of returns filed by the self-employed. Because many self-employed individuals do not have sophisticated internal controls, books or records akin to those maintained by corporations, the CRA often relies on indirect techniques to detect and verify income and expenses.

The CRA also carries out random audits focussed on certain self-employed individuals in order to validate existing risk profiles and to detect emerging trends. Random audit results can be applied to the population studied even though only a small sample of the population has been audited.

For example, the CRA conducted a T1 Small and Medium Enterprises Research Audit Program (T1 SME RAP) during fiscal years 2011-2012 and 2012-2013 using a representative sample of individuals reporting self-employment income[9] for the 2009 tax year. The sample included about 4,700 individuals who were randomly selected for the T1 SME RAP. The main objectives of the program were to establish non-compliance rate estimates by industrial sector, and to validate and refine risk assessment systems.

Results from the T1 SME RAP show that if all 2.2 million self-employed individuals covered by the study had been audited, between $2.4 billion and $3.0 billion[10] (2009 dollars) in additional federal tax revenues would have been assessed. The T1 SME RAP results cannot be extrapolated to self-employed individuals who did not file or did not report self-employment income.

The results also indicate that slightly over half of the filers in the sample made reporting errors (or alternatively, slightly under half did not make any reporting errors) and more than 90% of the files with errors had a change in federal tax payable. The average amount of federal tax adjustment was $1,224 (2009 dollars) with about 12% of files accounting for over 70% of the adjustments.

It is also important to note that most adjusted files contained errors identified as unintentional. This result highlights the importance of CRA outreach efforts to small businesses to inform them of their tax obligations. In this regard, in addition to traditional compliance measures such as audits, the CRA has a number of initiatives in place to encourage compliance amongst the self-employed in situations where the non-compliant behaviour may be unintentional and compliance can be facilitated through education, outreach or assistance. This type of preventative approach underlies the following:

- **The Liaison Officer Initiative (LOI):** The LOI is designed to help small businesses meet their tax obligations. The initiative provides taxpayers with education and support to comply

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[9] The population covered by this program included individuals reporting self-employment income, excluding those earning commissions, and included individuals earning rental income in excess of $125,000.

[10] This represents a 95% confidence interval.

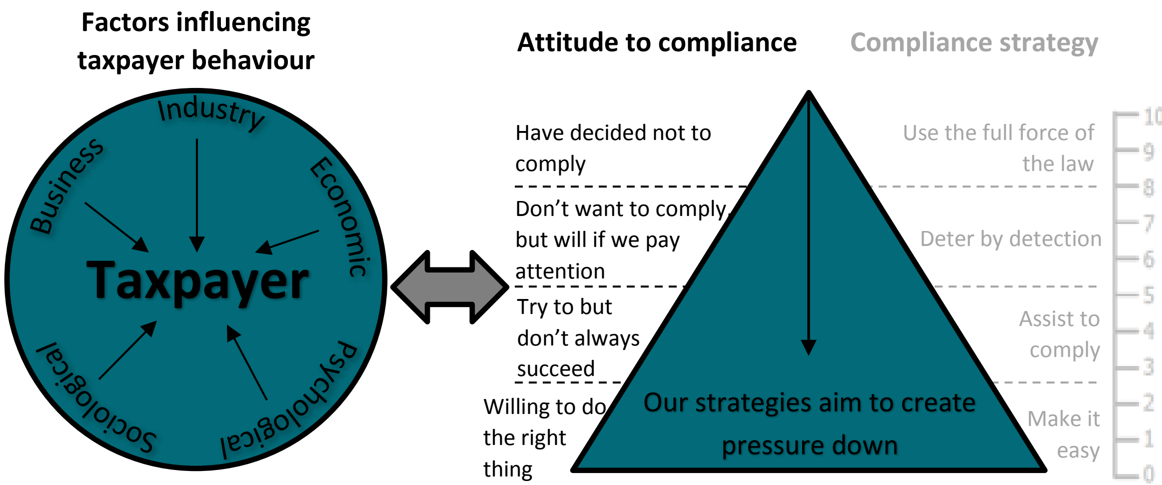
with tax requirements. A visit from a liaison officer does not constitute an audit and will not result in any CRA-driven changes to past tax filings. The focus of the LOI is to help businesses get it "right from the start" by providing them with in-person support and guidance at key moments of their business life cycle.

- **Industry Campaign Approach:** The CRA works with industry associations to provide businesses with sector-specific tax information that will help them to comply with their tax obligations. The objectives of the program are to:
    - Develop enhanced relationships with selected industry sectors;
    - Provide more useful information and education for businesses on how to avoid potential tax pitfalls; and,
    - Direct taxpayers to useful industry benchmarks that businesses may find helpful in assessing their financial performance in comparison to others in the same sector.
- **Office Audit Letter Campaigns:** The CRA has yearly letter campaigns to inform selected taxpayers about their tax obligations and to encourage them to correct any inaccuracies in their past income tax and benefit returns. As part of these campaigns, educational letters are mailed to certain individuals in selected activity groups where taxpayers are at risk of misunderstanding their tax obligations.

2.2.3 Late payment/Non-payment

Payment non-compliance arises when individuals have tax owing that they do not pay in full or at all by the payment deadline, which is April 30 of the year following the tax assessment year. The CRA takes a firm and efficient approach to collecting outstanding payments from tax debtors. In addition to charging interest on the outstanding debt, the CRA uses various escalating compliance activities that could lead to penalties or legal action if taxpayers do not settle their debts or make payment arrangements with the CRA.

Box 4: Approach to Compliance Activities



Source: OECD, Forum on Tax Administration Committee on Fiscal Affairs, Compliance Sub-group, GUIDANCE NOTE *Compliance Risk Management: Managing and Improving Tax Compliance*, October 2004

The CRA's compliance efforts are activities that aim to reduce non-compliance in order to preserve fairness, integrity and public trust in the tax system. A diverse set of strategies and processes are used by the CRA - ranging from internal verifications, audits, outreach and letters - based on the varied attitudes of individuals towards compliance.

These attitudes are not fixed and may be present to differing degrees and/or simultaneously. What is clear, however, is that compliance efforts will need to differ, depending on the specific attitude that is underlying the non-compliant behaviour, in order to be effective. In general, the more entrenched the attitude towards non-compliance, the more coercive the compliance strategy is needed to be effective.

2.3 Compliance Indicators

This report uses two types of indicators to illustrate the scope of non-compliance of individuals. First, the report presents indicators for the part of the tax base that is considered assured and wherein the CRA has a high level of confidence that taxes are correctly being assessed. Second, using tax administration data and other data sources, the report estimates tax gaps resulting from certain types of non-compliance. Tax gap analysis has been conducted in recent years by some tax administrations in other countries to help understand the extent of tax revenue loss due to non-compliance. These indicators, and their use in the present paper, are considered below.

2.3.1 Assurance Indicators

> *"Tax assured measures the proportion of the tax base where the revenue body has "justified trust" through its activities or others' activities that tax is "under control" and so assured as accurate and paid."*
>
> ***OECD, Measures of Tax Compliance Outcomes, 2014***

Indicators of tax assured identify the part of the revenue base in which the tax administration has a high level of confidence that the risk of non-compliance is low. This confidence needs to be tested over time, as risks change.

This report defines portions of the tax base as assured where the CRA determines that amounts reported are at low risk of non-compliance. This judgement is made based on whether amounts are either subject to arm's-length third-party information reporting or are legislated fixed claim amounts.[11] Third-party information allows the CRA to conduct data matching to identify and correct unreported or misreported income, or over/understated tax deductions and credits, based on information received independently of the taxpayer with minimal direct intervention. In this way, the CRA can have a relatively high degree of confidence in the reporting compliance/accuracy of amounts reported on a tax return that are verified and corroborated by data-matching. It is important to emphasize that non-assured components are not necessarily wrong or non-compliant; they are, however, not subject to data-matching and are at higher risk of non-compliance. Identifying the non-assured tax base allows the CRA to target its efforts at areas of greater risk of non-compliance.

We would note that our definition of assured for this analysis is a conservative one in that the CRA carries out a number of verification activities beyond data matching that add to enhance its confidence that taxpayers are reporting correctly.

2.3.2 Tax Gap Estimation

Broadly defined, the tax gap is the difference between the tax that would be paid if all obligations were fully met in all instances, and the tax actually paid and collected. Tax gap estimates are a function of the existing tax framework and of the quality of data available.

Direct tax gaps, including income tax gaps, are generally best estimated using a bottom-up methodology. Such an approach uses relevant individual-level data, which is most efficiently acquired through a comprehensive random audit program. The results of a random audit of a representative sample of the T1 population could be extrapolated to the T1 population as a whole and provide a statistically reliable and precise estimate of tax loss.

While the CRA does have a random audit program to estimate non-compliance for small- and medium-sized businesses (both self-employed individuals and incorporated businesses), the CRA's compliance strategy for personal income taxes does not include a comprehensive random audit program that covers the remainder of the individual population. This is in part due to the fact that

[11] See Annex 3.1 for more details.

random audit programs are resource-intensive and can subject taxpayers, many of whom may be fully compliant, to a high degree of scrutiny. Instead, the CRA's internal research and the design of most of its compliance efforts are risk-based.

Box 5: Random vs. Risk-based Audits

Random audits: Every individual in the tax-filing population has an equal chance of being selected for audit, regardless of the likelihood of their non-compliance. Selected individuals are audited to determine the extent of non-compliance and where non-compliance is occurring. If the sample size is sufficiently large and representative, results of audited files can be generalized to the entire population.

Risk-based audits: Audits are usually targeted at a particular sub-set of the population that has been determined to be at high risk of non-compliance. Individuals in this sub-population have common characteristics which may make them more likely to be selected for audit. These audits help to identify the extent and nature of non-compliance and results are used to inform the CRA's compliance efforts for that particular sub-set of the population. However, these findings cannot be reliably extrapolated to the general population.

Given relatively high compliance across the overall T1 population (as discussed in the subsequent sections), the CRA's audit efforts tend to focus on known higher-risk segments of the population. While random audits could have a general deterrence effect against non-compliance or could help identify emergent issues, they can be resource-intensive, intrusive for low-risk groups, and generally recover less tax revenue for the same level of investment compared to risk-based audits. However, carefully targeted audit programs are an effective alternative to random audits for identifying emerging trends in non-compliance.

3. Assured T1 Tax Base

In carrying out its mandate, the CRA strives to ensure that all individuals pay their required share of taxes, receive the benefits they are entitled to, and have avenues to seek an impartial and responsive review of contested decisions. To achieve these goals, the CRA has built a tax administration system aimed at ensuring that taxpayers report income correctly and abide by the rules.

In order to preserve the integrity of the system, it is critical that the CRA have appropriate indicators to monitor compliance and address sources of non-compliance. This section develops and presents a series of tax assured indicators based on the OECD framework on tax assured. According to the OECD, tax assured is a conceptually robust indicator of compliance which measures "the proportion of the tax base where the revenue body has "justified trust" through its activities or others' activities that tax is "under control" and so assured as accurate and paid". This report defines the portions of the tax base as assured where the CRA has confidence that amounts reported by taxpayers are at low risk of non-compliance because these amounts are subject to arm's-length third-party reporting and data-matching by the CRA, or are fixed amounts specified in legislation (for instance, the basic personal amount).

3.1 Income Reporting and its Verification

One of the key characteristics of Canadian personal income tax administration is the important role played by the extensive system of arm's-length third-party reporting of information. This means that a significant amount of information required to be reported by individuals on their T1 Return is collected from information slips received directly by the CRA from third parties. For example, the CRA has access to:

- T4 slips issued to employees by their employer, with a record of salary or wages paid and taxes, contributions to Employment Insurance (EI) and the Canada Pension Plan (CPP), and other amounts withheld;
- Annual information returns filed by financial institutions for Registered Retirement Savings Plans (RRSP) contributions made by an annuitant, or her/his partner;
- T4A(P) issued to individuals receiving CPP benefits;
- T3 slips issued to individuals for income and credit amounts designated to them by a trust (a fiduciary relationship in which an individual gives other parties the right to hold title to property of assets for their benefit); and,
- T5 slips issued by financial institutions on investment income earned by individuals.

One of many reviews conducted by the CRA aimed at monitoring compliance and ensuring the integrity of the Canadian tax system is the T1 matching process. Information on slips filed with the CRA by third parties, and information filed by individuals' spouses, is matched to the amounts reported by individuals on their return. The CRA is able to identify many errors and omissions made by individuals in respect of their personal income tax through this process. Re-assessments based on matching do not necessarily lead to an increase in the tax liability for the taxpayer, as they could also lead to a reduction in taxes or an increase in benefits. In fact, ensuring that Canadians have access to their tax benefits is a key priority for the CRA.

Much of the matching process is automated and is able to correct data entry errors or fill in missing information. The CRA's analytical models identify issues and automatically re-assess taxpayers. Although matching can confirm that the amount an individual reports is the same as what the third party reports, there is still a small risk of intentional or unintentional non-compliance. For example, an employer may unintentionally misstate amounts on an employee's T4, or an employer and employee might collude in a tax evasion scheme (e.g., whereby the employer reports only a portion of the employee's earnings).

For this analysis, we place the types of income that are required to be reported on the T1 Return into either assured or non-assured categories. Any lines of income that are subject to arm's-length third-party reporting, and therefore covered by the data-matching process, are considered assured (e.g., T4 employment income reported on line 101), while other lines that can only be corroborated by the taxpayers themselves or by sources of information other than arm's-length third-party information, are considered non-assured (e.g., self-employment income). Some lines have only portions that are subject to third-party reporting and therefore have both assured and non-assured components (for instance, capital gains).

Our analysis indicates that the CRA has justified trust that 86% of assessed income was reported accurately for the 2014 tax year (Figure 2) with minimal direct CRA intervention.[12]

Figure 2: Assured Income (2014 Tax year)

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html and Infodec data

Table 1 identifies the largest sources of income which are subject to third-party reporting and in which the CRA has justified trust that tax filers reported correctly, and those which it does not. Employment income is the largest source of assured income at 63% of total income assessed, with other pension and superannuation amounting to an additional 7%. This means that a majority of income reported by individuals is assured with little direct intervention by the CRA. On the other hand, the main contributions to non-assured income are dividend income (4%), self-employment income (4%) and income from capital gains (2%). These are the largest sources of income which the CRA is only able to verify with sources other than information slips.

It bears repeating that the 86% of income that is assured does not mean that the remaining 14% of income is being reported incorrectly. In this report, assured income is income for which information reporting and data-matching programs together provide the CRA justified trust that amounts are reported correctly with minimal intervention. By contrast, the remaining 14% of non-assured income are not subject to these same processes. As a result, the CRA does not have the same level of justified trust in the accuracy of this 14% of income reported and it is at higher risk of reporting non-compliance, especially before targeted interventions are carried out.

[12] 86% of income assured does not mean that a corresponding 86% of tax revenues are assured. The analysis above is based on income reported and assessed, not tax revenues collected. In particular, the progressivity of the tax system will affect the extent to which assured income is translated into assured tax revenues. For instance, to the extent assured income is earned by individuals taxed at a lower rate and non-assured income is earned by individuals in the top brackets, assured tax revenues as a share of total revenues will be less than 86%.

Table 1: Largest Sources of Income by Component (2014 tax year)[1]

	Number of Filers	$ (M)	% of Total Income Assessed
Assured Income			
Employment Income	17,241,930	809,809	63.3%
Other Pension or Superannuation	4,242,740	89,466	7.0%
Canada Pension Plan/Quebec Pension Plan Benefits	6,977,050	48,047	3.8%
Old Age Security Pension	5,463,770	33,401	2.6%
Employment Insurance and Other Benefits	2,433,370	17,297	1.4%
Top 5 Assured Income Sources		**998,020**	**78.0%**
Total Assured Income		**1,099,752**	**86.0%**
Non-Assured Income			
Taxable Amount of Dividends from Taxable Canadian Corporations[2]	3,154,900	56,412	4.4%
Net Income from Self-employment[3]	3,033,180	51,544	4.0%
Taxable Capital Gains[2]	2,699,490	26,873	2.1%
Other Income[2]	3,842,210	18,482	1.4%
Other Employment Income	2,401,880	10,861	0.8%
Interest and Other Investment Income[2]	4,086,210	7,728	0.6%
Top Non-Assured Income Sources		**171,899**	**13.4%**
Total Non-Assured Income		**179,407**	**14.0%**
Total Income Assessed		**1,279,157**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html and Infodec data

[1] Totals may not add due to rounding.

[2] Partially subject to third-party reporting.

[3] Assessed self-employment income can be negative. For the purposes of the T1 final statistics, net self-employment includes negative amounts, which are netted out when calculating the total overall net self-employment income.

3.2 Deductions and Credits

A number of deductions and credits are available to individuals to reduce their tax payable.[13] These deductions and credits often serve objectives internal to the tax system (for instance, to prevent double taxation or promote fairness of the tax system), as well as other policy objectives (to encourage savings/investment or support competitiveness). Under Canada's self-assessment system, individuals are responsible for determining their eligibility for these deductions and credits and claiming eligible amounts on their tax return that may reduce their tax owing. The following sub-sections discuss the extent to which these amounts are assured and the compliance activities undertaken by the CRA to determine if individuals are claiming the non-assured credits and deductions appropriately.

3.2.1 Assured Deductions and Credits

Like income, a number of deductions and credits are subject to third-party information reporting and data-matching, and are therefore at low risk of being reported incorrectly. In addition, there are credit amounts that are fixed amounts specified in legislation and are therefore at low risk of reporting non-compliance (for example, the basic personal amount which all individual taxpayers can earn without paying income tax is fixed for all taxpayers and leaves very little room for error or omission). Deductions and credits subject to arm's-length information reporting or are fixed amounts are considered assured and at low risk of non-compliance. **About 74% of deduction amounts are assured and 83% of credit amounts are assured** (Figure 3).

Figure 3: Assured Deductions and Credits (2014 Tax year)

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html and Infodec data

[13] See the Report of Federal Tax Expenditures, https://www.fin.gc.ca/taxexp-depfisc/2017/taxexp-depfisc17-eng.pdf.

Table 2 presents the largest assured deduction and credit amounts (Annex 2 lists all assured and non-assured deductions and credits).

Table 2: Largest Assured Deductions and Credits (2014 tax year)[1]

	Number of Filers	$ (M)	% of Total Deductions/ Credits Claimed
<u>**Assured Deductions**</u>			
Registered Retirement Savings Plan Deduction	6,194,290	40,292	28.4%
Other Payments Deduction	3,852,230	27,090	19.1%
Registered Pension Plan Deduction[2]	4,866,910	20,578	14.5%
Deduction for Elected Split Pension Amount	1,236,680	13,327	9.4%
Annual Union, Professional, or Like Dues[2]	4,860,040	3,318	2.3%
Top 5 Assured Deductions		**104,604**	**73.9%**
Total Assured Deductions		**104,633**	**73.9%**
Total Deductions Claimed		**141,637**	**100.0%**
<u>**Assured Credits**</u>			
Basic Personal Amount	27,461,120	304,731	60.1%
Age Amount	5,393,400	33,356	6.6%
Canada Pension Plan Contributions (through employment)	16,157,620	25,419	5.0%
Canada Employment Credit	18,001,210	19,540	3.9%
Spouse or Common-law Partner Amount	2,110,630	16,107	3.2%
Top 5 Assured Credits		**399,152**	**78.8%**
Total Assured Credits		**420,605**	**83.0%**
Total Credits Claimed		**506,728**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html, and Infodec

[1] Totals may not add due to rounding.

[2] Partially subject to third-party reporting.

Contributions to Registered Retirement Savings Plans are matched against reports from financial institutions authorized to register individuals' contributions to these retirement savings vehicles. Deductions related to these plans accounted for about 28% of the total value of deductions claimed in tax year 2014. The deduction that removes non-taxable benefits from taxable income, such as provincial social assistance benefits and the Guaranteed Income Supplement, is called the "other payments deduction" and represented another 19% of the total value of deductions.

With respect to credit amounts claimed, the basic personal amount represented over 60% of the value of all credits claimed for the 2014 tax year, while the age amount, the credit for Canada Pension Plan contributions, the Canada employment amount and the spouse/common-law partner amount added an additional 19% to assured credit amounts.

It is important to note that these assured values do not all have the same impact on tax revenues. In particular, the progressivity of the tax system will affect the actual tax value of deductions while the impact of credits on tax revenues depends on individuals' effective credit rate.[14]

3.2.2 Non-assured Deductions and Credits

Although relatively smaller in value overall, there are many types of deductions and credits that are not subject to third-party reporting or have a discretionary element (e.g., a fixed amount is not set in legislation or eligibility is not universal). These present greater compliance challenges than assured deduction and credit amounts. For example, while taxpayers may receive receipts for donations made to registered charities, these charities are generally not required to send a copy of those receipts directly to the CRA, though the CRA may ask taxpayers for the receipts to verify their claims to the credit.

The CRA systematically reviews these deductions and credits, using both a risk-based approach and through random selection (on a deduction/credit basis) to test and ensure compliance with the *Income Tax Act*. Table 3 presents some of the most commonly required adjustments in risk-based reviews. Other deductions and the Northern Residents Deductions are among the largest value adjustments to deductions reported. Medical expenses are among the largest credit amounts, as well as tuition, education and textbook amounts and the public transit amount.[15]

When taken together, the total amounts claimed for these commonly adjusted deductions and credits are relatively small – representing 2% of the value of all deductions and 5% of the value of all credits claimed in the 2014 tax year.

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[14] For instance, although most non-refundable tax credits are valued at 15%, the effective credit rate could be lower for individuals who do not need the full value of the credits to bring their tax liability to zero, or could be higher for some credits such as the credit for charitable contributions (where a credit of 29% (or 33% to the extent an individual marginal tax rate is 33%) could be applied to charitable contributions exceeding $200).

[15] Of note, education and textbook amounts were eliminated as of January 1, 2017. The public transit credit will be eliminated as of July 1, 2017.

Table 3: Common Adjustments[1] – Deductions and Credits Claimed (Non-assured) (2014 tax year)

	Number of Filers	$ (M)	% of Total Deductions/ Credits Claimed
<u>**Commonly Adjusted Deductions**</u>			
Other Deductions[2]	712,010	2,370	1.7%
Northern Residents Deductions	263,430	905	0.6%
Total Commonly Adjusted Deductions		**3,275**	**2.3%**
Total Deductions Claimed		**141,637**	**100.0%**
<u>**Commonly Adjusted Credits**</u>			
Medical Expenses	4,698,680	11,760	2.3%
Tuition, Education, and Textbook Amounts	1,785,810	10,127	2.0%
Tuition, Education, and Textbook Amounts Transferred from a Child	708,020	3,592	0.7%
Public Transit Amount	1,770,460	1,561	0.3%
Total Commonly Adjusted Credits		**27,040**	**5.3%**
Total Credits Claimed		**506,728**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html.

[1] http://www.cra-arc.gc.ca/tx/ndvdls/tpcs/ncm-tx/rvws/djstmnts-eng.html

[2] Includes income amounts repaid, legal fees and other deductible amounts.

Regular reviews are conducted on high-risk deductions and credits. In a given review of a particular high-risk deduction or credit, the sample population is randomly selected from all individuals claiming that deduction or credit. The random selection is critical to determining deductions and credits that pose high compliance risk, patterns of non-compliance and the revenue implications. The recent random sample for the 2014 tax year indicated that approximately 22.5% of the claims were non-compliant, although non-compliance rates did vary between specific deductions and credits. The value of non-compliance was estimated to be an average of $92 per return.

In the absence of this type of review and subsequent compliance efforts taken, it is estimated that up to $1.5 billion would have been lost for the 2014 tax year in relation to the higher-risk deductions and credits. Risk scores from these types of reviews are critical for the CRA's audit and verification programs to effectively protect the tax base.

4. Tax Gap Approach: Payment Gap

Section 3 introduced and developed the concept of assurance as an indicator of T1 tax compliance in Canada. To complement our discussion on compliance, the remainder of this report aims to estimate some key parts of the T1 tax gaps as indicators of T1 non-compliance, to the extent that available data allow. A tax gap can arise from filing and reporting non-compliance and, even if income is reported and assessed correctly, a tax gap can also arise when assessed taxes are not paid (i.e., "payment non-compliance" as explained in Section 2). This section of the report examines payment data and outlines a methodology for estimating Canada's payment gap, while Section 5 presents analysis on the tax gap related to filing and reporting non-compliance in the underground economy.

4.1 Payment Data

Due to late-filing and the time it takes for compliance efforts to be completed (e.g., audits, re-assessments, appeals, collection actions), data on the payment of tax debt become more complete over time. The analysis below is based largely on 2014 tax year data, but because of the time lag in resolving tax debt, the estimate of the payment gap is the upper bound of the range.

Historically, the highest risk for debt at initial assessment is related to taxpayers with income not subject to third-party reporting or withholding, such as self-employment income. The non-compliance risk for the self-employed is also higher compared to the rest of the T1 population because it may be more challenging for the self-employed to keep the records necessary to report income amounts and expenses accurately. Self-employed individuals may also be more at risk of bankruptcy than other individuals. Instalment requirements for individuals reporting self-employment however partially mitigate these risks.

4.2 Payment Gap

Based on 2014 tax year assessing and accounting data available at the time of writing, 16% of the $13.6 billion in debt at the Notice of Assessment stage remains outstanding, amounting to $2.2 billion, for the 2014 tax year.[16] This is generally in line with other research findings for other tax years. For instance, 2010 tax year initial assessment data showed 13% of debt still outstanding two years after the payment deadline.

This payment gap takes into account the 2014 tax year debt that has been written-off or removed from the federal government's accounts ($6.5 million or less than 0.1% of debt at initial assessment). The CRA considers debtors' ability to pay, individuals' associated accounts (e.g., GST or payroll accounts), and third-party assessments within legislated time limitations on collections in its investigations leading to write-off decisions. Write-offs are amounts that were assessed as taxes payable but for various reasons are deemed to not be collectible (for example, due to bankruptcy of the taxpayer). From this perspective, they add to the payment gap.

[16] These outstanding amounts are the balance of funds, calculated during the assessment process, owed to the CRA after the application of penalties, interest, payments, instalments and other credits available at the time of assessment.

By the above approach, the total payment gap for the 2014 tax year was about $2.2 billion[17], amounting to 1.6% of personal income tax revenues in 2014. It should be noted that this payment gap is an overestimate to the extent that assessment and collections on 2014 tax year debt will in fact continue into the future and exceed write-offs. Indeed, we note that an alternative method for calculating a payment gap would be to tally all write-offs related to 2014 tax year debt once all collection efforts have been exhausted. This, however, would involve a significant time lag before a report could be produced.

Box 6: Collecting Taxes Owed

If a taxpayer does not fully pay his or her debt on time and refuses to cooperate with the CRA, the CRA may use one of several different methods to recover the money owed. The CRA may also charge interest compounded daily on any amount owing, until the balance is paid in full. For example:

In order to collect on taxes owed, the CRA may issue a garnishment that would intercept funds that a third party owes or holds for the taxpayer. A third party for an individual taxpayer could include a person or organization such as an employer, a bank, or, with respect to a self-employed individual, a supplier. The CRA would use these funds to reduce or pay off the individual's debt.

The CRA may obtain a writ or memorial and seize the taxpayer's assets and property. The CRA can then have the assets advertised and sold by a court enforcement officer. The proceeds of the sale would be applied to the debt, net of all reasonable costs and charges the CRA incurred to carry out the sale.

The CRA may hold a third party jointly and severally responsible for a taxpayer's tax debt. The third party could include a business partner, director, or a related corporation.

The debts will only be written off once all attempts to collect outstanding debt have been exhausted.

[17] Outstanding amounts include both taxes owing as well as interest and other penalties.

5. Tax Gap Approach: Underground Economy

In this section, we discuss the tax gap that results from individuals not reporting income earned in the underground economy (UE) and where it is not detected by the CRA. **The tax gap associated with UE activities within the scope of this analysis is estimated at about $6.5 billion for 2014.** This represents about 4.8% of personal income tax revenues and 0.3% of GDP.

As the CRA does not carry out a single random audit program that covers the entire T1 population, we are unable to take results from existing audit programs to extrapolate a tax gap for the general population (i.e., bottom-up approach). Instead, we adopt a top-down approach and leverage aggregate statistics on the UE published by Statistics Canada to approximate an income base for tax purposes and, in turn, the tax gap related to the UE. While there are a number of limitations to adopting a top-down methodology and using Statistics Canada's estimates of the UE (as discussed below and in Annex 3), the estimates do provide a general indication of the potential tax revenue loss from UE activities within the scope of this report.

As noted previously, only the domestic components of the tax gap are addressed in this paper.

5.1 Underground Economy (UE)

The UE is commonly understood as economic activity or income that is purposely hidden from public authorities, which can include working under the table or skimming (when revenues are under-reported or costs over-reported to understate net income). A variety of definitions for the UE exist – depending on the context, it may include activities that are officially measured and unmeasured, taxable and non-taxable, legal and illegal, or even very small-scale economic activities that generate income. From the CRA's perspective, the UE includes any activity that is unreported or under-reported for tax purposes.

5.1.1 Implications of Using Statistics Canada's UE Estimates

The starting point for our analysis is Statistics Canada's annual UE estimates for Canada.[18] Statistics Canada's underground economy estimates aim to identify missing or unreported productive activity that is not captured in official Canadian Gross Domestic Product (GDP) statistics. Although these estimates of the UE can provide a general sense of the magnitude of T1 hidden taxable income in key activities, there are a number of reasons why using the Statistics Canada's estimates for tax gap purposes cannot lead to a precise T1 tax gap estimate[19]:

- First, Statistics Canada's methods were intended to provide an upper bound rather than a precise estimate of in-scope UE activities;

[18] Statistics Canada, The Underground Economy in Canada, 1992 to 2011: http://www.statcan.gc.ca/pub/13-604-m/13-604-m2014073-eng.htm; Updated estimates for 2013 can be found here: http://www.statcan.gc.ca/daily-quotidien/160620/dq160620b-eng.htm.

[19] Ibid., Introduction, page 6.

- Second, some estimates include components already embedded in GDP, which should theoretically be added to total UE estimates. Statistics Canada does not publish these amounts separately but have indicated that the amounts account for less than 10% of the hidden income base estimated in this analysis; and,

- Third, by its very nature, it is difficult to obtain information on UE activities so the estimates necessarily rely on assumptions, indicative information and various indirect methods.

In addition to limitations to using Statistics Canada's estimates, there are also a number of caveats related to a top-down approach to estimate the tax gap and the methodology taken to adapt Statistics Canada's estimates for the purpose of this report.

- A top-down approach does not account for the particular circumstances of individuals participating in the UE that would determine the actual effective tax rates these individuals would face if they were to comply.

- It was not possible to consider hidden income that is earned by activities outside the scope of the framework used to estimate GDP, such as unreported income from capital gains on the sale of assets. More details are provided in Annex 3.

- The UE estimates are produced on a GDP basis and therefore largely reflect activity that occurs within Canada's borders. Therefore, consistent with the focus of this paper, international sources of UE income are outside the scope of Statistics Canada's estimates.

- The analysis excludes illegal activities completely given the data limitations[20] and uncertainties about the amount of taxes that could actually be assessed and collected on these activities.

If this analysis seems highly-caveated, we would emphasize that all tax gap analysis requires some indirect estimation of hidden activities. While audit results can uncover some UE activities and unreported income, they provide an incomplete picture of the universe of undetected activity. This is because even if all individuals were subject to a comprehensive audit by the most skilled auditor, there could still be unreported income that would be go undetected. As a result, any tax gap analysis requires non-tax data to estimate income hidden for tax purposes, and, is therefore constrained by the methods used to collect this non-tax data, as well as how good a substitute the data is for direct measurement of hidden income.

[20] Statistics Canada's UE estimates only cover a small part of the illegal sector (illegal manufacturing and sales and imports (smuggling) of alcohol and tobacco).

5.1.2 Hidden Income by UE Activity

The activities within scope of our tax gap analysis of the UE fall under either the hidden sector or informal sector. The definition of these sectors, as outlined by Statistics Canada, are presented below.

- *Hidden sector*: The hidden sector is comprised of "activities that are productive and legal but are deliberately concealed from authorities" due to individuals wanting to avoid taxes, social security contributions, labour standards, administrative procedures, or to increase the benefits they receive. Activities in the hidden sector include skimming, unreported construction-related activities (new homes or renovations), hidden rent income, undeclared tips and unreported trade-related activity.

- *Informal sector*: This sector includes informal production activities associated with establishments that are not registered with fiscal or social authorities. The activities within scope of Statistics Canada's research are childcare in the home, private household services, other personal care services and direct sales of agricultural products. Although it is possible that UE activity exists in other industries in the informal sector, they have been excluded from Statistics Canada's estimates until further research determines the magnitude of this missing productive activity.

Table 4 presents the estimated amounts of income earned in the UE for the activities within the scope of this analysis. These are based on Statistics Canada's UE income-based GDP estimates. To allow for direct comparison with the 2014 tax year figures reported elsewhere in this paper, hidden income by UE activity is also expressed in 2014 dollars.[21]

[21] Adjusted using the Statistics Canada's GDP deflator.

Table 4: Selected Activities of the Underground Economy by Components in 2013 (Amounts in millions of dollars)

	Published Amounts[1] (2013)	Amounts in 2014 dollars	Share (%)
Individuals (not self-employment)			
Construction	6,350	6,470	19.9
Tips[2]	5,214	5,313	16.4
Trade-related activities	2,174	2,215	6.8
Other UE Activities[3]	10,955	11,162	34.4
Sub-total	**24,693**	**25,160**	**77.5**
Self-employment (mixed income)			
Construction	2,094	2,134	6.6
Rent / Rooming and Boarding	592	603	1.9
Other UE Activities[2]	4,495	4,580	14.1
Sub-total	**7,181**	**7,317**	**22.5**
Total	**31,874**	**32,476**	**100.0**

[1] Figures consistent with Statistics Canada's published amounts: http://www.statcan.gc.ca/daily-quotidien/160620/dq160620b-eng.htm. The breakdown by type of activity is based on the assumptions documented in Statistics Canada methodology paper: http://www.statcan.gc.ca/pub/13-604-m/13-604-m2014073-eng.htm.

[2] Amounts presented in this table include $3.3 billion in tips that is accounted for in 2013 official GDP. This is added to the $1.9 billion in tips reported as part of Statistics Canada's 2013 UE data to arrive at $5.2 billion in total hidden tips for 2013.

[3] Income earned in other UE activities includes skimming.

Source: Statistics Canada, National Economic Accounts Division, 2016, special tabulation

On the whole, the estimated amount of hidden income for the activities within scope of this analysis was $31.9 billion in 2013. This is equivalent to $32.5 billion in 2014 dollars[22], or about 2.5% of the reported income and 1.6% of GDP in 2014. Individuals hiding some form of compensation accounted for 78% of all hidden income while hidden income from self-employment accounted for the remaining 23%. Income earned in construction accounted for 27% and unreported tips accounted for 16% while UE activities in other sectors accounted for 49% of all hidden income. Other sectors include a number of smaller sectors participating in the UE, including maintenance

[22] Adjusted using the Statistics Canada's GDP deflator.

and repair of vehicles, child care services, and services related to household maintenance (other than renovation).[23]

Of note, the amount of hidden income covered by this report account for about 70% of the total UE estimate published by Statistics Canada.[24] Our exclusions related to illegal activities ($4.1 billion) and incorporated businesses UE revenues ($12.9 billion) account for most of this difference.

5.2 Estimating Tax Revenue Loss

This section estimates the federal personal income tax revenue forgone as a result of UE activities within scope of this study. To determine the taxes that would have been paid if the income earned had been reported, we have assumed the tax rate to reflect the federal effective marginal tax rate (EMTR)[25] of individuals in similar circumstances or reporting income in similar activities.

An EMTR represents the tax rate that would apply on reporting an additional amount of income. The federal EMTRs used in this analysis account for statutory income tax rates, deductions and credits. As this tax gap analysis relates to federal income tax revenues, the EMTRs used do not account for provincial income taxes nor do they account for income-tested federal and provincial benefits. That is, the tax gap calculated represents the federal taxes foregone as a result of the UE hidden income. A detailed discussion on the assumptions underlying the calculation of the EMTRs are presented in Annex 3. The EMTRs assumed for each UE activity as well as the corresponding tax gaps are reported in Table 5.

The estimated tax gap associated with UE activities within the scope of this analysis is about $6.5 billion. The foregone revenues represent 4.8% of personal income tax revenues and 0.3% of GDP in 2014. The tax gap related to activities in the construction industry is estimated at $1.8 billion while that related to unreported tips accounts for $770 million. Of note, the tax gap related to the total of the smaller sectors is estimated at $3.3 billion, about half of the overall tax gap.

[23] Details are provided on an expenditure-basis in Statistics Canada, The Underground Economy in Canada, 1992 to 2011: http://www.statcan.gc.ca/pub/13-604-m/13-604-m2014073-eng.htm, Table A.6.

[24] Total UE activity is estimated at $45.6 billion in 2013 or 2.4% as a share of GDP. The size of the UE as a share of GDP has been stable since 2002. The highest proportion was 2.7% in 1994, while the lowest was 2.2% in 2000 (source: The Underground Economy in Canada, 2013, Statistics Canada, 2016).

[25] EMTRs are calculated based on a small marginal change in income. This report's use of EMTRs rather than average tax rates to calculate the tax loss due to UE is based on the assumption that hidden income is incremental to income already reported by taxpayers rather than attributable to non-filers, in which case applying an average tax rate would be more appropriate. This approach is likely closer to reality as individuals participating in the UE are likely reporting some amount of income and filing their tax return (for example, to access income-tested benefits). The EMTRs used for this analysis are based on the CRA's calculations using the Department of Finance's T1 micro-simulation model. Additional information is presented in Annex 3.

Table 5: Federal Tax Loss for Selected Activities of the Underground Economy (2014 dollars)

	Amounts in 2014 Dollars ($M)	Federal Effective Marginal Tax Rate (%)	Estimated Tax Loss	Share %
Individuals (compensation to employees)				
Construction	6,470	21.8	1,412	21.7
Tips	5,313	14.5	770	11.8
Trade-related Activities	2,215	21.0	465	7.2
Other UE Activities	11,162	21.3	2,375	36.5
Sub-total	**25,160**		**5,022**	**77.2**
Self-employment (mixed income)				
Construction	2,134	17.8	380	5.8
Rent / Rooming and Boarding	603	23.1	139	2.1
Other UE Activities	4,580	21.0	962	14.8
Sub-total	**7,317**		**1,481**	**22.8**
Total	**32,476**		**6,503**	**100.0**

5.3 CRA Compliance Efforts that Uncover Underground Economy Activities

UE activities place an unfair burden on law-abiding taxpayers and businesses, and they jeopardize the integrity of Canada's tax base. As such, the CRA takes participation in the UE very seriously. In order to combat the challenge of identifying income that is deliberately hidden, the CRA has developed a series of strategies.

In the course of the administration of the tax system, the CRA finds evidence of UE activities in the form of non-reporting or under-reporting of income. This can occur either at the risk assessment stage or during the audit and verification process.

The CRA has a dedicated UE strategy and tactical plan focussed on 1) refining the CRA's understanding of the UE; 2) reducing the social acceptability of participation in the UE; and 3) mobilizing a range of data, information and legislative tools, initiatives and partnerships to correct non-compliant behaviour and address persistent non-compliance. In harnessing research and advanced analytics, and through working with industry stakeholders, other levels of government and the Minister's Underground Economy Advisory Committee, the CRA has positioned itself to better target UE participants and activities with its compliance activities. These activities are tailored to the attitudes towards compliance of UE participants and the risk of non-compliance associated with them.

In addition, the CRA conducts special UE projects in certain sectors or regions, where the risk of non-compliance has been determined or is thought to be high.

Beyond these specific projects, the CRA has programs that use third-party information and leads from the general public to identify different types of non-compliance. These programs may sometimes uncover UE activity or trigger audits to confirm whether UE activity is involved.

Voluntary Disclosures Program (VDP)

The VDP offers individuals a chance to correct inaccuracies in one or more tax returns that were previously filed or to file returns that should have been filed. By filing voluntarily before being identified by the CRA as non-compliant, individuals may be eligible for reduced penalties and/or be able to avoid criminal prosecution.

The VDP is intended for individuals to come forward to report previously undisclosed income from domestic or international sources. In 2015-16, 60% of the disclosures were related to domestic sources. Unreported wages and benefits accounted for 45% of these domestic disclosures, while only accounting for 6% of foreign source disclosures. For foreign source disclosures, unreported interest and dividend income accounted for the largest portion at 60%, and only accounted for 8% of domestic source disclosures.

Income declared through VDP reduces the income reported incorrectly and reduces the size of the tax gap that would exist in the absence of the program.

Informant Leads Program (ILP)

The ILP coordinates and reviews information provided by the public to assist the CRA in identifying taxpayers who may be violating tax laws. Lead information for this program pertains to tax evasion allegations on the part of an individual or a business taxpayer. After reviewing the information for elements of non-compliance with tax legislation, leads are referred to the corresponding compliance program for appropriate action. The number of leads that the ILP has received has been steadily increasing over the years. In 2015-16, the National Leads Centre received over 32,000.

Offshore Tax Informant Program (OTIP)

Based on international best practices, the OTIP allows the CRA to make financial awards to individuals who provide specific and credible information related to major international tax non-compliance that leads to the collection of taxes owing.

Since it was launched in January 2014, the OTIP has generated a great deal of interest. As of December 31, 2016, over 407 submissions have been received and over 200 taxpayers were under audit and a number of files have been referred for criminal investigation. The CRA has entered into over 25 contracts with informants who have provided specific and credible information on hundreds of taxpayers who are suspected of concealing income and assets offshore. At a minimum, each contract is expected to identify an additional $100,000 in federal taxes.

6. Conclusion

The federal government relies in large part on an effective personal income tax system to be able to raise the revenues needed to deliver public programs and services to Canadians. Preserving the fairness and integrity of the tax system while ensuring high compliance of individuals with their tax obligations is therefore a top priority for the CRA and the government.

By reviewing the T1 tax administration system, this report has shown how its key systemic features – which include accessible client services and information products, an extensive withholding regime, mandatory third-party reporting, use of digital tools and technology, and a strong risk-based compliance approach – ensure high compliance even before CRA compliance intervention. This paper also reports the indicators supporting CRA's compliance strategy for personal income taxes, which is risk-based in approach for most of the predominantly-assured personal income tax base, with the exception of dedicating resources for random audits of high-risk sources of income (self-employment) or for reviews of reported amounts at high risk of non-compliance (deductions and credits).

The effectiveness of these features is borne out in the assurance compliance indicators presented in this paper. This report finds that a relatively high proportion of amounts reported to the CRA is assured based on data-matching. **For the 2014 tax year, the report finds that 86% of income assessed, 74% of deductions reported and 83% of credits claimed were assured with minimal direct CRA intervention.** Identifying assured portions of the income base can inform compliance efforts and the targeting of more intense compliance efforts at non-assured components where there is higher risk of non-compliance.

To complement the tax assured analysis, this report also presented estimates of the tax gaps resulting from payment, filing, and reporting non-compliance. Assuming that any outstanding T1 debt for the 2014 tax year at the time of writing could be at risk of non-payment, **this report estimates the payment gap to be about $2.2 billion for the 2014 tax year, representing about 1.6% of personal income tax revenues in 2014.**

Transforming Statistics Canada's estimates of the underground economy to approximate T1 income hidden from the CRA for tax purposes, **this analysis estimates a gap of about $6.5 billion for tax year 2014**, **or 4.8% of personal income tax revenues**, related to unreported income earned in the underground economy activities covered by this report**. The total T1 tax gap within scope of this report amounts to $8.7 billion, 0.4% of GDP or 6.4% of personal income tax revenues in 2014.**

By the approach used in this analysis, there are risks of overestimating the payment gap and underestimating the filing and reporting gap. However, in general, a $8.7 billion gap is likely an underestimate of the true T1 tax gap – the exclusions made to our analysis resulting from data limitations (such as capital gains and international reporting non-compliance) are likely more significant than the impact of payment gap underestimation. We note that attribution of a larger share of the personal income tax gap to filing/reporting non-compliance than to non-payment is consistent with the findings of other jurisdictions.

It also is worthwhile to note the risks associated with self-employment income that have been identified in this paper. Self-employment income is a completely non-assured income base, due to a near-complete absence of third-party reporting and a more complex assessment process. While this does not mean that all self-employment income is reported inaccurately, it is at higher risk of reporting non-compliance, be it intentional or unintentional. As a result, it is audited by CRA more often than the rest of the T1 income base.

The UE analysis also illustrated the large potential contribution of the self-employed to the total T1 tax loss resulting from hidden income earned in the UE. The SME RAP estimated that more than half of the self-employed population made some type of reporting error. However, it also found that the vast majority of errors were small and likely unintentional. Such findings have helped inform CRA outreach and the design of compliance efforts in this area of higher compliance risk.

The indicators developed in this report demonstrate the challenges of producing system-wide macro-level tax gap estimates and the difficulty in interpreting these estimates. The CRA is committed to improving transparency with respect to the administration of the tax system and will continue to release papers on key components of Canada's tax gap over the next two to three years.

Annex 1: T1 Income Sources

Income Sources[26]	Description	% of Assessed Income (2014)[27]
Employment Income	Salaries, wages, commissions and other employment income earned from employment at a business, institution, school, federal or provincial Crown corporation, or some form of government body.	65
Pension and Retirement Income	Public sources can include: Old Age Security (OAS) and the Canada Pension Plan/Quebec Pension Plan (CPP/QPP) are programs that provide a level of retirement income for eligible individuals and the Guaranteed Income Supplement provides a monthly supplement to low-income Old Age Security pension recipients.[28] Private sources can include: Retirement income from Registered Pension Plans or through Registered Retirement Savings Plans/Registered Retirement Income Funds.	16
Investment Income	Investment income can include interest, taxable dividends from Canadian corporations, taxable capital gains, and other investment income. Net rental income and net partnership income (for limited or non-active partners) are also included in this category.	9
Benefits	Employment insurance (regular and special benefits), social assistance payments[29], workers' compensation benefits and Universal Child Care Benefit (until June 2016).	3
Net Income from Self-employment	Self-employment income can be earned from a business, a profession, commission, farming, or fishing. (a) Business: income from any activity you carry out for profit or with reasonable expectation of profit. This income can be from businesses and active partnerships. (b) Commission: commission income for self-employed people, such as real estate agents, who are working in sales and earning commissions. (c) Farming: income of self-employed farmers, including beekeepers and tree farmers. (d) Fishing: income of self-employed people fishing as boat owners or crew members, or fishing from shore. (e) Professional: income from an independent practice only, such as earnings by self-employed accountants, doctors, dentists and lawyers. Net self-employment income is this income net of eligible expenses.	4
Other	Other smaller sources of income, such as some types of retiring allowances or severance pay, for example.	2

[26] Amounts not subject to tax or not required to be reported are for the most part excluded from this table (for example, lottery winnings). However, certain sources of income referred to are included in "net income", which is used for calculating certain benefits, but excluded from "taxable income", income on which tax rates are applied. For instance, see footnote below. As well, some sources of total income assessed are in gross amounts, while others are in net amounts. For example, eligible dividend income is grossed up to represent 138% of such income. Interest and investment income are also gross figures since carrying charges are not deducted. On the other hand, taxable capital gains are net amounts because the income inclusion rate for capital gains was 50% in 2014.

[27] Totals may not add to 100% due to rounding.

[28] While the GIS is included in income for the purposes of calculating net income, it is not ultimately taxable as it is deducted before arriving at taxable income.

[29] Workers' compensation and social assistance benefits are included in net income, but are not ultimately taxable.

Annex 2: Income, Deductions and Credits

Table A2.1: Sources of Income by Assured Component (2014 tax year)[1]

	Number of Filers	$ (M)	% of Total Assessed Income
Assured Income			
Employment Income	17,241,930	809,809	63.3%
Other Pension or Superannuation	4,242,740	89,466	7.0%
Canada Pension Plan/Quebec Pension Plan Benefits (CPP/QPP)	6,977,050	48,047	3.8%
Old Age Security Pension	5,463,770	33,401	2.6%
Employment Insurance and Other Benefits	2,433,370	17,297	1.4%
Registered Retirement Savings Plan Income	2,309,540	15,877	1.2%
Commissions (from employment)	556,760	15,360	1.2%
Taxable Amount of Dividends from Taxable Canadian Corporations[2]	1,127,820	13,737	1.1%
Elected Split-Pension Amount	1,236,300	13,327	1.0%
Social Assistance Payments[3]	1,638,410	11,855	0.9%
Net Federal Supplements (GIS)[3]	1,978,230	10,041	0.8%
Interest and Other Investment Income[2]	2,564,460	8,028	0.6%
Other Income (eligible and non-eligible retirement allowances)[2]	214,370	5,718	0.4%
Workers' Compensation Benefits[3]	598,650	5,198	0.4%
Universal Child Care Benefit (UCCB)[4]	1,737,480	2,585	0.2%
Taxable Capital Gains[2]	12,070	5	0.0%
Registered Disability Savings Plan Income	890	2	0.0%
Total Assured Income		**1,099,752**	**86.0%**
Total Income Assessed		**1,279,157**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html and Infodec data

[1] Totals may not add due to rounding.

[2] Partially subject to third-party reporting.

[3] Note, while these amounts are included in net income for benefits purposes, they are ultimately not taxable. That said, they are tax assured in the sense that the amounts are reported correctly, irrespective of the fact that the tax rate on this income is zero percent.

[4] Replaced by the Canada Child Benefit as of July 2016.

Table A2.2: Sources of Income by Non-Assured Component (2014 tax year)[1]

	Number of Filers	$ (M)	% of Total Assessed Income
Non-Assured Income			
Taxable Amount of Dividends from Taxable Canadian Corporations[2]	3,154,900	56,412	4.4%
Net Income from Self-employment[3]	3,033,180	51,544	4.0%
Taxable Capital Gains[2]	2,699,490	26,873	2.1%
Other Income[2]	3,842,211	18,482	1.4%
Other Employment Income	2,401,880	10,861	0.8%
Interest and Other Investment Income[2]	4,086,210	7,728	0.6%
Net Rental Income	1,545,410	6,006	0.5%
Support Payments Received	90,310	1,255	0.1%
Net Partnership Income (Limited or Non-Active Partners Only)	88,930	246	0.0%
Total Non-Assured Income		**179,407**	**14.0%**
Total Income Assessed		**1,279,157**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html and Infodec data

[1] Totals may not add due to rounding.

[2] Partially subject to third-party reporting.

[3] Assessed self-employment income can be negative. For the purposes of the T1 final statistics, net self-employment includes negative amounts, which are netted out when calculating the total overall net self-employment income.

Table A2.3: Assured Deductions and Credits (2014 tax year)[1]

	Number of Filers	$ (M)	% of Total
Assured Deductions			
Registered Retirement Savings Plan Deduction	6,194,290	40,292	28.4%
Other Payments Deduction	3,852,230	27,090	19.1%
Registered Pension Plan Deduction[2]	4,866,910	20,578	14.5%
Deduction for Elected Split Pension Amount	1,236,680	13,327	9.4%
Annual Union, Professional, or Like dues[2]	4,860,040	3,318	2.3%
Canadian Forces Personnel and Police Deduction	1,860	29	0.0%
Total Tax Assured Deductions		**104,633**	**73.9%**
Total Deductions Claimed		**141,637**	**100.0%**
Assured Credits			
Basic Personal Amount	27,461,120	304,731	60.1%
Age Amount	5,393,400	33,356	6.6%
CPP Contributions (through employment)	16,157,620	25,419	5.0%
Canada Employment Credit	18,001,210	19,540	3.9%
Spouse or Common-law Partner Amount	2,110,630	16,107	3.2%
Pension Income Amount	4,916,910	9,401	1.9%
Employment Insurance Premiums (through employment)	15,531,440	9,191	1.8%
Federal Dividend Tax Credit[2]	1,374,660	2,042	0.4%
Provincial Parental Insurance Plan (PPIP) Premiums Paid	3,772,280	765	0.2%
Total Tax Credit on Donations and Gifts[2]	775,840	54	0.0%
Total Tax Assured Credits		**420,605**	**83.0%**
Total Credits Claimed		**506,728**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html, and Infodec data

[1] Totals may not add due to rounding.

[2] Partially subject to third-party reporting.

Table A2.4: Non-Assured Deductions and Credits (2014 tax year)

	Number of Filers	$ (M)	% of Total
Non-Assured Deductions			
Carrying Charges and Interest Expenses	1,997,440	5,424	3.8%
Capital Gains Deduction	68,320	5,149	3.6%
Child Care Expenses	1,332,440	4,952	3.5%
Other Employment Expenses	813,840	4,045	2.9%
Security Options Deductions	48,760	2,666	1.9%
Other Deductions	712,010	2,370	1.7%
Net Capital Losses of Other Years	656,050	2,361	1.7%
Social Benefits Repayment	565,310	1,637	1.2%
Deductions for CPP/QPP Contributions on Self-employment and Other Earnings	1,710,130	1,386	1.0%
Additional Deductions	206,960	1,376	1.0%
Support Payments Made	68,800	1,188	0.8%
Annual Union, Professional, or Like Dues[2]	960,050	981	0.7%
Northern Residents Deductions	263,430	905	0.6%
Exploration and Development Expenses	62,550	759	0.5%
Moving Expenses	100,690	424	0.3%
Non-Capital Losses of Other Years	36,860	385	0.3%
Clergy Residence Deduction	27,250	374	0.3%
Business Investment Loss	10,270	292	0.2%
Registered Pension Plan (RPP) Deduction[2]	29,810	262	0.2%
Deduction for PPIP Premiums on Self-employment Income	448,030	35	0.0%
Limited Partnership Losses of Other Years	910	13	0.0%
UCCB Repayment	20,130	12	0.0%
Disability Supports Deduction	1,580	8	0.0%
Employee Home Relocation Loan Deduction	1,280	1	0.0%
Total Non Tax Assured Deductions		**37,003**	**26.1%**
Total Deductions Claimed		**141,637**	**100.0%**

	Number of Filers	$ (M)	% of Total
Non-Assured Credits			
Amount for Children under 18 years of Age	3,811,110	15,185	3.0%
Medical Expenses	4,698,680	11,760	2.3%
Tuition, Education, and Textbook Amounts	1,785,810	10,127	2.0%
Amount for an Eligible Dependant	935,250	9,853	1.9%
Amounts Transferred from Spouse or Common-law Partner	1,333,260	6,820	1.3%
Federal Dividend Tax Credit[2]	2,467,060	6,606	1.3%
Disability Amount	768,020	5,960	1.2%
Tuition, Education, and Textbook Amounts Transferred from a Child	708,020	3,592	0.7%
Disability Amount Transferred from a Dependant	257,970	2,664	0.5%
Total Tax Credit on Donations and Gifts[2]	4,908,790	2,656	0.5%
Family Tax Cut	1,628,950	1,700	0.3%
Public Transit Amount	1,770,460	1,561	0.3%
CPP or QPP Contributions on Self-employment and Other Earnings	1,710,130	1,386	0.3%
Children's Fitness Amount	1,712,460	1,368	0.3%
Federal Foreign Tax Credit	1,336,590	1,332	0.3%
Caregiver Amount	248,540	1,322	0.3%
Home Buyers' Amount	200,360	899	0.2%
Children's Arts Amount	621,400	325	0.1%
Interest Paid on Student Loans	563,980	297	0.1%
Minimum Tax Carryover	54,960	146	0.0%
Volunteer Firefighters' Amount/Search and Rescue Volunteers' Amount	46,400	139	0.0%
Labour-sponsored Funds Tax Credit	291,750	127	0.0%
Amount for Infirm Dependants Age 18 or Older	17,870	81	0.0%
Investment Tax Credit	25,930	59	0.0%

	Number of Filers	$ (M)	% of Total
PPIP Premiums Payable on Self-employment Income	453,990	45	0.0%
Overseas Employment Tax Credit	5,070	43	0.0%
Federal Political Contribution Tax Credit	174,280	30	0.0%
PPIP Premiums Payable on Employment Income	113,290	24	0.0%
Adoption Expenses	2,100	15	0.0%
Employment Insurance Premiums (through Self-employment)	6,180	2	0.0%
Total Other Non Tax Assured Credits		**86,123**	**17.0%**
Total Credits Claimed		**506,728**	**100.0%**

Source: T1 Final Statistics, 2014 tax year: http://www.cra-arc.gc.ca/gncy/stts/t1fnl/2014/menu-eng.html, and Infodec data

[1] Totals may not add due to rounding.

[2] Partially subject to third-party reporting.

Annex 3: Technical notes

A3.1 Defining Tax Assured

A number of different categories of entities report information to the CRA. They include employers, financial institutions, governments, and large firms. These are considered to be third parties when they report information to the CRA independently from the taxpayer to which the information reported relates.

For the purposes of the tax assured analysis, all income, deduction and credit lines in the T1 General Form and Schedule 1 were operationally defined as assured in the following way:

- For income, deductions and credits amounts: subject to arm's-length third-party reporting supported by the T1 matching program; and
- For deductions and credits amounts: fixed deduction and credit amounts (e.g., age amount).

Some lines are only partly assured according to the above definition. In such cases, lines were split into assured and non-assured portions. Partially assured amounts included:

Income

- Taxable amounts of dividends from taxable Canadian corporations;
- Other income;
- Interest and other investment income; and,
- Taxable capital gains.

Deductions/Credits

- Registered Pension Plan (RPP) deduction;
- Annual union, professional or like dues;
- Federal dividend tax credit; and,
- Total tax credit on donations and gifts.

A3.2 Transforming Statistics Canada Underground Economy Estimates to a T1 Hidden Taxable Income Base

Statistics Canada Underground Economy (UE) papers report upper-bound estimates of the extent of underground economic activity in Canada beyond what is already included in GDP. The estimates of UE activities are first prepared by Statistics Canada on an expenditure by sector approach to arrive at expenditure-based UE GDP. A number of key assumptions are made at this stage: 1) underground activity occurs mainly in the household sector; 2) unincorporated businesses are more likely to participate in the UE than corporations; 3) the non-profit and government sectors do not take part in the UE; and 4) residential construction is considered the only investment activity that has UE activity in the corporate sector.

Statistics Canada's estimates of income-based UE GDP are then developed by benchmarking to the expenditure-based estimates, with income allocated to factors, including compensation to employees, gross operating surplus (corporations) and gross mixed income (unincorporated businesses), according to a set of fixed allocation assumptions.

Estimates of Statistics Canada's income-based UE GDP are not perfectly aligned to the concept of taxable income. As a result, for the purposes of this report, it is necessary to take certain steps to transform the estimates into a domestic T1 hidden taxable income base.[30] This transformation first requires removing the gross operating surplus (corporations) component of income-based UE GDP, leaving only the components relevant for T1 income (compensation to employees and gross mixed income (unincorporated businesses)). Compensation to employees is then broken out into UE activities consistent with the income allocation assumptions in Statistics Canada's studies.[31] Finally, other hidden sources of taxable income, outside the calculation of GDP[32], need to be added, which we assume to be negligible other than unreported capital gains.[33] That said, there are data limitations related to adding taxable capital gains to the UE estimates and they are not included in our tax gap analysis. Related considerations are discussed in the section below.

It is important to highlight that the tax loss estimates related to UE activity are sensitive to the estimation methods used for each UE activity and the assumptions for how income earned through these activities is allocated between individuals, corporations and the self-employed. Different methods and assumptions would lead to different gap estimates.

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30 International sources of hidden income (for example, employment compensation received from abroad or capital gains accrued outside Canada) would add to total hidden T1 taxable income. However, as noted at the outset of this report, the present report only considers domestic tax gaps as our point of departure is UE GDP, which is domestic in scope.

31 Statistics Canada, The Underground Economy in Canada, 1992 to 2011: http://www.statcan.gc.ca/pub/13-604-m/13-604-m2014073-eng.htm, Table C.9. The same allocation assumptions were used for this study as for the updated 2013 estimates. Therefore, in order to determine, for instance, how much skimming by businesses contributes to employee compensation, we observe in table C.9 that income from skimming on receipts by incorporated businesses is assumed to be shared equally with employees. This 50-50 allocation of skimmed income is also assumed for unincorporated businesses and employees. As a result, the share of unreported compensation to employees that results from skimming by businesses in 2013 is equal to the estimated value of revenues skimmed by incorporated businesses ($6,460 million) and those skimmed by unincorporated business ($4,495 million), or $10,955 million (as indicated in Section 5, table 4).

32 These sources of income include transfers from public or other sectors, payments out of pension and various registered retirement plans, and income from capital gains on the disposition of assets (for example, property, shares).

33 In this report, it is assumed that undisclosed non-public transfers between individuals (for example, private scholarships, money transferred between individuals without an underlying economic transaction) is not significant in scale relative to the tax base, and that payments out of domestic registered plans (RPPs, RRSPs) are generally subject to third-party reporting and generally difficult to hide. This leaves unreported capital gains as the key source of taxable income outside the framework that needs to be added to hidden T1 income base.

A3.3 Capital gains

Taxable sources of capital gains are generally realized when individuals are considered to have sold capital property, which includes land, buildings, shares, bonds, personal property (for instance, residences) and listed personal property (for example, artwork), at a price in excess of the adjusted cost base.[34]

Statistics Canada's UE estimates do not cover capital gains. Relevant data on which to base an estimate of unreported capital gains was not available for the purposes of this report. While special projects, audits and other compliance activities are conducted by the CRA to verify reported capital gains or to identify unreported capital gains, they are risk-based and cannot be extrapolated and scaled up to give an indication of non-compliance within the entire T1 population for the purposes of this report.

Of particular note are capital gains realized on the sale of real estate. The CRA uses a combination of advanced risk-assessment tools, analytics, leads, and third-party data to detect and address non-compliance in this sector, which can contribute to both the domestic and international tax gaps. The Housing Statistics Framework announced in Budget 2017, in combination with recent changes to reporting requirements (regarding, for instance, the sale of principal residences), will enhance the data available on residential properties in Canada, purchases and sales. This information will further enhance the targeting of CRA's compliance activities in this area.

A3.4 Limitations of a Top-down Approach

This report's filing and reporting gap is intended to estimate the unreported income of both filers and non-filers who would have a tax liability if they filed. Non-filers in this context are filers that are *not* identified by CRA's non-filer programs by June 2016. They are distinct from those non-filers that *were* identified by dedicated CRA programs and were subsequently factored into assessed income for tax year 2014. Because of the top-down nature of our approach to estimating T1 hidden income, the tax loss due to non-filing and under-reporting cannot be broken out into two separate filing and reporting gaps.

As well, given how CRA audit activity is tracked internally, it is not possible to remove *UE-related* income actually identified through the CRA's audits and verification activities from global estimates of hidden income. This is to say that we are not able to estimate an audit gap, or the amount by which the estimated 2014 filing and reporting gap related to UE activities was actually reduced by compliance activities. In this respect, the actual 2014 tax gap may be somewhat over-estimated.

[34] After also accounting for costs directly related to acquisition and sale.

A3.5 Effective Marginal Tax Rates

The Department of Finance's T1 micro-simulation model was used to determine the effective marginal tax rates (EMTRs). An EMTR represents the tax rate that would apply on reporting an additional amount of income – that is, it reflects the change in tax liability as a result of a marginal change in income.

The EMTRs calculated by the model account for federal and provincial statutory income tax rates, deductions and credits, and, when applicable, the clawbacks of federal income-tested benefits delivered using the tax system (e.g., Working Income Tax Benefit and child benefits). For the purpose of this study, only the component of the EMTR as it relates to the federal personal income tax system was used to determine foregone federal tax revenues.

Typically, EMTRs are calculated on a small marginal change in income (e.g., a marginal dollar of additional income). Given that UE participants are likely hiding more that a marginal dollar, we have assumed a larger margin to be conservative (i.e., a larger margin would result in higher EMTRs on average). In absence of statistics on the average amount of hidden income by individuals participating in the UE, we have assumed individuals would hide an amount equivalent to 20% of reported income.

Finally, EMTRs by sector were calculated under the assumption that UE participants have the same marginal tax rate as filers reporting income in similar sectors of activity (as presented in Table 5). For individuals in the hidden construction and tips sectors, we were able to link the employees to the employer's North American Industry Classification System (NAICS) code. We have assumed the sectors related to tips to include food services and drinking places, travel accommodations, taxi, limousines, personal care services and other personal care services. The EMTRs for individuals under other UE activities and UE trade-related activities assume the average EMTR for employees and self-employed individuals, respectively.

The average EMTR used for the self-employed in hidden construction corresponds with that of the self-employed who declared the construction NAICS code on their T1 Return. The EMTRs used for the self-employed earning hidden income from other UE activities and from hidden rent/room and board corresponded to those for the self-employed generally and for rental income, respectively.

Glossary

Term	Definition	Line in T1 Return (T1) or Schedule 1 (S1) where amount is reported/claimed
Age Amount	Tax filers who were 65 years or older in 2014 and whose net income was less than $80,980 were allowed to claim an age amount up to a maximum of $6,916.	S1 Line 301
Assessed Income	An individual's reported income after any adjustments made by the CRA through assessment or re-assessments. In this report's assurance analysis, assessed income can be assured or not assured.	T1 Line 150
Assessed Tax	Tax that is determined to be payable based on assessed income. Indicated on individuals' Notices of Assessment or Re-Assessment.	
Audit	The examination of taxpayers' books and records to determine the taxes, interest and penalties payable under the law.	
Basic Personal Amount	This is the amount of taxable income an individual can earn before paying any federal tax. A basic personal amount in 2014 of up to $11,138 could be claimed.	S1 Line 300
Canada Child Benefit (CCB)	The CCB is a tax-free monthly payment made to eligible families to help them with the cost of raising children under 18 years of age. The CCB might include the child disability benefit. The first CCB payment was administered in July 2016.	
Canada Employment Credit	Employees are eligible to claim an employment amount. This amount in 2014 was the lesser of: • $1,127 or • The total of the income reported on lines 101 and 104 of their T1 Return.	S1 Line 363
Canada Pension Plan (CPP)/ Quebec Pension Plan (QPP) Benefits	This is the amount of CPP or QPP benefits (box 20 on the T4A(P) slip) an individual receives. It also includes death and disability benefits, and child benefit, if received by a child of a deceased or disabled contributor.	T1 Line 114

Canada Pension Plan (CPP)/ Quebec Pension Plan (QPP) Contributions (through employment)	This is the amount paid into the CPP or QPP by employees. The maximum contribution in 2014 was $2,425.50 (for individuals not resident of Quebec). It does not include amounts for tax filers aged 71 or over because they do not contribute.	S1 Line 308
Capital Gains	This is income that is earned when capital property (e.g., land, buildings, shares, bonds, and fund and trust units) is sold or transferred for proceeds that exceed its costs. The income inclusion for capital gains is calculated in Schedule 3.	T1 Line 127
Commissions (from employment)	This is the income an employee receives based on a percentage of sales. Some people may be paid by commission only, while others may receive a fixed salary as well as a percentage of sales.	T1 Line 139
Effective Marginal Tax Rates (EMTR)	The EMTR is the tax rate bearing on the incremental dollar of income that is earned, or the next dollar earned, by an individual. For individuals, comprehensive EMTR measures take into account the income thresholds and statutory rates of the personal income tax system, as well as the impacts of tax deductions and credits and income-tested federal and provincial benefits.	
Elected Split-Pension Amount	The amount that is claimed by an individual who elects to split his or her pension income with his or her spouse or common-law partner. The transferring spouse or common-law partner can deduct the elected split-pension amount from line G of Form T1032.	T1 line 210
Employment Income	Salaries, wages, commissions and other employment income earned by an individual from employment by a business, institution, school, federal or provincial Crown corporation, or some form of government body. This income is generally provided on T4 slips.	T1 Lines 101 or 104
Employment Insurance and Other Benefits	This is amounts received in benefits from the Employment Insurance plan (box 14 on the T4E slip).	T1 Line 119
Employment Insurance Premiums (through employment)	This is the amount, up to a maximum of $913.68 in 2014, deducted as employment insurance premiums and withheld by the employer. It does not include any overpayment by the employer.	S1 Line 312

Gross Domestic Product (GDP)	The total unduplicated value of the goods and services produced in the economic territory of a country or region during a given period. The level of GDP reveals information about the size of an economy while the change in GDP from one period to another period indicates whether the economy is expanding or contracting.	
GST/HST Credit	The GST/HST credit is a tax-free quarterly payment that helps individuals and families with low or modest incomes offset all or part of the GST or HST that they pay.	
Hidden Income	Income that is not reported to CRA due to non-filing or the under-reporting of domestic income. For the purposes of this report, hidden income is estimated as the income earned in underground economy activities.	
(Net) Income from Self-employment	Self-employment income can be earned from a business, a profession, commission, farming, or fishing. It is reported net of eligible expenses.	T1 Lines 135 to 143
Interest and Other Investment Income	This includes interest, foreign interest or dividend income from investments or savings.	T1 Line 121
Medical Expenses	This is the amount for total allowable medical expenses. For 2014, this includes the allowable medical expense amount for the tax filer, his or her spouse or common-law partner and his or her dependent children born in 1997 or later and the allowable amount of medical expenses for other dependants.	S1 Lines 330 and 331
National Accounts	Canada's National Economic Accounts are a set of economic statistics that describe economic activity, through such indicators as Gross Domestic Product, including: (a) how production* is distributed among consumers, businesses, government and foreign nations; (b) how income originating in production, modified by taxes and transfers, flows to these groups; and, (c) how these groups allocate these flows to consumption, saving and investment. **Production refers to consumable outputs that result from the combining of inputs (e.g., labour, capital). It therefore does not include capital gains.*	

Net Federal Supplements (GIS)	This is the net amount of any allowance, allowance for the survivor, or guaranteed income supplement received in the tax year. It is shown in box 21 of the T4A (OAS) slip.	T1 Line 146
Northern Residents Deductions	The sum of the residency deduction for having lived in a prescribed zone and the travel deduction for taxable travel benefits received from employment in a prescribed zone, as calculated on Form T2222, Northern Residents Deductions.	T1 Line 255
Notice of Assessment	The notice sent to taxpayers explaining the results of the CRA's assessment of their T1 Return.	
Notice of Re-Assessment	The notice that is sent to a taxpayer if a previously filed return is re-assessed as a result of either a taxpayer's request for an adjustment to an already assessed return, or when a return is changed as the result of a CRA review or audit.	
Old Age Security Pension	This is a monthly benefit paid to people 65 years of age or older. It is from box 18 of the T4A (OAS) slip.	T1 Line 113
Other Deductions	This includes allowable amounts not deducted anywhere else on the return. The most common deductions claimed are: • income amounts paid back • legal fees • depletion allowances • certain unused RRSP contributions made after 1990 that were refunded in 2014 • excess parts of a direct transfer of a lump-sum payment from an RPP to RRSP or RRIF that was withdrawn and included in lines 129 or 130 of the 2014 return	T1 Line 232
Other Employment Income	This can include: • tips and occasional earnings • net research grants • clergy's housing allowance and/or an amount for eligible utilities • foreign employment income • income-maintenance insurance plans (wage-loss replacement plans) • certain veterans' benefits • certain GST/HST and QST rebates • royalties	T1 line 104

	• amounts received under a supplementary unemployment benefit plan (a guaranteed annual wage plan) • taxable benefits for premiums paid for a group term life-insurance plan • employees profit-sharing plan amounts • medical premium benefits • Wage Earner Protection Program	
Other Income	This can include: • scholarships, fellowships, bursaries and artists' project grants • apprenticeship incentive grant • apprenticeship completion grant • lump-sum payments from pensions and deferred profit-sharing plans when leaving a plan • retiring allowances (severance pay) • death benefits (other than CPP/QPP death benefits) • other kinds of income	T1 Line 130
Other Payment Deductions	Generally, the tax filer can deduct the total amount in this line. This includes: line 144, workers' compensation benefits; line 145, social assistance payments; and line 146, net federal supplements.	T1 Line 147
Other Pension or Superannuation	This includes income from registered pension plans, registered retirement income funds, deferred profit-sharing plans, and foreign pensions.	T1 Line 115
Pension Income Amount	This is an amount up to $2,000 that tax filers with eligible pension, superannuation or annuity payments on any or all of lines 115, 116 and 129 of the T1 Return can claim.	S1 Line 314
Public Transit Amount	This is an amount that can be claimed for the cost of monthly public transit passes, passes of longer duration, and certain passes of shorter duration. Public transit includes local buses, streetcars, subways, commuter trains or buses, and local ferries.	S1 Line 364
Re-examination	Occurs based on the level of risk of non-compliance, random selection, or at the request of the taxpayer. Depending on the findings of a re-examination of an individual's tax return, the CRA may issue a Notice of Re-Assessment.	

Registered Pension Plan (RPP) Deduction	An RPP is a pension plan that has been set up by your employer, and registered by the government, to provide a pension to an individual upon retirement. Tax filers can deduct their total RPP contributions for current service, or for past service for 1990 or later years. However, tax filers generally cannot carry forward the amount not deducted.	T1 Line 207
Registered Retirement Savings Plan (RRSP) Income	RRSP income refers to money withdrawn from or received out of an RRSP. This income will be shown on a T4RSP, Statement of RRSP Income slip and is reported on line 129 of the T1 Return.	
Registered Retirement Savings Plan (RRSP)/Pooled Registered Pension Plan (PRPP) Deduction	An RRSP is a retirement savings plan that an individual establishes, that the Government registers, and to which an individual or his or her spouse or common-law partner contributes. A PRPP is a retirement savings option for individuals, including self-employed individuals, who do not have access to a workplace pension plan to contribute to a large, pooled and portable pension plan. Investment options for PRPPs are similar to other registered plans. Eligible amounts contributed to an RRSP and PRPP may be deducted from income to reduce tax liability. Generally, any income earned in the RRSP or PRPP is exempt from tax as long as the funds remain in the plan, however, individuals usually have to pay tax when payments are received from these plans.	T1 Line 208
Rental Income / Net Rental Income	This includes income from renting a property owned by an individual including a house, apartment, room, space in an office building, or other real or personal property. Net rental income is this income net of eligible expenses.	T1 Line 126
Reporting Errors	Occur when individuals provide incomplete and/or inaccurate information in their tax return. Reporting errors can be intentional or unintentional.	
Social Assistance Payments	These are payments to beneficiaries or third parties as reported on a T5007, Statement of Benefits slip. This income is not subject to tax. That is, it is deducted from taxable income (line 260 of the T1 Return).	T1 Line 145

Tax Assured	Tax assured measures the proportion of the tax base where the revenue body has justified trust through its activities or others' activities that tax is "under control" and so assured as accurate and paid. For the purposes of this report, all income for which there is third-party reporting is considered "tax assured" as well as low-risk credits and deductions (see Section 3 of report).	
Tax Credit	Most tax credits are non-refundable. Non-refundable tax credits generally reduce personal income tax payable by the amount of the credit multiplied by the lowest federal tax rate (currently 15%), with some exceptions. For example, if an individual claimed $100 in the cost of adoption expenses, it would reduce the individual's tax liability by up to $15.	
Tax Deduction	Deductions are eligible expenses or allowances that are subtracted from total income for tax purposes in order to arrive at taxable income. The value of a deduction to a taxpayer generally depends on an individual's marginal rate of taxation. The higher the rate of taxation, the more valuable a deduction is in lowering the total income subject to tax.	
Tax Gap	A difference between the amount of tax that would be paid if all obligations were fully met in all instances, and the actual amount of tax collected.	
Tax Loss	Tax revenue lost due to non-compliance.	
Tax Withholdings	Income taxes are required to be withheld from some sources of income in Canada including employment and pension income. The payer withholds an amount of income from each payment and remits it to the Government of Canada on the payee's behalf (for example, an employer withholds tax on an employee's pay).	
Tuition, Education and Textbook Amounts	This is an amount for eligible tuition fees and the education and textbook amounts. The education and textbook tax credits were eliminated effective January 1, 2017.	S1 Line 323
Tuition, Education and Textbook Amounts	This is eligible tuition fees and the education and textbook amounts transferred from a student. A student may transfer up to $5,000, minus the amount that he or she uses	S1 Line 326

Transferred from a Child	(even if there is still an unclaimed part), to his or her parent or grandparent.	
Universal Child Care Benefit (UCCB)	This is a benefit for an eligible individual responsible for the care of a child under six years of age. The eligible individual can receive $100 per month for each qualified dependant. The UCCB was replaced by the CCB as of July 2016.	T1 Line 117
Workers' Compensation Benefits	This is the amount of compensation paid to an employee or surviving spouse or common-law partner in the event of the employee's injury, disability or death, under the laws of Canada or a province or territory. This amount is shown on a T5007, Statement of Benefits slip. These benefits are not subject to tax and are correspondingly deducted from taxable income on line 260 of the T1 Return.	T1 Line 144
Write-Offs	An uncollectible debt that the CRA is unable to collect for reasons, such as: • collection avenues have been exhausted; • the debt cannot be located; or • the debtor does not have the ability to pay. Under specific legal requirements, uncollectible debts can be written off to remove them from the CRA's inventory, under the authority of the *Financial Administration Act*. The CRA has multiple delegated authority levels to approve debt write-offs. Writing off a debt does not forgive or extinguish the legal right of the CRA to collect the debt, nor does it release the debtor from the obligation to pay. Write-offs related to T1 tax debt add to the T1 tax gap.	