

2014

Oregon Department of Revenue RESEARCH SECTION

COMPLIANCE WITH OREGON'S PERSONAL AND CORPORATE TAX PROGRAMS

EXECUTIVE SUMMARY

JANUARY 2014



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In 2013, the legislature included a budget note in the Department of Revenue (DOR) appropriation bill.

The Department of Revenue shall submit a report to the Legislature during the 2014 session that describes the cause of noncompliance in the personal and corporation tax programs, including a discussion of tax gap estimates. The Department shall create a specific, systemic plan to reduce the tax gap including performance measures, benchmarks, and timelines, and report progress from this plan to the Legislature in 2015. Where possible, the Department shall incorporate the results of the work performed for the Enforcement Revenue Budget Note in 2011.

There are two parts of our response to the budget note. The first sentence of the budget note requests a report from DOR related to noncompliance in the personal and corporation tax programs including a discussion of tax gap estimates. The report summarized here is the first part of the response to the budget note and addresses the requests made in that first sentence.

This executive summary describes the information contained in the report. The summary does not substitute for a detailed reading of the report, but it should familiarize the reader with the general concepts and themes.

The goals of the report are:

- to describe taxpayer's motives and opportunities for noncompliance,
- to describe one method of measuring and reporting the results of compliance programs, and
- to explain how estimates of noncompliance are made and in what circumstances the estimates are useful.

Why are taxpayers noncompliant?

A widely accepted definition of tax compliance consists of three broad characteristics: filing tax information on time, reporting complete and accurate information, and paying tax obligations on time. There are many points in time and decisions made by taxpayers where one of these components of tax compliance is at risk.

There are two complementary views of how taxpayers decide whether to comply, one focused on noncompliance as a deliberate decision and the other view looking at several reasons for noncompliance.

The first theory of noncompliance is a model of deterrence, which assumes taxpayers comply because of the threat of sanctions if the tax agency discovers the noncompliance. This model treats taxpayer decision making about how much tax to underreport as a gamble. The model is predicated upon the taxpayer having an idea of the likelihood of being caught if they cheat, and the penalty that will be imposed. Using that knowledge, the taxpayer attempts to minimize the expected tax and penalty they will pay. Some researchers believe tax compliance in the United States is much higher than this model predicts.

The second view of tax noncompliance relies on a set of theories that explain taxpayers' compliance decisions in terms of less quantifiable factors. These theories state that taxpayers consider factors such as their satisfaction with government leaders and services, their perception of their peers' tax compliance, their belief that the tax system is equitable, and the effort required to comply compared to their motivation to comply.

Complexity Increases Noncompliance

For taxpayers who want to comply, complexity heavily influences their efforts and associated costs. Even taxpayers intending to file completely and accurately may be unable to do so if they do not understand the laws and rules that determine their eligibility for deductions or credits, or their requirements to report certain types of income but not others.

For taxpayers who want to evade tax, complexity offers a way to accomplish that aim. As stated by the National Taxpayer Advocate, “Many law firms, accounting firms and investment banking firms have made tens of millions of dollars by scouring the tax code for ambiguities and then advising taxpayers to enter into transactions, with differing levels of business purpose or economic substance, to take advantage of those ambiguities”(Olson, 2011).

Because most noncompliance is likely due to complexity, it is advisable to structure a moderate compliance enforcement program that is flexible and able to respond to the underlying causes of taxpayer noncompliance. It may be inappropriate and could possibly be perceived as unfair for tax agencies to respond identically to inadvertent noncompliance that arises due to complexity, and noncompliance that arises due to a taxpayer’s intention to evade.

Measuring DOR’s Impact on Noncompliance

In 2011, the legislature requested that DOR develop a method to report the results of enforcement efforts. In response, DOR developed a way to categorize each payment received that is directly due to the enforcement efforts of DOR employees. This effort resulted in a way to sum receipts from audits and tax liabilities in active collections. This enforcement revenue series can provide a useful way to identify the direct results of enforcement activities.

This measurement cannot include indirect impacts. For example, a taxpayer that is audited may improve future compliance, or share the story of the audit, which may lead to improved compliance by a larger group of taxpayers. Such indirect effects cannot be measured. In addition, identification of taxpayer noncompliance does not automatically lead to payment(s) received from that taxpayer. Often, following an audit a taxpayer may be unable to pay, or may resist payment.

Enforcement efforts also affect DOR’s accounts receivable. For instance, nearly all of the net growth in personal income tax accounts receivable during fiscal year 2013 can be attributed to DOR’s increased efforts to identify noncompliance of tax nonfilers (people that don’t voluntarily file tax returns are generally more difficult to collect tax debt from). It is only after these nonfilers are identified and some form of payment has been received will that amount show up in the enforcement revenue series.

Amount of Noncompliance and Estimating the Tax Gap

Because noncompliance cannot be directly observed, several methods have been used to make estimates of the total level of noncompliance (the tax gap). The estimates vary widely based on the method of estimation, and ultimately, any estimate of total noncompliance is speculative. Given the speculative nature of estimates and the variance in estimation methods, comparisons of tax gap estimates over time or between tax jurisdictions are generally not meaningful.

While the gap estimate is large, efforts to identify and collect more of the tax gap are limited by the information available to DOR and by the burden placed on taxpayers that is necessary to achieve increased compliance. There is agreement among researchers that only a small part of the tax gap is collectible.

In Appendix A of the report, we present estimates of the overall tax gap in Oregon’s personal and corporate income taxes. The value DOR derives from the tax gap is in understanding the sources of noncompliance. Knowing and understanding the motivation for and methods that facilitate noncompliance allow appropriate compliance strategies to be developed and effectively administered.

2014

Oregon Department of Revenue

RESEARCH SECTION

COMPLIANCE WITH OREGON'S PERSONAL AND CORPORATE TAX PROGRAMS

SOURCES OF NONCOMPLIANCE AND DISCUSSION OF TAX GAP

JANUARY 2014



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Purpose of This Report

In 2013, the legislature included the following budget note in the Department of Revenue (DOR) appropriation bill.

The Department of Revenue shall submit a report to the Legislature during the 2014 session that describes the cause of noncompliance in the personal and corporation tax programs, including a discussion of tax gap estimates. The Department shall create a specific, systemic plan to reduce the tax gap including performance measures, benchmarks, and timelines, and report progress from this plan to the Legislature in 2015. Where possible, the Department shall incorporate the results of the work performed for the Enforcement Revenue Budget Note in 2011.

There are two parts of our response to the budget note. This report is the first part of the response, and addresses the first sentence of the budget note. This report is background for the second part of the response.

Defining Noncompliance

Tax compliance is an important topic in the design and administration of Oregon's tax system. A tax system carefully designed with the goals of fairness and equity¹ can look significantly different from the design after the effect of noncompliance. For instance, one of the statutory guiding principles of Oregon's tax system is that, "it is not regressive." If noncompliance is higher for high-income or lower for low-income Oregonians, it affects the progressivity of the designed tax system. Varying levels of compliance can also change the competitive landscape between compliant and noncompliant businesses.

A widely accepted definition of tax compliance consists of three broad characteristics: filing tax information on time, reporting complete and accurate information, and paying tax obligations on time. There are many points in time and decisions made by taxpayers where one of these components of tax compliance is at risk.

While filing compliance, reporting compliance and payment compliance seem straightforward, looking at these characteristics in detail exposes significant ambiguity. Discussions of tax compliance tend to refer to compliance and noncompliance as if there is a bright line separating them. Such a characterization misses some of the uncertainty faced by taxpayers and tax administrators. There are legitimate disagreements about the interpretation and implementation of some parts of tax law, and some parts are notoriously unclear. It is not uncommon for a tax issue to be resolved in court when the state and a taxpayer disagree about whether a tax return is compliant as filed.

What does Noncompliance look like?

When most people think about tax noncompliance, the first thought is about intentional tax evasion. Indeed, some taxpayers knowingly evade taxes even when compliance is fully possible. While it is impossible to definitively separate, many people in tax administration believe a large proportion of noncompliance is unintentional. Each of the characteristics required of a compliant taxpayer (accurately and timely filing, reporting, and paying) represents an opportunity for either intentional or unintentional noncompliance. The three broad characteristics of compliance are discussed in detail below.

¹ ORS 316.003 details the goals and objectives of Oregon's tax system, noting that to meet the goals, "any tax must be considered in conjunction with the effects of all other taxes on Oregonians."

Filing Tax Information on Time

The requirement to file is not necessarily simple. For individuals, the requirement is based on comparing income to the tax resulting after considering the standard deduction and personal exemption credits that may be available on a return. Since income, standard deduction, personal exemption credits, and filing status change each year, many taxpayers must review filing requirements each year if they are looking for certainty about their filing requirements. For corporations, the requirement to file is based on whether the corporation is “doing business” in Oregon, which can be a complicated determination.

Reporting Complete and Accurate Information

Based on federal estimates, noncompliance due to inaccurate reporting is the largest source of noncompliance in terms of dollars (Internal Revenue Service, 2012). Inaccurate reporting generally falls into the categories of understating income, overstating deductions or expenses, or overstating allowable credits. For multi-state businesses, accurate reporting also requires accurately allocating and apportioning income between states and countries.

Paying Tax Obligations on Time

Taxpayers who file and report correctly may still fail to pay the entire amount of tax due, and these taxpayers are also considered to be noncompliant. A number of factors can lead to underpayment but circumstances taxpayers often report to DOR include significant medical issues, a death in the family, unemployment or a lack of awareness that a particular item of income (e.g. forgiven debt) is taxable. In addition, low-income taxpayers may face an unmanageable state income tax liability all at once when they file their return.²

Sources of Tax Noncompliance

Where possible, DOR matches the compliance intervention to the source of noncompliance. For example, if a taxpayer is diligent and wants to comply but does not understand the rules for taking a political contribution credit, then clear instructions and maybe a discussion with DOR staff ensure compliance. Taxpayers who deliberately understate their tax need stronger intervention like an audit to compel compliance.

Noncompliance is made of many errors, some intentional and some unintentional. For taxpayers who want to maintain compliance, it takes consistent attention and action over the course of every year. Taxpayers must know how to maintain compliance or must hire someone who knows how. Taxpayers must then follow through using that knowledge to accurately and timely record appropriate transactions and make appropriate and timely tax payments.

Compliance is often summarized as having three primary components: (1) timely filing, (2) accurate reporting and, (3) timely payment. Those three components appear to be simple, but it is important to understand there is considerable effort (and perhaps financial compliance costs) expended by those who do all three diligently.

² For comparison, the lump sum payment required for an income tax (if withholding has been insufficient) is very different than the payments made through adequate withholding or through a sales tax that affects taxpayers in predictable and manageable increments over the course of a year.

As a high-level overview, taxpayers must keep accurate records of:

- Income
- Allowable deductions, exclusions or subtractions
- Tax Credits
- Residence and domicile
- For corporations;
 - Allowable Expenses
 - Allocation of income between that related to primary business and other income
 - Location of Sales in Oregon if:
 - For property, delivery within Oregon (except to U.S. government)
 - For services, greatest proportion of cost is incurred in Oregon
 - Which corporations in a group with common ownership are taxable in Oregon?
- Taxpayers must periodically estimate their tax liability and ensure timely payments of estimated tax are made (either through withholding or estimated payments).

Finally, a compliant taxpayer accurately reports their information on prescribed forms and pays any remaining amount due on time.

In developing compliance strategy and in understanding the results, it is helpful to understand compliance in more detail. The following sections explain the motive and opportunity for noncompliance.

Cause of noncompliance: Motive

Taxpayers have varying reasons for noncompliance. It is likely most instances of noncompliance are inadvertent, though intentional noncompliance may have a higher cost. A strategy for addressing noncompliance can increase voluntary compliance if it eliminates a reason for noncompliance, or makes compliance a more compelling choice for the taxpayer in future years.

The National Taxpayer Advocate makes a compelling case that a significant amount of noncompliance is inadvertent by interpreting results from the IRS and the Government Accountability Office (Olson, 2011).

- IRS auditors working on the National Research Program³ were asked to classify the noncompliance they discovered as intentional, computational, or unintentional. They identified only three percent of errors as intentional, and while IRS does not have much faith in this estimate, its magnitude is instructive.
- IRS data suggested only 28 percent of eligible taxpayers claimed a one-time credit for over-collected telephone excise credits in 2006. This indicates taxpayers make mistakes that cost them money, so it is reasonable to infer that some noncompliance that costs the treasury money may also be inadvertent mistakes.

³ The National Research Program (NRP) data used was from reviews of a random sample of about 47,000 tax returns. The NRP and is the basis for the IRS estimates of the tax gap for the federal personal income tax.

- A Government Accountability Office study of capital gains misreporting using IRS data implies two thirds of capital gains misreporting is inadvertent.⁴

Adding to the capital gains example used by the National Taxpayer Advocate, looking at taxpayers who inadvertently over-report their taxes for any reason may give further insight into those that inadvertently underreport. If taxpayers overpay tax, it is likely to be due to complexity and the resulting cost of accurate reporting. Two studies, one in 1987 performed using IRS audit data, the other in 1994 using data from the American Taxpayer Compliance Measurement Program (TCMP) found taxpayers often overstated their tax liability by overstating income (Kirchler, 2007). For instance, data from the 1988 TCMP indicated that 14 percent of taxpayers with adjusted gross income between \$50,000 and \$100,000 overstated their tax due.⁵ Since overpayment is likely due to complexity, some underpayment may also be due to complexity. Assuming an equal number of taxpayers inadvertently understate income, then complexity leads more than one fourth of taxpayers to be unsuccessful despite their attempt to report correctly.

Intentional noncompliance of varying degrees may be aided by complexity. Intuitively, taxpayers with the most to gain from noncompliance would have a greater incentive and ability to invest time and personal effort in pursuing and disguising noncompliance.

- Returns received from recipients of income other than wages, such as business income, rental income and investment income are likely to be more sophisticated than wage earner only returns. This sophistication and the reduced availability of third party reporting for these types of income provide the opportunity for noncompliance.
- A contractor hired by the IRS estimated the average loss due to corporations' use of abusive tax shelters from 1993 through 1999 was between \$11.6 and \$15.1 billion (U.S. General Accounting Office, 2003). While the estimate of the magnitude of the abusive tax shelters is dubious,⁶ such noncompliance is obviously planned and therefore intentional.

Understanding the motive and opportunities for noncompliance is essential to devising strategies to address noncompliance.

Motive for Compliance/Noncompliance: Economic Deterrence Model

Economists have created a model of economic deterrence that provides a reasonable basis for understanding intentional noncompliance based purely on financial motive. The foundational economic theory of tax evasion illustrates the compliance choice of a taxpayer by looking at it as a gamble (Allingham & Sandmo, 1972). The basic model relies on taxpayers knowing their true tax liability, but the tax collector not knowing it without an examination of some kind.

⁴ This is based on GAO finding that one-third of taxpayers that misreported capital gains had overstated their actual gains (U.S. Government Accountability Office, 2006). The National Taxpayer Advocate assumes errors are "normally distributed" so that there are as many overstatements as understatements due to taxpayer error, which results in the two-thirds estimate.

⁵ Estimated percent of taxpayers overstating tax was lower for lower income groups and higher for higher income groups, and the percent understating was higher for every group. (Christian, 1993/1994) Note that the groups with the highest overstatement of tax were higher-income for 1988, likely reflecting more complex tax situations and the presence of income from sources other than wages.

⁶ The U.S. General Accounting Office noted, "Treasury, IRS, the contractor, and [GAO] all have concerns about the reliability of the contractor's estimates..." (Page 3).

In this model, the taxpayers' expected after-tax income is based on how much their tax liability is understated, the (perceived) probability the understatement is discovered, and the penalty associated with understatement.

A taxpayer who is indifferent to risk would simply maximize their expected after-tax income, but taxpayers' aversion to risk lowers their inclination to understate tax liability.

A number of interesting observations can be made based on this model and extensions made to it by researchers in the last forty years:

- Honesty and fear of being caught can both lead to compliant behavior based on the deterrence model
- Probability of detection is likely proportional to the amount of evasion, but the probability can be modified by "evasion technology" including complex transactions, pass-through entities, financial derivatives, etc.
- Probability of detection is higher where third party reports exist. The model would predict higher compliance with third party reporting, and experience shows this is correct.
- If penalties are derived as a fraction of understated tax (as opposed to understated income) the tax rate does not play a role in underreporting decisions because the reward for noncompliance is proportional to the penalty for underreporting being discovered.
- If interest rate on discovered tax understatement exceeds cost of borrowing in standard markets the interest rate acts as a penalty.
- Evasion is more likely in years when a taxpayer requires cash and cannot secure a loan through the traditional market. In that case, a taxpayer may turn to the tax agency as an unwilling lender (Andreoni, IRS as Loan Shark: Tax Compliance with Borrowing Constraints, 1992). As an example, DOR staff members have reported that Oregon businesses facing financial crisis and cash flow issues sometimes fail to remit the income tax withheld from employee paychecks.
- Adding "Underground Economy" considerations, the benefits of evasion are often passed along to others (e.g. contractors working "off book" may have a lower price than those who are tax-compliant) (Kesselman, 1989)
- There is a widespread view among researchers that the model would predict voluntary compliance rates that are much lower than those seen in the U.S.⁷ Even if the model does not explain the high levels of compliance, it is valuable in understanding compliance decisions.

Where the taxpayer is making choices about intentionally misreporting based on a purely financial motive, as in this model, it may seem that the obvious strategies to address the misreporting are:

⁷ See for example "Why do people pay taxes?" (Alm, McClelland, & Schulze, 1992) The authors argue that, "Although it is clear that detection and punishment affect compliance to a degree, it is equally clear that these factors cannot explain all, or even most, tax compliance behavior." There is an opposing view that arguments that dismiss the economic deterrence model saying it cannot explain compliance, "... [are] not persuasive, because the low average audit coverage rate vastly understates the chances that the average dollar of unreported net income would be detected." (Slemrod, *Cheating Ourselves: The Economics of Tax Evasion*, 2007).

- Pursue methods to increase the odds of detecting noncompliance, such as increasing the (real or perceived) probability of audit, requiring more third-party reporting, or increasing the effectiveness of audits.
- Increase the penalty for noncompliance.

However, this model really only addresses intentional noncompliance with a purely financial motive, so while strategies based on this model may be useful, their impact should be considered in connection with other motives for noncompliance.

While the economic deterrence model informs strategies to address intentional noncompliance, some actions that would be based on increasing compliance through economic deterrence (e.g. increasing audit rates or penalties) may actually reduce long-term voluntary compliance. Moderation is advisable in enforcement policies because extreme enforcement actions may make taxpayers see the tax system as unfair. For instance, most taxpayers would likely feel they were treated unfairly after they diligently prepare what they believe is an honest return, but are forced to respond to an intensive audit or are harshly penalized for an honest mistake.⁸

Taxpayers fearing enforcement actions may also choose to overpay tax by not claiming benefits they are entitled to, or avoid being visible to tax authorities altogether by shifting their income producing activities to informal, cash-based transactions (Kopczuk, 2006). In addition, a more extensive audit program may provide audited taxpayers with information that may actually assist them in reducing compliance in future years,⁹ or provide an incentive to understate tax based on a belief that lower initial reported tax may lead to a lower tax after audit.¹⁰

The deterrence model also illustrates other significant features of voluntary compliance that exist when enforcement relies primarily on third-party reporting. It is tempting in tax administration to wrest every dollar due from wage earners; the group of taxpayers who are already most compliant. Pursuing wage earners generally results in the best direct financial results because their noncompliance is most visible and they have a source of income that can be garnished to collect underpaid taxes. Since DOR is often judged on financial results, there is pressure to wrest more compliance from wage earners. However, a focus on wage earners comes at the expense of pursuing taxpayers who are intentionally using harder-to-detect methods to evade tax or who are actively fighting collection efforts.

It is best to address unintentional noncompliance differently than intentional noncompliance. This fact underlies the strategies developed by DOR to allocate resources to protect and enhance voluntary compliance.

⁸ Penalties can be effective in reducing unintentional mistakes in tax reporting, but it's not clear that they are the best tool. As stated by Wojciech Kopczuk, "...if penalties are an effective tool for reducing intentional cheating, high penalties may lead to a situation where the only penalized taxpayers are the honest but confused ones." (Kopczuk, 2006).

⁹ A review of the results of audits selected at random in the UK concluded that selecting audits based on risk might be preferable because the taxpayers identified as "compliant" by random audits appeared to reduce compliance in future years, perhaps because they become familiar with the limitations of audits. (Gemmell & Ratto, 2012).

¹⁰ In a controlled experiment in Minnesota, the tax agency sent letters to a sample of taxpayers, informing them that their tax returns would be "closely examined." Low and middle-income taxpayers increased their reported tax compared to a control group. However, high-income taxpayers receiving the notice reduced their reported tax relative to a group that did not receive such a notice. (Slemrod, Blumenthal, & Christian, Taxpayer Response to an Increased Probability of Audit: Evidence from a Controlled Experiment in Minnesota, 2001) It appears that these high-income taxpayers reduced their compliance. It may be that they see the initial reported tax as the opening bid in a negotiation after an audit, and reduced the tax to be in a better negotiating position.

Motives for Compliance/Noncompliance: Qualitative

While the economic deterrence model primarily describes a compliance choice based on a taxpayer's careful examination of the benefits of noncompliance compared to the risks, the choice about noncompliance is influenced by many factors. Most of these factors are not necessarily directly observable. A closer look at some of those factors is important in understanding compliance.

One way taxpayers are categorized is by their level of willingness to comply with tax laws. The broad categories describe the willingness of taxpayers to comply with tax laws and the effort they are willing to expend to comply or to evade. Such broad categories are useful for developing enforcement strategy.

Another way to look at compliance is to look at the reasons taxpayers make their compliance decisions. The reasons for their choice explain which of the broad compliance categories they fall into, and give further insight into how compliance can be aided or enforced.

As an example, one classification of the reasons for noncompliance (Kidder & McEwen, 1989) lists the following:

- **Procedural:** Failure to follow rules about filing, reporting and estimated payments, but not a failure to eventually report and pay the correct amount.
- **Lazy:** A step beyond procedural where the failure to meet requirements such as record-keeping lead to an underestimate of income or overestimate of expense and a resulting underpayment of tax
- **Unknowing:** Underpaying taxes inadvertently through ignorance of the requirements.
- **Asocial:** Deliberately understates taxes for personal gain without regard to the effect on others.
- **Social:** A set of circumstances exist (e.g. employer pays "under the table" at a reduced rate assuming the pay is not taxed) making noncompliance a social norm.
- **Symbolic:** Noncompliance is a deliberate action based on perceived inequity in the tax system or misgivings about how tax revenue is used.
- **Brokered:** A tax professional advises or assists with the noncompliance.
- **Habitual:** One of the previous reasons may have been the initial reason for noncompliance, but a lack of correction by the tax agency reinforces the ability to understate tax, or fails to correct inadvertent errors leading to repetition.

These classifications apply to individual taxpayers, and to individuals making decisions about compliance for corporations. For large corporations, these classifications may need to be seen in light of the development that the tax departments of large corporations have been characterized as profit centers¹¹ rather than cost centers.

As noted earlier, tax auditors tend to believe most mistakes they find are inadvertent. In discussions with DOR auditors, a need for individual taxpayers to understand basic bookkeeping was a primary suggestion to improve compliance.

¹¹ See for example *The New Market in Corporate Tax Shelters* (Bankman, 1999) which states, "The elevation of the tax department to a profit center has turned corporate norms on their head. Aggressive tax planning is now a desirable trait – a new norm."

The economic deterrence model offers a way to address some types of noncompliance through audit and penalties, but inadvertent errors are more difficult to address with increased enforcement and DOR prefers to proactively address inadvertent errors with education and assistance. The prospect of increasing penalties so that the threat of penalties looms larger than the compliance cost of accurate filing may be an unappealing solution to noncompliance because the increased social costs (including direct compliance costs) may exceed the increased revenue. Like many policies, the distinction lies in whether taxpayers' increased cost to comply is an appropriate trade-off for increased compliance.

Auditors and collectors at DOR report that life circumstances may lead to noncompliance. Often, unemployment, a death in the family, or a catastrophic illness leaves a taxpayer, or the taxpayers' family, unable to comply. If a deceased spouse was the record keeper for the business, the surviving spouse may be unable to replicate the information needed to file a return. A surviving spouse may even be unaware that a return must be filed. In addition, while most of the discussion of compliance is focused on decisions about reporting, nonpayment is also noncompliance, and the same sorts of life circumstances can make compliance with tax payments impossible. For instance, mid-year job loss may leave a taxpayer facing a choice between staying current on the family mortgage or staying current on tax payments. When taxpayers face more debt payments than income available to make the payments, tax debt is not always a priority.

Compliance may be Ambiguous

Discussions of tax compliance tend to speak of compliance and noncompliance as if there is a bright line separating them. Such a characterization misses some of the ambiguity faced by taxpayers and tax administrators.

There are legitimate disagreements about the interpretation and implementation of some parts of the tax law, and some parts are notoriously ambiguous. While ambiguity is in the eye of the beholder, one way to spot issues that taxpayers see as ambiguous is to see which issues are appealed and decided in court. Regularly contested issues for Oregon DOR include whether a group of corporations should file a consolidated return, whether a sale occurred in Oregon, whether an individual is an Oregon resident, and whether a worker is an employee or contractor.

It is not uncommon for a tax issue to be resolved in court when the state and a taxpayer disagree about whether a tax return is compliant as filed. The state prevails in some court cases and taxpayers prevail in some cases, indicating the disagreements are sometimes legitimate and the dividing line between compliance and noncompliance is not always obvious.

Like other disagreements about compliance, the distinction between legal tax avoidance and illegal tax evasion is not always clear. Legal ways of reducing tax are typically referred to as tax avoidance. Tax avoidance can be simple actions like claiming legitimate deductions, or more complicated like characterizing compensation from a wholly owned S-Corp as either salary or profit distributions to take advantage of differential tax treatment of the different types of income. Illegal ways of reducing tax are typically referred to as tax evasion, and include failing to report income from financial accounts in foreign countries because the income was invisible to U.S. tax authorities, as well as very complex abusive tax shelters.

As an example of both complexity and ambiguity, many corporations began using complex transactions known as lease-in-lease-out (LILO) transactions during the 1990s (Boraks, 2003). In a simplified view, a typical LILO arrangement was a lease by a taxpayer of an asset held by

a tax exempt organization (e.g. a city), which was immediately leased back to the tax exempt organization. An upfront lease prepayment by the taxpayer generates an immediate expense while periodic payments by the tax exempt organization are recognized when they are received. The arrangement generates a significant deferral of taxes. The tax exempt organizations participated in these activities because they received a portion of the tax savings as a fee, and after deconstructing the many transactions involved, LILOs tended to resemble a loan from the taxpayer to the tax exempt partner.

In 2000, the IRS identified LILO transactions as abusive tax shelters. Since then there have been several court decisions, nearly all of which found the tax benefits claimed by LILO participants were not legal. However, there was enough uncertainty that taxpayers may have believed for some time that their participation in these shelters was compliant with tax laws. For instance, Con Ed (Consolidated Edison, Inc.) reported their use of LILOs was under audit for several years and that they had confidence their reporting was correct.¹² In 2013, the U.S. Court of Appeals ruled against Con Ed,¹³ in a reversal of the finding by the U.S. Court of Claims.

In such a case where courts disagree, it may have initially been reasonable for the taxpayer to believe their transactions and reporting were a form of legal tax avoidance even though the IRS has maintained that these transactions are abusive tax evasion.

Opportunity for Noncompliance: Income Visibility

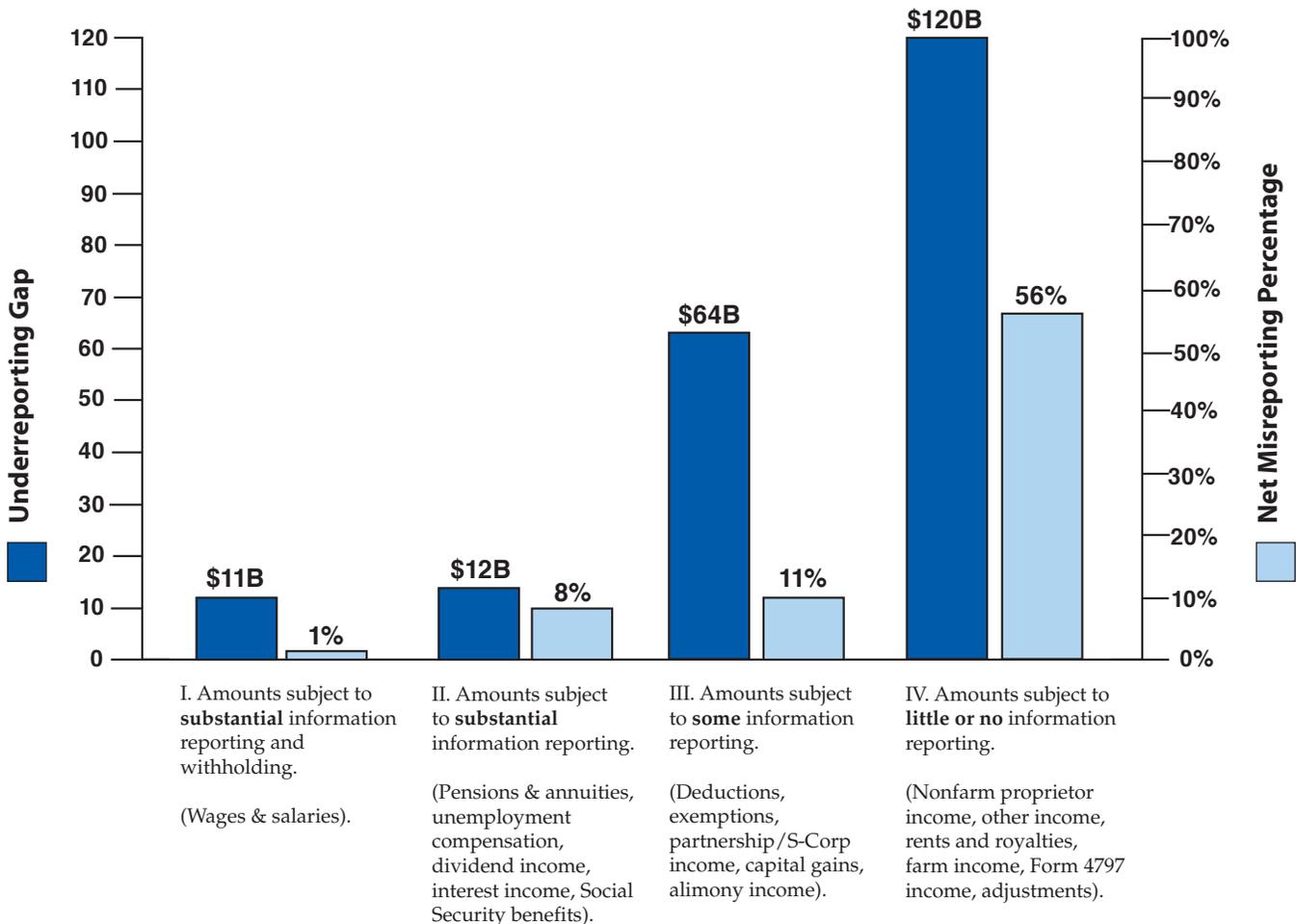
Taxpayers have more opportunity to misreport income or deductions that are “low-visibility.” Specifically, without third party reporting of the transaction, or tax withholding at the source of the transaction DOR may not automatically be aware of the transaction. IRS research is very clear that income and deductions that are subject to third party reporting have a much higher rate of correct voluntary reporting. Items subject to tax withholding have an even higher rate of correct voluntary reporting. For the highest visibility category (e.g. wages) where there is both third party reporting and withholding, taxpayers that file returns misreport the income by a little over one percent. For the lowest visibility category, where there is little or no information reported to the IRS, the estimated misreporting was about 56 percent (see graph).

¹² See Con Ed’s 2005 publicly filed 10-K, which includes the statement, “Con Edison believes that its position on the LILOs is correct and is currently appealing the auditors’ proposal within the Internal Revenue Service.”

¹³ Consolidated Edison Co. of New York Inc. v. United States, No. 2012-5040 (Fed. Cir. 2013) , reversing 90 Fed. Cl. 228 (2009).

Chart 1: Effect of Information Reporting on Taxpayer Compliance

Tax year 2006 individual income tax underreporting gap and net misreporting percentage, by “visibility” category.



NOTE: Net misreporting percentage is defined as the net misreported amount of income as a ratio of the true amount. Internal Revenue Service, December, 2011.

Figure 1: Net Misreporting by “Visibility”(Internal Revenue Service, 2007)

This leads to one of the most effective ways to increase voluntary compliance. Increasing the amount of information subject to third-party reporting, or the number and types of transactions subject to withholding will lead to increased compliance. However, there may be substantial cost to increased reporting and withholding. In this case, policy makers must weigh the benefit of increased compliance with the burden of increased costs to comply.

Opportunity for Noncompliance: Complexity

When a taxpayer files, compliance generally requires every line on their tax return be reported accurately. Therefore, every line adds complexity and an opportunity for noncompliance.¹⁴ Complexity is increased by every source of income that must be reported, sources of income

¹⁴ Here, “every line” refers to every required report of income sources, deductions, modifications, credits, etc. There is likely to be a drop in compliance when lines are combined. For example, a lack of distinct reporting reduces transparency and may lower compliance if a group of “other credits” are reported together, or net income is reported rather than separately listing income and expenses.

that are excluded, every deduction or deductible business expense, every credit, and so on. Further, each of these items may have a complex definition that is not familiar to the average taxpayer.

The National Taxpayer Advocate has included complexity in her report to Congress on the top ten issues faced by taxpayers multiple times. In the 2012 report to congress, the National Taxpayer Advocate noted, "The most serious problem facing taxpayers — and the IRS — is the complexity of the [tax code]." As measures of the complexity and its generated costs, the report noted:

- Taxpayers' cost to comply with tax reporting requirements were estimated at \$168 billion federally, or 15 percent of tax collections
- There were 4,680 changes to the tax code from 2001 through 2012, "an average of more than one a day."
- "The tax code has grown so long that it has become challenging even to figure out how long it is. A search of the Code conducted using the 'word count' feature in Microsoft Word turned up nearly four million words."

The Taxpayer Advocate concluded that a simpler tax code could be fairer, could improve tax morale, and could reduce tax evasion.(National Taxpayer Advocate, 2012)

Because Oregon ties to the federal definitions of income for personal and corporation taxpayers, Oregon inherits most of the complexity of the federal tax system. In addition to federal tax issues, personal income tax payers sometimes face difficult questions about residency¹⁵ as well as the various modifications of federal taxable income to arrive at Oregon taxable income (embodied in Oregon additions to, and subtractions from, federal income). Business filers generally have much more complicated returns and the added challenge of determining what part of multi-state business profits is taxable in Oregon.

For taxpayers that want to comply, complexity heavily influences their efforts (and associated costs). Even taxpayers that are devoted to honest filing may not be fully able to comply if they do not understand the laws and rules that determine their eligibility for deductions or credits, or their requirements to report certain types of income (but not others). There is significant evidence that most instances of underreporting tax are inadvertent.

For taxpayers that want to evade tax, complexity offers a way to accomplish that aim. As stated by the National Taxpayer Advocate, "Many law firms, accounting firms and investment banking firms have made tens of millions of dollars by scouring the tax code for ambiguities and then advising taxpayers to enter into transactions, with differing levels of business purpose or economic substance, to take advantage of those ambiguities"(Olson, 2011)

There is another category of taxpayer that will pursue minimizing their tax burden in ways that are "aggressive," but not necessarily characterized as honest or dishonest. As noted earlier, there is not always a clear distinction between illegal tax evasion and legal tax avoidance. In a

¹⁵ There is a long judicial history interpreting Oregon's definition of residency for tax purposes. Oregon law (ORS 316.027) treats a person as a resident based on whether they are "domiciled" in Oregon, have a permanent place of abode inside or outside Oregon, and the number of days they are in Oregon for a given year. Each person has exactly one domicile at a point in time, and changing domicile requires the intent to abandon the current domicile and acquisition of a new one. Since the establishment of domicile is subjective based on a taxpayer's intentions, many of a taxpayer's circumstances are generally important in determining whether these requirements are met.

purely legalistic sense, the distinction often lies in the business purpose¹⁶ of the transactions used to reduce tax. If there is no purpose for the transaction other than tax savings, it is likely tax evasion.

An example of complexity that may lead to unintentional noncompliance, or provide an opportunity for intentional noncompliance is differential tax treatment for similar income. In some cases a taxpayer has the ability to choose whether to characterize income as wages, capital gains, or profits. One example that has become important for Oregon (with the passage of HB 3601 in the 2013 special session providing lower rates on some S Corporation distributions) is a technique that has been used at the federal level to avoid employment taxes. Taxpayers that are both owners and employees of an S-Corporation face a choice each year about how much of the S Corporation's income is wages and how much is profits. Because the federal government imposes taxes on wages that are not imposed on profits (e.g. FICA), it may be advantageous for employee-owners to characterize most or all of their compensation as profits. But the IRS has noted that they are looking at this issue and can reclassify distributions as wages if the employee-owner doesn't receive a reasonable salary. There is no definitive guidance on what a reasonable salary is, so taxpayers must weigh individual circumstances (Fellows & Jewell, 2007). This makes it difficult for taxpayers that want to be compliant, and creates an opportunity for taxpayers that want to take an aggressive position to minimize their tax.

Complexity is often cited as a problem in tax administration, but there are constituencies that benefit from complexity and actively lobby for it. The complexity of the tax code supports an industry aimed at helping taxpayers file their returns, generally with promises of the maximum allowable refund. Notably lower-income taxpayers eligible for the earned income credit have become a major source of revenue for tax preparers. A small group of tax preparers has fought efforts by California's tax agency and the IRS that those organizations believe would simplify tax filing for some taxpayers (Day, 2013). In addition, complexity in the form of tax preferences or incentives benefits many taxpayers and professions that lobby to keep some elemental complexity in place.

Some Complex Transactions Don't Have a Business Purpose

Tax administration officials have challenged many financial arrangements that (on the surface) appear to be authorized by law, but also appear to exist only to reduce taxes. The business purpose and economic substance doctrines contend that legislative intent in writing tax law and taxpayer motive in entering transactions can override statutory language. The core of the idea was stated in a ruling by U.S. Supreme Court in *Gregory v. Helvering*. In the courts' opinion negating the tax benefit, the court noted that the reorganization of the business resulted in transfers of shares of stock in a manner that met the requirements in the law's language but not its intent.

In these circumstances, the facts speak for themselves, and are susceptible of but one interpretation. The whole undertaking, though conducted according to the terms of subdivision (B), was in fact an elaborate and devious form of conveyance masquerading as a corporate reorganization, and nothing else. The rule which excludes from consideration the motive of tax avoidance is not pertinent to the situation, because the transaction, upon its face, lies outside the plain intent of the statute. To hold

¹⁶ For simplicity, business purpose is discussed but the related concepts of economic substance, substance over form, and sham transaction are not discussed though they are often conflated.

*otherwise would be to exalt artifice above reality and to deprive the statutory provision in question of all serious purpose.*¹⁷

These doctrines have enabled tax administrators to successfully challenge some aggressive tax planning. However, challenging complex tax shelters requires tax agencies to have significant expertise to identify shelters and then the resources necessary to contest them.

Because business purpose and economic substance are open to interpretation, these doctrines have become a source of tax complexity themselves. For instance, many taxpayers have sued advisors that sold them tax shelters. Presumably, these taxpayers thought there was a reasonable basis to believe the shelters complied with tax laws, but were surprised when the IRS did not accept the shelters and assessed penalties.

Corporate Tax Complexity is higher than Personal (generally)

For multi-state corporations¹⁸ that have some business in Oregon, complexity is higher. The definition of taxable income for corporations is the same for Oregon taxes as for federal taxes. As a result, most of the complexity of the federal system is inherent in the Oregon tax system as well. Adding to the complexity are myriad rules about state filing requirements and the division of income among states. The following features of the corporate tax add complexity above that which exists in the federal system:

- Determining if there is a state filing requirement (nexus)
- Determining which businesses included in a consolidated return are part of a unitary group and doing business in Oregon
- Allocating the income that is not related to the primary business to the home state of the corporation
- Apportioning the corporation's business sales as sales made in Oregon versus sales made elsewhere.

Side Note: Complexity Dilutes the Impact of Tax Incentives

As a side note, the complexity of incentive programs administered through the tax system is at least partly responsible for the significant portion of taxpayers that get help filing returns. Ironically, the nature of paid preparation may reduce the impact of these programs because the preparer (or software) simply takes advantage of provisions while the taxpayer may remain unaware that they have received a benefit. There is some reason to believe that the more the tax system is made complex by narrow incentives, the less effective those are.¹⁹ For instance, an energy credit provides no incentive if a taxpayer does not know about the credit until their tax preparation software asks if they made energy efficiency improvements.

¹⁷ *Gregory v. Helvering*, 293 U.S. 465 (1935)

¹⁸ Businesses in general face most of these issues, but for simplicity in the discussion of complexity, multi-state corporations are the focus in this section without reference to the issues that are not faced by non-corporate or Oregon-only businesses.

¹⁹ "If people do not understand the incentives embodied in the system, they will not respond to them." (Goolsbee, 2004) "An incomprehensible tax system may also render ineffective the incentives it is meant to provide such as encouraging charitable contributions." (Burman & Slemrod, 2013).

Even when taxpayers are aware of the incentives, there is evidence that the real economic effect is small relative to the effect of changing the timing of their activities or changing the characterization of their income or expense.²⁰

Compliance probably decreases for each incentive as well, since incentives are usually in the form of credits, reduced rates, or deductions all of which can be misstated and some of which are more difficult to verify. The tradeoffs associated with targeted tax benefits versus compliance will vary by type of incentive, reporting mechanism, and any precertification received, and may be important considerations in policymaking.

Refundable Credits Create Unique Compliance Challenges

Refundable tax credits are treated like payments by DOR's accounting system, so even if a taxpayer has no tax liability to offset, a refundable credit can be refunded to the taxpayer. Oregon has two primary refundable credits, the Earned Income Credit and the Working Family Child Care Credit.

With the refundable credits that are meant to be income support to working Oregonians, there is pressure to process the credits so that refundable amounts can be sent to the recipient quickly. This pressure can sometimes conflict with the traditional role of tax administration to ensure that claims are legitimate. Because of these dueling priorities, there is some controversy at the national level over the use of the IRS as administrator of social benefits programs.²¹

Oregon's largest refundable credits also create an unusual form of noncompliance. The Earned Income Credit acts as a negative income tax for some taxpayers, who get a larger credit and larger refund if their income is higher. This creates an incentive for these taxpayers to overstate their earned income to get a larger tax benefit. Similarly, the Working Family Child Care Credit has a minimum level of earned income needed to qualify, which also provides an incentive to overstate income. While noncompliance typically involves reporting less income than was earned, which is most often identified by third party reporting. Overstating income to inflate refundable credits is more difficult to detect than understatement because a lack of third-party reported earnings is not conclusive proof that the earnings are overstated.

Filing Environment and Asymmetry of Resources Makes Enforcement Challenging

Income tax filing in the U.S. and Oregon begins with voluntary compliance. Historically, the expansion of mandatory reporting of income sources has been limited, ostensibly because of the increased burden created by expanded reporting requirements.

²⁰ Joel Slemrod has described a hierarchy of responses to taxation. The biggest change due to changes in tax structure is the timing of transactions, as is typically seen before and after changes in the tax rate on capital gains (e.g. people tend to sell assets and realize gains at a much higher rate prior to a capital gains tax rate increase). The second largest impacts are in recharacterizing transactions. For example, after the tax deduction for most forms of interest was eliminated in the Tax Reform Act of 1986, individuals changed the nature of much of their debt to mortgage debt that was still deductible. "At the bottom of the hierarchy, where the least response is evident, are the real decisions of individuals and firms." (Slemrod, *Do Taxes Matter? Lessons from the 1980's*, 1992)

²¹ See, for example, "Trade-Offs Between Targeting and Simplicity: Lessons from the U.S. and British Experiences with Refundable Tax Credits" (Holtzblatt, 2006) which describes the benefits and drawbacks of using the U.S. tax system to deliver benefits to low income households.

Oregon receives 1.8 million returns each year, and checks each for math errors and other signs that the reporting is incorrect. Auditors look at many returns each year, but can only fully examine a small fraction.

Likely due to complexity and the time-burden of filing returns, almost half of Oregon full-year filers use a tax preparer to file their state tax return. Of the half that do not use a paid preparer, almost 90 percent use software. Reliance on preparers and software changes the compliance decisions faced by taxpayers. Where preparers and software likely help avoid unintentional mistakes, some may also facilitate noncompliance. For instance, it has been argued that software appears to facilitate noncompliance by analyzing returns and highlighting audit “red flags” for taxpayers. This may encourage taxpayers to experiment with their reporting, reporting income or deductions erroneously but in ways that avoid “red flags.” Such alterations are perceived by the taxpayer as difficult to detect, and may be used by taxpayers to manipulate their final refund or tax due.

Given the number of returns, and the complexity of each, the dollar cost of verifying the accuracy of each return would be prohibitive. The monetary and social cost of requiring submission of detailed documentation for each item reported or excluded on every return would be similarly unacceptable.

How Does DOR Address Noncompliance?

The personal and corporate tax programs in Oregon, like the federal income taxes, begin with voluntary compliance. There is a compulsory duty to comply with tax law, but the nature of the income tax is that only the taxpayer has the information to compute their correct tax. This means that taxpayers are expected to voluntarily file an accurate initial report of their income and a calculation of their tax due, with the understanding that a small fraction may be asked to assist DOR with verifying the accuracy of their reporting.

DOR believes that noncompliance is best addressed through a balanced approach that begins with supporting voluntary compliance. For taxpayers that diligently attempt to file and report taxes correctly, education and assistance are the most effective means to promote voluntary compliance. The connection of Oregon’s personal and corporate tax programs to the federal programs allows Oregon taxpayers to also use IRS resources for tax assistance and education for reporting income and deductions.

Taxpayers are educated about their tax obligations in a number of ways, including partnerships between DOR and other state agencies, tax information from DOR’s website, tax practitioners, and tax preparation software vendors. Taxpayers that need individual assistance are able to get that over the phone, by letter or e-mail, and at DOR’s offices.

After taxpayers have the opportunity to voluntarily report and pay their taxes, DOR uses enforcement resources to check compliance against third-party information sources,²² and to collect tax balances due. Enforcement begins as returns are received by checking for math errors, legitimacy of certified tax credits, and other inaccurate reporting. After a return is processed, it may be reviewed through one of DOR’s audit programs to ensure propriety of

²² Third party information used by DOR is extensive and includes reports of payments made to employees, bank or brokerage account-holders, business shareholders, etc. Information is also received from the IRS when they adjust or audit a taxpayer return or discover unreported income. DOR also receives tips from taxpayers that aid enforcement efforts.

reported information. Third party and federal tax information is also used to identify people or corporations that did not file despite having a requirement to file.

For Tax Debt, Collection can be a Challenge

A significant portion of noncompliance is comprised of tax liabilities that have not been paid. The tax debt included in DOR's accounts receivable is not like business debt. Business debt is usually based on a contract entered by a debtor with a business, either implicitly or explicitly, by the purchase of goods or services on credit. Businesses typically do not extend credit to individuals who are not likely to have the ability to pay the debt. Tax debt is often not agreed to by the taxpayer, and is generally assessed regardless of the taxpayer's creditworthiness. Outstanding tax debt is also magnified by imposition of penalties and interest on debt that in most cases cannot legally be written off for at least seven years.

In thinking about the difficulty of collecting tax debt, it is helpful to separate out the origin of the debt. DOR uses three primary categories to think about the tax debt:

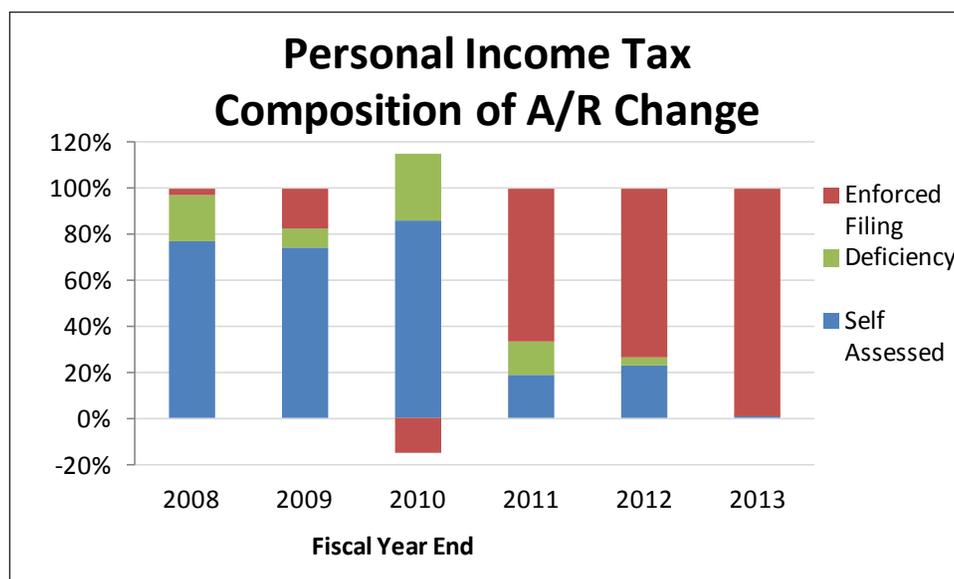
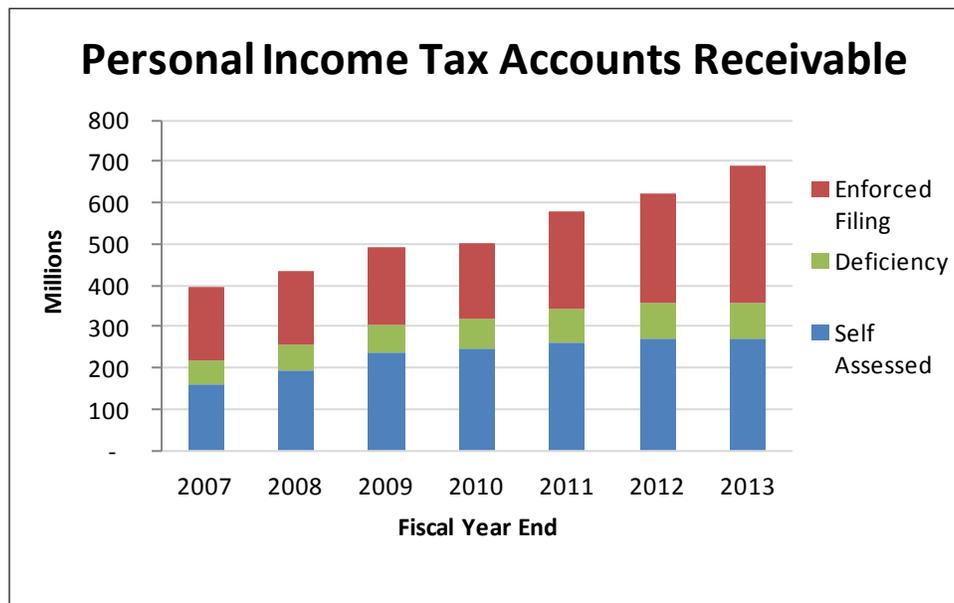
Categorization of Tax Liabilities	
Self-Assessed	This category includes the bulk of tax liabilities and payments. The taxpayer filed a return reporting tax liability prior to any enforcement action by DOR. This category also includes amended returns if the original was self-assessed. Unpaid tax debt that is self reported is included in this category.
Enforced Filing	The taxpayer did not file a return by the due date, and either filed a return after DOR sent a letter requesting the taxpayer to file, or DOR estimated the taxpayer's tax liability and assessed a tax.
Audited Return (Deficiency)	The taxpayer's reported tax liability was reviewed by DOR and adjusted. The adjustment can be made automatically by the tax processing system, as a result of a review if the processing system notes a discrepancy or high-risk return, or as a result of an audit after a return is processed and accepted by the system.

Enforcement efforts often lead to tax assessments that are not immediately fully collected.²³ Therefore, it is inevitable that increased auditing or filing enforcement lead to an increase in accounts receivable. Self-assessed debt is generally easier to collect because by filing a return showing that they owe unpaid tax (i.e. self-assessing), the indebted taxpayers have shown they will expend some effort to comply even if they cannot pay now. Enforcement debt (Enforced filing and Audit) is generally more difficult to collect from individuals, in some cases because the taxpayers are actively resisting their compliance obligations.

²³ In particular, debt assessed by DOR based on a taxpayer's failure to file a tax return is based on the best information available about the taxpayer's earnings. However, DOR is not aware of a nonfiler's allowed deductions or credits when the debt is assessed so the failure-to-file assessments are often adjusted downward when the taxpayer files a return which overrides DOR's assessment.

In addition to the source of the debt, other characteristics of tax debt may make it more difficult to collect. Tax enforcement is backward looking, which results in debt that is aged at the moment when it is established. Audits and filing enforcement typically don't begin until at least two calendar years after the tax year in question. This leads to tax debt that may not be collectible because of events in the intervening time. Anecdotally, DOR enforcement staff report finding significant noncompliance during calendar year 2003 that could not be collected. The subject of the 2003 audits and filing enforcement were businesses that collapsed after the dot-com bubble burst but before the noncompliance was identified.

The following graphs show the sources of personal income tax accounts receivable balance since 2007 and the components of change in balance since 2008. The balance of accounts receivable is growing, but the components of growth vary significantly by year. From 2008 through 2010, the main source of growth was self-assessed liability likely because taxpayers' ability to



pay was reduced during the long economic downturn. From 2011 through 2013, the main driver of growth has been failure to file assessments because DOR has increased enforcement efforts aimed at identifying individuals who were required to file a return but did not.

Because of the general interest in accounts receivable (which is a reflection of noncompliance in tax payment), additional detail on the components of change in personal income tax accounts receivable during 2013 have been included in Appendix B. The changes in accounts receivable are complex, so an understanding of the sources of change, economic conditions and compliance strategies that led to the changes are all needed to evaluate whether a growing (or shrinking) accounts receivable balance is desirable.

Measurement of Compliance Program Results

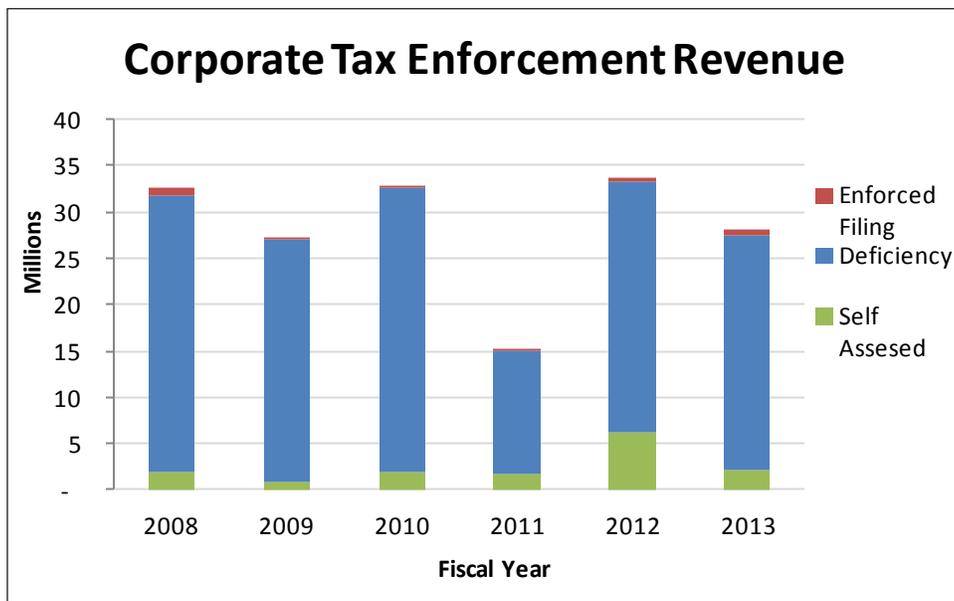
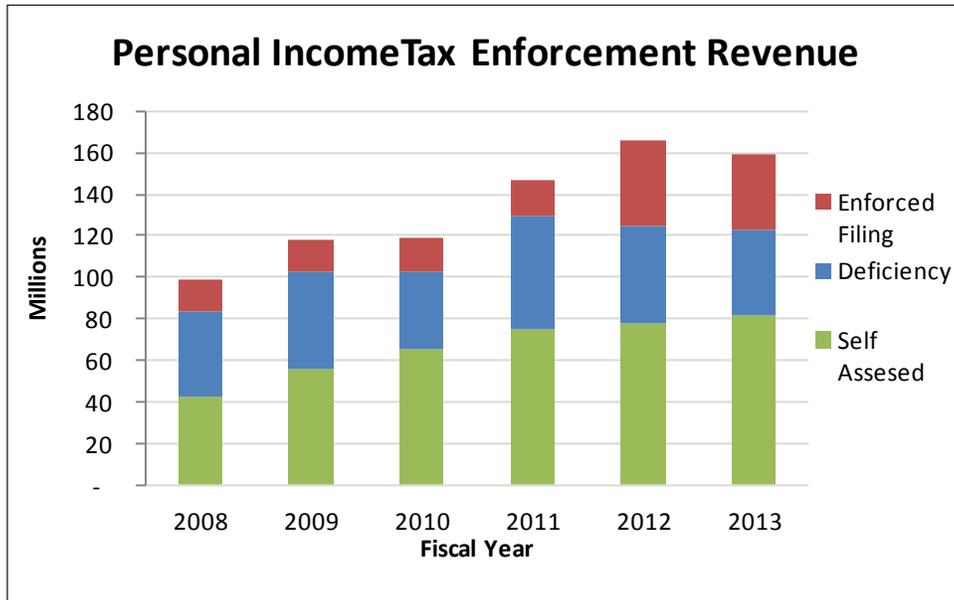
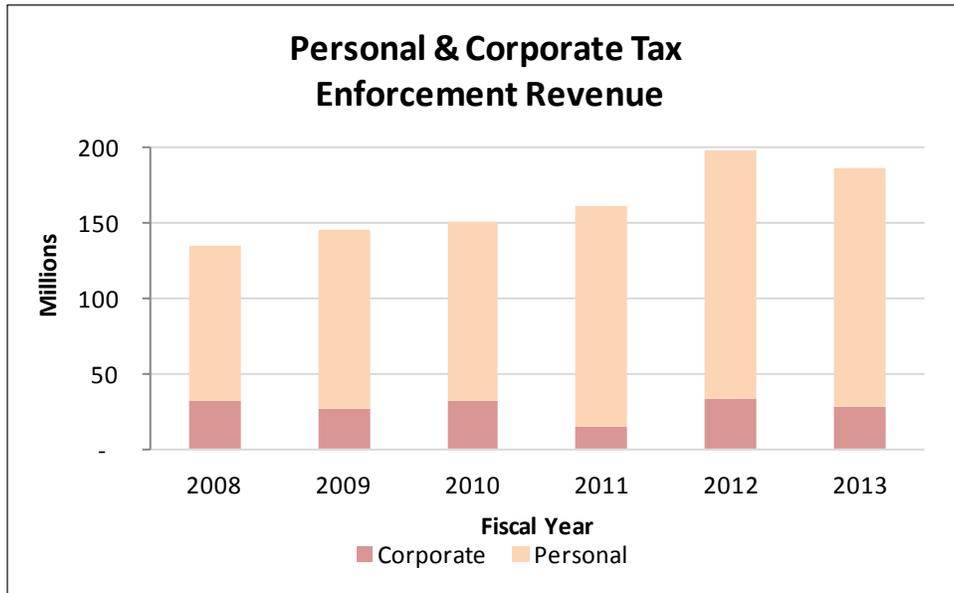
DOR devises strategy based on the relative risks to the tax system inherent in noncompliance. Knowledge of which components of tax returns carry the most risk is vital in addressing non-compliance. Overall tax gap estimates are interesting, but the estimates are extremely speculative. Therefore, comparisons of tax gap estimates over time are not meaningful when measuring progress toward maximizing voluntary compliance (this idea is explored further in the section titled “Comparing Estimates over Time or Across States May Not Be Useful” starting on page 26).

In 2011, the legislature requested that DOR develop a method to report the results of enforcement efforts. DOR developed a way to categorize each payment received and specify²⁴ which are directly due to the enforcement efforts of DOR employees. The result is a way to sum receipts from audits and from tax liabilities in active collections. This enforcement revenue series can provide a useful way to identify the direct results of enforcement activities.

The following charts show personal and corporate Enforcement Revenue since 2008 by category of tax liability (see definitions on page 16). The trend in enforcement revenue is positive, though some significant events have affected the last several years. For instance, corporate enforcement revenue was lower in 2011 (and probably later years) because some corporations used the opportunity of a tax amnesty in 2010 to pay taxes for issues that would probably have resulted in audit revenue. In addition, a new program (BOOST²⁵) was started which required hiring and training new auditors beginning in April 2010. This new program shifted work away from the established enforcement programs.

24 Enforcement revenue is “specified” rather than “identified” because strong assumptions are required to attempt to associate payments with enforcement efforts. Arguably, every income tax dollar received is influenced by actual or potential enforcement, so delineating dollars due to enforcement is a useful device, though it is not definitive. Specification of enforced revenue would apply differently to the effectiveness of different inputs. For instance, the specification was developed to identify revenue due to enforcement staff intervention. A new specification may need to be developed to evaluate the impacts of tax policy, or technology changes.

25 BOOST is an imperfect acronym for “Building Opportunities for Oregon Small Business Today.” The program came from 2010 HB3698, and added enforcement staff to DOR to set aside money for loans and grants to eligible small businesses. Almost half of the \$15 million in corporate enforcement revenue for fiscal year 2011 was from BOOST.



It is important to note that even a perfect measure of the direct results of enforcement activities would be an important but incomplete picture of the full and wide-ranging results of enforcement activities. For example, it is reasonable to believe an audit has a ripple effect. Audited taxpayers may be more compliant over time, and when they share their audit stories among their friends or industry peers those taxpayers may also become more compliant.

Researchers have attempted to estimate these indirect effects of audits in the past. One estimate is that for every \$1 of underreporting identified in IRS audits started in 2001, \$11.7 more was reported voluntarily as an indirect result of the audits (Plumley, 2002). Another estimate estimated the magnitude of indirect effect at \$6 for 1977 through 1986. It is hard to know how the indirect impact of federal tax audits might compare to the indirect impact of state tax audits.

Three types of indirect effects have been identified (Bloomquist K. M., 2012):

- Induced effects: Change in compliance due to changes in enforcement policy (e.g. increased level of enforcement or increased penalties as economic deterrent)
- Subsequent period effects: Changes in taxpayer behavior after that taxpayer is audited. There is evidence this effect can be negative (For example, see Gemmell & Ratto, 2012).
- Group effects: Changes in behavior after learning a neighbor, coworker, industry competitor, etc. has been audited.

It is very likely different types of audits have different impacts on each of these three types of indirect effects. In particular, it seems likely that effective audits of difficult subject areas would have relatively greater indirect effects because these audits have the most potential to increase taxpayers' perceptions of audit probability and efficacy. Maximizing revenue may necessarily be different from maximizing measurable revenue. If audits are chosen to maximize the sum of direct and indirect effects, optimal audit strategy may result in smaller direct effects as an informed tradeoff to gain greater long-term compliance through indirect effects that cannot be measured.

Over the next several years, DOR will be replacing the computer systems used for administration and enforcement in the personal and corporate tax programs. The impact of replacing DOR's core computer systems is unclear. Because DOR's core systems replacement project will allow better use of information, it will change the relative costs between different types of compliance activities. Optimal compliance strategy before and after that type of change will necessarily be different. DOR is not planning to simply pursue the same audit and collection strategies as today at a faster pace.²⁶ Instead, the technology will enable shifting strategy in ways that are being explored. As a result, the impact of core system replacement on revenue and compliance cannot be entirely foreseen, but improved technology allows an improvement in compliance results. As DOR's technology improves, it may make strategic sense to reallocate effort. For instance, DOR may reduce efforts directed at audits that produce quick and measurable direct revenue in favor of audits made more feasible given new technology that have larger, but indirect and therefore immeasurable, impacts.

Enforcement is only one way DOR tries to maximize voluntary compliance. Education, assistance, and tax complexity also have significant effects on voluntary compliance, especially unintentional noncompliance. The impact of education and assistance also cannot be measured, but

²⁶ Some, but certainly not all, of the current audit and collections strategies will be pursued at a faster pace because a new system will automate the activities.

clearer form instructions and quality telephone assistance reduce the incidence of unintentional noncompliance and reduce the tax gap. Taxpayer education and assistance, and tax complexity are important determinants of voluntary compliance that must be considered at the same time as enforcement.

Discussion of Tax Gap Estimates

The IRS defines the gross tax gap as “the amount of true tax liability faced by taxpayers that is not paid on time” (Internal Revenue Service, 2012) and consists of three components: non-filing, underreporting of tax owed, and underpayment. The net tax gap takes into account receipts from enforcement activities and late payments.

Any reporting of a tax gap is an estimate, and several different methods have been used to make tax gap estimates. A comparison between estimates is generally not meaningful, and cannot be useful without a full understanding of the detailed method of estimation.

This section describes tax gap estimates by describing the IRS estimate of the federal tax gap and alternative methods of estimating the tax gap. Then a brief overview of estimates of Oregon’s tax gap is presented for the personal income tax and corporate income tax. The section concludes with a discussion of how tax gap estimates may be used and some uses that may be inappropriate.

IRS Tax Gap Estimate

Since much of Oregon’s tax gap estimate relies on the federal estimate produced by the IRS, it is worthwhile to give a little background related to the IRS estimate and its components.

In 2011, the IRS released a tax gap estimate for tax year 2006. The gross tax gap was estimated at \$450 billion with an expectation that \$65 billion²⁷ would be collected, leaving a net tax gap of \$385 billion (Internal Revenue Service, 2011). Compared with prior gap estimates, the tax year 2006 estimates were based on new data and improved estimation methodologies. The IRS estimates are separated into three components, which are discussed in more detail: non-filing, underreporting of tax owed, and underpayment.

Nonfiling Gap

For tax year 2006, the federal nonfiling gap, which represents the portion of the gross tax gap associated with returns that were filed late or not at all, was estimated at \$28 billion. The tax year 2006 nonfiling estimates were based on IRS administrative data.²⁸ Using a process of comparing all valid social security numbers (SSNs) to SSNs reported on returns, IRS was able to estimate the level of nonfiling. Estimating the level of income not reported was based on income and withholding reported by third parties. Following this approach leads to a lower bound estimate of income not reported. Estimating the gap related to late return filing was done using internal IRS data.

Underreporting Gap

The heart of the IRS’s work on the personal income tax gap is its estimate of the underreporting gap. Tax underreporting is estimated based on a random sample of filed returns, and resulting estimates of the true liability associated with each selected return. More recent IRS tax gap estimates have shifted the approach of measuring noncompliance. Sample sizes have been reduced (still representative of the population) and sampling is now being done annually and combined over multiple years. One hope is that conducting smaller samples on a continuous basis will

²⁷ Interest and fees associated with late payments are not included.

²⁸ Compared to tax year 2001 when nonfiling estimates were based on matched Census data.

allow analysis of compliance behavioral changes over time (Black, Bloomquist, Emblom, Johns, Plumley, & Stuk, 2012).

To estimate the true amount that should have been reported on each line of the federal personal income tax return, the IRS adjusts the observed misreporting using the Detection Controlled Estimation (DCE) process, which calculates a multiplication factor for each line item on a return. DCE accounts for income taxpayers do not report on their returns and that remains undetected after an audit. DCE also accounts for differences in audit productivity between auditors. The multiplication factor for low-visibility income items was reported to be between 3.3 and 4.2 (Toder, What is the Tax Gap, 2007). For example, if an auditor discovered a misstatement of \$100 of income, the IRS would estimate between \$330 and \$420 was the actual misstatement.

The estimated true amount for each line item was compared to the reported amount to calculate a Net Misreporting Percentage (NMP). For a positive income item like wages, the IRS defines the NMP as the net amount that was misreported on a given line item expressed as a percentage of the total amount that should have been reported on that line item. Generally, sources of income with higher degrees of third party reporting have the lowest NMP whereas income not subject to third party reporting on average has a much higher NMP.²⁹ Beginning with the 2011 IRS tax gap estimate, a tax calculator was used to compute the resulting tax adjustment due to underreporting of income. This differs from the previous practice of using an average marginal tax rate estimate.

Underpayment Gap

For tax year 2006, \$46 billion of federal taxes reported on time were not paid on time. IRS calculates the amount unpaid using tabulations of account transactions. Also included in the underpayment gap is an estimate of income tax withheld for employees but not reported on time by employers.

What about the Underground Economy?

A persistent question received about tax gap estimates is whether they include tax lost to the underground economy. There is not a simple answer to that question, at least in part because the definition of the underground economy is not consistent. In addition, estimates are difficult regardless of the definition.³⁰

One definition of the underground economy might be otherwise legal transactions that are not recorded and not reported on tax forms despite creating taxable income. By this definition, estimates of the tax gap include estimates of tax originating from the underground economy. Concealed and undetected activity appears in noncompliance estimates only as understated (net) income and nonfiling. Overstated deductions, fraudulent refund claims, and overstated expenses are generally fictitious and do not reflect unreported activity.

²⁹ Erard and Feinstein (2011) estimate the NMP for high 3rd party information reporting income to be 1.6% compared to 54.8% and 51.4% for schedule C and schedule F income respectively.

³⁰ Note that Oregon's reported gap is based on the IRS estimate, and the IRS does not include taxes on income earned from illegal activities in its estimate of the tax gap. Illegal activities are a subset of the underground economy that includes sales of illegal goods or services as well as illegal sales of otherwise legal goods (e.g. counterfeit goods). The IRS states the reasons for not including the illegal activity are that the government should be eliminating illegal activity rather than taxing it, and there are significant challenges to measuring illegal activity.

Alternative Methods of Estimating the Tax Gap

There are several methods that have been used to estimate state tax gaps. Oregon's income tax gap has been estimated using federal estimates, but there are two other methods that are briefly discussed for context.

Bureau of Economic Analysis Data

Adjusted gross income (AGI) gap estimates attempt to compare tax return data to an independent source of AGI. The Oregon AGI gap index estimates the gap using Bureau of Economic Analysis (BEA) data as the independent source. The BEA produces estimates for the federal AGI gap using similar federal-level data and methodology. While the AGI gap estimate is really a measure of an income gap rather than a tax gap, it is worth noting that the AGI gap method produces a smaller gap percent than application of IRS misreporting estimates.

In 2008, the BEA released gap estimates for all fifty states for the years 2000-2002. For the three years, the BEA estimated Oregon's adjusted wage gap ranging from 7.6 to 8.3 percent (Brown & Dunbar, 2008). There are three components of such an income gap: 1) people who filed a tax return but understated their income, 2) people who were required to file a return but didn't, and 3) people who had no requirement to file a return and didn't. The share of people in each category is unknown, but only two of the three categories represent tax noncompliance. A comparison of AGI gap estimates to tax gap estimates made using other methods is problematic.

American Community Survey Data

Census' American Community Survey (ACS) data can be used to estimate the total tax gap, by deriving filing statuses and constructing taxable income components reported in the survey. The survey data only includes self-reported income that is received periodically and excludes one-time payments, such as capital gains. Filers with self-reported income below filing thresholds are excluded from the analysis. This allows comparing income reported on the ACS to income reported on tax returns to estimate the tax gap. Then, IRS data and W-2 data can be used to identify the non-filers and uncollected taxes associated with them. The difference between total PIT gap and non-filer gap is attributed to underreporting. This method produced a smaller tax gap estimate than application of IRS misreporting estimates when they were estimated for the 2009 tax compliance report.³¹ Again, comparing tax gaps estimated using ACS data to gaps estimated using different methods is problematic.

Level of Noncompliance with Oregon's Personal Income Tax

When the Oregon Department of Revenue has reported the tax gap for the personal income tax program, we have used the IRS estimates as the basis of our estimates by applying the net misreporting percents to Oregon. One of the primary reasons to use the IRS estimates is that it allows estimates of the gap by type of reporting.

Oregon's personal income tax gap estimate for tax year 2010 is based on the estimate of the federal gap made by the IRS. For federal taxes, Oregon's tax gap per return was found to be lower than the national average based on a review by the Government Accountability Office.³² The

31 2009 Report on Personal Income Tax Compliance in Oregon, Oregon Department of Revenue. Available at www.oregon.gov/dor/docs/800-552web.pdf.

32 "Oregon's Regulatory Regime May Lead to Improved Federal Tax Return Accuracy and Provides a Possible Model for National Regulation," United States Government Accountability Office August 2008 (GAO 08-781)

Oregon Personal Income Tax Gap Estimate TY 2010 (\$ Millions)	
Tax return line item misreporting by visibility category:	
Substantial information reporting and withholding ¹	\$67
Substantial information reporting ²	\$62
Some information reporting ³	\$291
Little or no information reporting ⁴	\$905
Tax credits	\$122
Adjustment due to GAO findings	-\$199
Total misreporting gap	\$1,247
<i>Nonfiling gap</i>	\$133
<i>Underpayment gap</i>	\$155
Gross tax gap	<u>\$1,536</u>
<i>Voluntary withholding payments not claimed on timely returns</i>	-\$250
<i>Other receipts beyond reported tax</i>	-\$148
Net tax gap	<u>\$1,137</u>
Net tax gap as % of true liability	17.8%
¹ Includes wages and salaries.	
² Pensions and annuities, unemployment compensation, dividend income, interest income.	
³ Deductions, exemptions, partnership/S-Corp income, capital gains, alimony income.	
⁴ Nonfarm proprietor income, other income, rents and royalties, farm income, adjustments.	

estimate of the net personal income tax gap in Oregon for tax year 2010 based on IRS misreporting data is 17.8%.³³ However, the net tax gap estimate does not represent the amount of tax that is collectible, even if every potential taxpayer were audited (see the section, “Most of the Tax Gap is not Collectible” starting on page 28).

The table offers a high-level overview of Oregon’s estimated personal income tax gap for tax year 2010. For a more detailed presentation, see Appendix A.

The IRS misreporting percentages are the basis for our estimate because other methods of estimating the gap do not allow for this level of detail to be presented. The primary benefit to the IRS of the compliance research used to produce their estimate of the overall tax gap is what is learned by examining thousands

of returns for research audits on an annual basis. For Oregon, the level of detail can help inform allocation of enforcement resources to address specific sources of the tax gap.

When DOR has estimated the size of the overall tax gap using different methods, those methods have led to estimates that are smaller than using the line-by-line error rates of the IRS.³⁴ Because noncompliance is not directly observable for most sources of income and deductions or credits, the overall size of the tax gap will remain an estimate. However, the primary drivers of the size appear realistically predicted at the national level for the years presented. The application of the national estimates to Oregon is a reasonable approach to estimating Oregon’s personal income tax gap.

Level of Noncompliance with Oregon’s Corporate Tax

Noncompliance in the corporate tax looks somewhat different from noncompliance in the personal income tax. There is no way to directly observe overall corporate noncompliance or the size of the corporate tax gap. However, there are aspects of corporate tax compliance that can be used to estimate the tax gap. More important than the overall size of the corporate tax gap are the aspects of corporate tax compliance that are used to drive the compliance strategies of DOR.

Because the starting point of the Oregon corporate tax return is federal taxable income, most noncompliance already included in a corporation’s federal taxable income is passed along to

³³ The net tax gap is the percent of tax estimated to be owed for tax year 2010 that was not reported and/or collected.

³⁴ While not directly comparable for a variety of reasons, DOR did include three Oregon compliance estimates in a 2009 report. The estimated compliance level using Census’ American Community Survey data was 88.9%, while the estimate comparing adjusted gross income reported to income based on Bureau of Economic Analysis data was 83.7%. The estimate widely cited and based on the IRS net misreporting percent was 81.5% compliance (or 18.5% “gap”).

Oregon. Therefore, Oregon's corporate tax gap as a percentage of tax liability is probably at least as large as the national tax gap.³⁵ In addition to noncompliance in reported federal taxable income, there are state-only issues that increase the corporate tax gap:

- Determination of whether there is a state filing requirement (nexus)
- Determination of which businesses included in a consolidated return are part of a unitary group and doing business in Oregon
- Allocation of the income that is "non-business" to the home state of the corporation
- Separation of the corporation's sales into sales made in Oregon versus sales made elsewhere.

While extremely speculative, applying the IRS estimate to Oregon leads to an estimated net corporate tax gap for Oregon of 14.1% of true tax liability after credits for tax year 2010. Details of the estimated size of Oregon's corporate tax gap along with discussion regarding how the estimate was prepared is presented in Appendix A of this report (see page 36).

A discussion of shelters used by corporations to shift income otherwise taxable by Oregon to outside the state has been prepared by DOR in response to (HB 2640) passed by the Oregon legislature in 2013. See *Out-of-State Tax Shelters Report* for a more in depth discussion of the mechanics of intentional sheltering in the corporate tax program.

Comparing Estimates over Time or Across States May Not Be Useful

Measuring the effectiveness of DOR in addressing the tax gap is a difficult issue. As noted earlier (in the section titled "Measurement of Compliance Program Results" on page 18) DOR has developed a specification of receipts due to enforcement efforts, which is a good indicator of the impact of DOR's enforcement programs on the tax gap. This enforcement revenue is a reasonable basis for comparison over time, especially since limitations in the estimation of the tax gap mean comparisons of tax gap estimates are not likely to be useful.

The basis of Oregon's estimated personal income tax gap is the assumption that the compliance rates in Oregon match federal compliance rates by type of income or deduction. At the federal level, and consequently for Oregon, tax gap estimates made over time are not good measurements of trends in compliance.³⁶ Changes in national tax gap estimates might reflect changes

³⁵ There is oversimplification in the idea that the federal corporate tax gap is the starting point for Oregon's corporate tax gap. The federal tax gap will differ from the Oregon tax gap where the tax base is different or in the compliance for federal credits versus Oregon credits. For reference, federal credits were about 38% of tax before credits in 2010 and for Oregon credits were about 14% of tax before credits. In addition, if the mix of corporations that do business in Oregon includes more of the compliant industries or taxpayers, or if more compliant taxpayers owe a relatively larger share of Oregon tax, then the noncompliance in reporting federal taxable income in Oregon may be relatively smaller than the same form of federal noncompliance. Oregon also has a corporate minimum tax that is similar to a tiered gross receipts tax. For corporations that file tax returns, compliance is probably higher for those subject to the minimum tax, but the impact of nonfilers on compliance is also higher, it is likely that the minimum tax increases compliance overall, but it is not certain. On net, characteristics that would lead to a larger state tax gap than the federal tax gap appear to dominate. However, in comparing Oregon's corporate tax gap to other states it is likely that some Oregon laws and policies probably reduce the corporate tax gap relative to other states (e.g. consolidated reporting).

³⁶ Eric Toder notes "Changes over time in compliance rate estimates that IRS releases are not good measures of trends in compliance and should not be used as measures of IRS performance...An improvement or degradation in IRS efficiency is only one of many factors influencing the estimated tax gap." (Toder, *What is the Tax Gap*, 2007).

in compliance, but may also simply be the result of changes in income composition, data quality and availability, or changes in estimation methods.³⁷

Likewise, differences in estimated compliance rates between Oregon and the IRS (or other states that use the IRS as the basis of their estimates) will primarily reflect differences in tax base, tax rates, or detailed methods of applying the net misreporting rates. For these reasons, comparisons of tax gap estimates between jurisdictions are not likely to be useful in determining or comparing the effectiveness of efforts to reduce the tax gap. However, comparison of composition of income can give an idea of the different challenges faced by different states (e.g. the task of enforcing compliance is simplified if wages are a more significant portion of the tax base).

The primary reasons for observed differences in tax gap estimates between taxing jurisdictions are:

- Tax gaps are reported for a variety of time periods and tax programs. Oregon’s estimate is for personal income tax for the 2010 tax year. Gap estimates developed by other states involve a variety of time periods and tax programs (e.g. sales and use taxes).
- Different methods of estimating the tax gap.
 - Oregon’s tax gap was based on a return-by-return examination. Basing the analysis on aggregate data may result in significant differences.
 - Other states have estimated their gap by comparing income reported on returns to personal income estimates from the Bureau of Economic Analysis (Oregon’s estimated gap using that method in the 2009 report was 16.3%)
 - Other states have also used sample data from the American Community Survey (Oregon’s estimated gap using ACS data was 11.1%)
- When using IRS misreporting percentages:
 - Differences in tax rate structures
 - For example, the Federal tax rate on capital gains is often lower than the rate for ordinary income, where Oregon taxes both types of income at the same rate. This makes noncompliance in reporting capital gains in Oregon contribute relatively more to Oregon’s tax gap.
 - Differences in the proportion of income attributable to high vs. low compliance sources
 - For states with higher proportions of their taxes derived from wages or retirement income, their estimated tax gap will be relatively smaller.
 - Estimates of Oregon’s tax gap will differ year-to-year as components of income differ (e.g. dividend income is highly variable).
 - Differences in state-specific additions, subtractions, or credits
 - Each line on a return is an opportunity for noncompliance, and the magnitude of income, expense, or credits reported on those lines affects the estimate.

³⁷ In comparing IRS tax gap estimates for tax years 2001 and 2006, the IRS stated “Although some parts of the tax gap appear to have grown by more than the growth in tax liabilities, this generally reflects the effect of the new data and improved methodologies, and does not reflect changes in taxpayer compliance behavior” (Black, Bloomquist, Emblom, Johns, Plumley, & Stuk, 2012).

- For instance, comparing states that have different proportions of their tax offset by credits will result in different gap estimates.

Fundamentally, estimates of the tax gap are extremely imprecise. Differences in estimates are much more likely to reflect differences in estimation methods, data quality, or estimation error than true differences in tax gaps.

State Policy and Compliance Strategy Affect Level of Noncompliance

Noncompliance can be larger or smaller based on policy decisions about the types of taxes imposed, the level of information reporting required, and the ease of complying with tax law. Overall, policy and tax system design are likely more important determinants of the level of noncompliance than enforcement.

There are limits to the effect of enforcement on compliance.³⁸ Even with those limits, the revenue associated with enforcement is significantly more than its monetary cost. Keep in mind however; the monetary cost of performing audits is only one cost. Increased enforcement means more taxpayers have direct contact from DOR, which has psychological, social, and monetary cost for the taxpayer.

Given the level of resources DOR has for enforcement, many strategies can be pursued to maximize compliance and resources could be deployed to focus effort on education, assistance, or enforcement. The deployment considerations include balancing burden with compliance (to maximize long-term voluntary compliance) as well as balancing enforcement in light of the desired attributes of Oregon's tax system.³⁹

Strategies that are solely focused on maximizing enforced compliance may not be optimal because they probably don't simultaneously maximize voluntary or even total compliance.

Most of the Tax Gap is not Collectible

There are difficulties associated with collecting tax debt as described in "For Tax Debt, Collection can be a Challenge," starting on page 16. Much more limiting, however, is the fact that most of the tax gap cannot be identified even with an audit of every potential tax payer.

IRS estimates of noncompliance with personal income tax (which are used to estimate the Oregon tax gap) are primarily based on audits of a random sample of returns. The auditors' findings are inflated by a technique the IRS uses to estimate the true tax liability. The inflation technique is necessary because the true tax liability cannot be completely uncovered in an audit. Depending on the availability of corroborating information on taxpayer information, the auditors findings are multiplied, with multipliers as high as 4. That is, for some income

³⁸ Burman and Slemrod (pg. 183) assert that at most twenty percent of the tax gap can be recovered through increased enforcement including expanding information reporting (Burman & Slemrod, 2013). Eric Toder states that additional steps to close the tax gap are "extremely unlikely" to reduce the federal tax gap by more than 8.5 % (he uses the figures of \$ 20 to \$30 billion of a \$345 billion total) (Toder, Reducing the Tax Gap: The Illusion of Pain-Free Deficit Reduction, 2007). However, some information reporting requirements are best initiated at the federal level, and Congressional will to impose new requirements is extremely limited. Clint Stretch notes that Congress has recently enacted and subsequently repealed some improvements that would have addressed parts of the tax gap including mandatory withholding on federal contracts and expanded 1099 reporting requirements (Stretch, 2013).

³⁹ ORS 316.003 includes a list of goals and guiding principles for Oregon's tax system. In addition, there is a classic balance within the tax system of economic efficiency, simplicity, and fairness.

types (e.g. farm income) the IRS believes that on average, one-fourth of the tax understatement is discovered through an audit. Conversely, three-fourths of tax understatement in these cases remains undiscovered after an audit. Therefore, only about one fourth of the gap for these types of income may be recovered if every personal income taxpayer were audited and promptly paid any resulting deficiency.

The corporate tax gap is based on audits as well. The starting number for the noncompliance estimate is the auditor's recommended additional tax, but corporations often appeal the recommended tax liability after an audit. In a 1994 report, the General Accounting Office estimated 80 to 90 percent of large corporations appeal and on average, the final assessment was 22 percent of the additional tax recommended by the auditor (U.S. General Accounting Office, 1994). At the national level, disagreements about the tax code and aggressive planning by corporations appear to mean an average of 22 percent of the estimated gap may be collectible for large corporations if every large corporation were audited.

What is the best use of the Tax Gap information

The process of estimating the tax gap is beneficial if it helps in developing a risk-based compliance strategy. Data collected in the course of developing a tax gap estimate can be used to help inform and design better audit selection processes and strategies. These strategies are not necessarily to pursue audits in proportion to relative misreporting percentages or relative contributions to the tax gap (Toder, *What is the Tax Gap*, 2007). The estimation of the tax gap in relation to the causes of noncompliance in both motive and opportunity do provide a good basis for a judgmental adjustment to education, assistance, and enforcement resource allocation.

Concluding Remarks: Sources of Noncompliance and Discussion of Tax Gap Estimates

There are many reasons why noncompliance and even the definition of compliance can be unclear. Taxpayers may be noncompliant for a number of reasons including pure self interest, their feelings about government or their ability to understand and implement tax law when they file their tax return. A taxpayer's level of noncompliance can be thought of as a continuum ranging from inadvertent mistakes all the way to deliberate tax evasion. An understanding of taxpayers' noncompliant behaviors is useful in addressing noncompliance.

Estimating the amount of noncompliance is a difficult process that can yield estimates of limited use. Estimates of the tax gap are not meaningful when compared to estimates from other states or over time. The real benefit of studying noncompliance is not the estimate of the aggregate tax gap, but rather the knowledge regarding the causes of noncompliance that are discovered and studied through the process of producing the estimate. Studying and understanding the places on tax returns where noncompliance is highest is important in addressing noncompliance.

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Appendix A: Tax Gap Estimate

Because there is interest in the overall level of the tax gap, an estimate is reported. The estimate is interesting but speculative. There are multiple ways in which a tax gap can be estimated, each with its own strengths and weaknesses. The method employed in this report relies on federal tax gap estimates used by the IRS intertwined with Oregon specific estimates and assumptions. Changes from prior estimates, or comparison to estimates made by different tax agencies (e.g. other states or the IRS) are likely to reflect differences in estimation method or tax structure and are not likely to be meaningful.

Estimating the Personal Income Tax Gap

The gross tax gap is defined as “the amount of true tax liability faced by taxpayers that is not paid on time” as compared to the net tax gap which is “the portion of the gross tax gap that is never paid, even after enforced and other late payments”(Black, Bloomquist, Emblom, Johns, Plumley, & Stuk, 2012). The gross tax gap has three components: non-filing, underreporting of tax owed, and underpayment. The three components are mutually exclusive, are estimated in different ways, and when combined compose the gross tax gap.

Underreporting

The largest component of the personal income tax gap estimate is underreporting. Because Oregon’s personal income tax begins with the federal definition of taxable income, the process of estimating the underreported income, adjustments, deductions, and credits begins with the amounts reported on each primary line⁴⁰ on the federal 1040 and Oregon form 40 returns. These line-by-line estimates utilize the net misreporting percentages⁴¹ (NMPs) produced and used by the IRS in estimating the federal tax gap misreported amounts of income, deductions, and credits.

Because underreporting is the largest component of the personal income tax gap, and Oregon specific estimates are predicated on IRS NMPs, a short background on how the IRS produced the NMPs is warranted. Between 1963 and 1988, the NMPs were founded on the results of random IRS audits conducted as part of the Taxpayer Compliance Measurement Program (TCMP). Partially due to taxpayer complaints and IRS resource reallocations, the TCMP was abandoned in the late eighties and ultimately replaced by the National Research Program (NRP). The NRP was meant to be a less intrusive way to realize the gains of a random audit program without subjecting all selected returns to full line-by-line audit scrutiny. The NRP relied more heavily on third party data and exempted some simple returns from intense scrutiny. More recently, the IRS began selecting fewer returns for audit but rather than select returns on a cyclical basis, an annual approach is now followed. Because of the shift to annual selection of returns and the limited number that have been selected so far, the most recent NMPs available from the IRS,

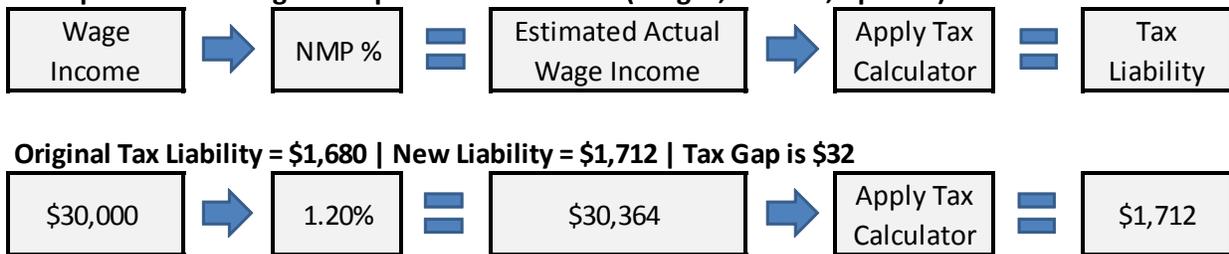
⁴⁰ For estimation purposes, some return lines are combined. For example, credits are grouped into three categories: OR exemption credit, regular credits and refundable credits.

⁴¹ Net misreporting percentage (NMP) = (net misreported amount)/(true amount) For example, if an individual claimed \$90 in income but failed to report \$10, then the income NMP would be: \$10/\$100 or 10%.

and the ones used in the tax gap estimates presented in this report, come from audit results related to tax year 2001.⁴²

DOR’s process of estimating the underreported income, adjustments, deductions, and credits begins with the amounts reported on federal 1040 returns. Where a value is provided on a return, the NMP for that specific line is applied to that value to generate an estimated actual line value. The return, which now has an estimated line value, is then run through DOR’s tax calculator to estimate the change in total tax liability for the return.⁴³ The difference in tax liability between the original amount reported on the return and the estimated amount comprises the estimated tax gap. This process is then repeated for each income line reported on a taxpayer’s federal return. The subsequent calculated total change in tax liability for each return is then summed to produce an aggregate tax gap estimate by return line. Below is an example of how the process works. For this example, the original tax liability reported on the return was assumed to be \$1,680.

Example of Estimating Tax Gap for Individual Line (Wages, salaries, tips etc.)



After the federal portion of tax noncompliance is estimated, Oregon specific aspects of noncompliance must be added. This includes net misreporting of additions and subtractions, and net misreporting of credits.

The Oregon specific aspects were estimated using the NMPs of similar federal components. Misstatements in Oregon additions, subtractions, and standard deductions were estimated using the NMP for federal deductions. Misstatements in Oregon credits were estimated using the NMP for federal credits while estimation of Oregon withholding misstatements were based on the federal NMP for wages.

Another adjustment was made to reflect findings by the Government Accountability Office (U.S. Government Accountability Office, 2008) that Oregon tax returns are more accurate than the national average. GAO found the average Oregon return had an increase in federal taxes of about \$250 less than the average return included in the National Research Program. GAO hypothesized that the cause of the difference was due in part to Oregon’s more stringent tax preparer requirements. An adjustment is made to the misreporting gap estimate to account for this difference.

42 When more recent NMPs were requested from the IRS, the following response was received. “The reason we haven’t released that level of detail for TY06 is that the TY06 individual income tax underreporting gap estimates were based on a much smaller sample of randomly selected audits than were the TY01 estimates (less than 1/3 the size). The unfortunate result is that NMPs at that level of detail would be subject to much more uncertainty than their TY01 counterparts, making comparisons misleading (particularly since we weren’t able to quantify that uncertainty).”

43 The process of using a tax calculator differs from the last tax gap estimate prepared by DOR. The previous tax gap estimate (done for tax year 2006) utilized an effective tax rate to estimate tax liability. While overall tax gap estimates remained relatively stable, using a tax calculator as opposed to effective rates did cause changes at the individual return line level.

Keeping in mind that an adjustment was made to control for differences between Oregon and national returns, there are several assumptions implicit with this method of using NMPs to calculate misreporting. It is clear these assumptions are incorrect, but the direction or magnitude of bias introduced as a result is unclear.

- Misreporting in Oregon is the same as national misreporting for each income component.
- Misreporting is similar for all resident types.
- The net misreporting percentage for Oregon exemption credits is the same as misreporting for federal exemptions.
- The net misreporting percentage for Oregon Additions, Subtractions, and Standard/Itemized Deductions is the same as the misreporting percentage for federal deductions.
- The misreporting percentage for Oregon credits is the same as for federal credits.
- The misreporting for Oregon withholding is the same as the misreporting for wages.
- Tax year 2001 misreporting is representative of other tax years.

Non-Filing

Oregon's proportion of the tax gap attributable to non-filing was assumed to be the same as IRS estimates. As the IRS cautions that their estimate comprises a lower bound, Oregon's estimate may also be a lower bound estimate.

Underpayment

Oregon's underpayment gap is estimated using tabulations of taxpayer account transactions and is comprised of two components: the underpayment of known tax liabilities by individuals and the underpayment of withholding taxes by employers. Both estimates follow a similar approach where returns filed timely represent the known tax liability, which is compared with timely filed payments. The amount of timely filed tax liability that exceeds timely filed payments represents the underpayment gap.

As explained earlier, the sum of these three components (underreporting, nonfiling, and underpayment) represent the gross tax gap. Adjusting the gross tax gap to the net tax gap requires taking into account payments that are made on time but not recorded on returns, as well as late and enforcement related payments received. The following two paragraphs describe in more detail these payments.

Voluntary Withholding Payments not claimed on Timely Returns

Oregon DOR consistently receives more withholding dollars paid by employers (withheld from employees) than what is ultimately claimed by employees on their returns. Because DOR is in the process of implementing a system where employer withholding payments will be able to be reconciled with employee returns, an adjustment to the gross tax gap is necessary to compare total withholding paid by employers to total withholding claimed on returns. This is done by summing timely withholding payments recorded in DOR's accounting system for each tax year and comparing that total to the total withholding reported by employees on their timely filed tax returns.

Other Receipts beyond Timely Reported Tax

Payments made after the due date can be the result of enforcement actions, or simply the result of independent taxpayer action. Only payments made specifically to tax liabilities are considered. Because penalty and interest are not due on timely and correctly filed returns, penalty and interest payments or non-payments are not considered part of the tax gap. To this end, only payments allocated to tax liabilities were considered and if payment(s) on any one account exceeded the tax balance, the excess payment amount was not counted.

The personal income tax gap estimates for tax year 2010 include several enhancements to the methods used in the tax year 2006 tax gap estimates.

- In tax year 2006, federal adjustments were reported as a positive contributor to the tax gap. IRS examinations of taxpayers have found that on average taxpayers tend to understate the adjustments they are eligible to take, resulting in overpayment of tax. The tax year 2010 gap estimate now reflects federal adjustments as reducing the overall size of the tax gap.
- Changes were made to how underreported income was estimated through the application of IRS net misreporting percentages (NMPs). In cases where income could be reported as either positive or negative amounts, past estimates applied NMPs to Oregon returns with positive return line amounts only. For the tax year 2010 gap estimate, NMPs were applied to both positive and negative return line amounts.
- Rather than applying an effective tax rate to aggregate misstated return line amounts, a tax calculator was used to estimate the misstated tax for each line on each individual return separately.
- In response to a report released by the Government Accountability Office (GAO-08-781) regarding Oregon taxpayers on average being more compliant than the rest of the nation, a correction is made. The estimate made for tax year 2010 now follows a more high-level approach to estimating this correction. In past gap estimates an approach using effective tax rates was used, however, irregularities were found in following this technique and ultimately the high-level estimate was applied.

Oregon Personal Income Tax Gap Estimate (\$ Millions)

2010 Tax Year

	Oregon Resident							Full Gap
	Estimated Percent Misreported	Voluntarily Reported Net Amount	Estimated Net Misreported Amount	Estimated Tax Due, Voluntarily Reported Amount	Oregon Resident Tax Gap	Part-Year Resident Tax Gap	Non-Resident Tax Gap	

Income Reporting

Wages and Salaries	1.2%	\$57,545	\$699	\$4,493	\$62	\$1	\$4	\$67
Interest and Dividends	3.7%	\$3,387	\$130	\$251	\$11	\$0	\$0	\$11
Alimony Income	7.2%	\$127	\$10	\$9	\$1	\$0	\$0	\$1
Unemployment Income	11.1%	\$1,974	\$246	\$137	\$20	\$0	\$0	\$20
Pensions and IRA Income	4.1%	\$9,596	\$410	\$600	\$30	\$0	\$0	\$31
Business Income (Net)	57.1%	\$2,869	\$5,249	\$228	\$453	\$3	\$12	\$468
Farm Income (Net)	72.0%	-\$227	\$1,209	-\$9	\$97	\$0	\$5	\$102
Capital Gain (Net)	11.8%	\$2,668	\$460	\$249	\$42	\$1	\$4	\$46
Other Gain or Loss (Net)	64.4%	-\$157	\$811	\$1	\$56	\$0	\$5	\$62
Rents, Royalties, Etc (Net)	51.3%	\$368	\$720	\$41	\$61	\$0	\$8	\$69
S-Corps, Partnerships, Trust, Etc (Net)	17.8%	\$3,839	\$1,544	\$430	\$131	\$1	\$17	\$149
Other Income (Net)	63.5%	-\$933	\$3,825	\$32	\$215	\$2	\$8	\$226
Total Income Reporting		\$81,057	\$15,313		\$1,179	\$10	\$63	\$1,252

Adjustments to Income

Federal Adjustments	-21.1%	\$1,473	-\$257	-\$111	-\$21	\$0	-\$1	-\$22
Oregon Additions	5.4%	\$792	\$45	\$63	\$4	\$0	\$0	\$4
Oregon Subtractions	5.4%	\$4,790	\$273	-\$257	\$18	\$0	\$0	\$18
Deductions (Itemized & Standard)	5.4%	\$16,019	\$914	-\$1,044	\$67	\$1	\$4	\$72
Total Adjustments to Income					\$68	\$1	\$4	\$73

Adjust from National to Oregon Misreporting

Based on GAO Report (GAO-08-781)

-\$199 -\$199

Credits

Oregon Exemption Credit	5.4%	\$499	\$26	-\$499	\$25	\$0	\$1	\$26
Oregon Regular Credits	26.3%	\$140	\$29	-\$140	\$28	\$0	\$4	\$33
Oregon Refundable Credits	26.3%	\$50	\$10	-\$50	\$10	\$0	\$0	\$11
Oregon Withholding Claimed	1.2%	\$4,050	\$48	N/A	\$48	\$1	\$3	\$52
Total Credits		\$4,738.9	\$113.2		\$111	\$2	\$9	\$122

Total Misreporting Gap				N/A	\$1,159	\$12	\$76	\$1,247
Nonfiling Gap (IRS est = 10.6% of Misreporting Gap)				N/A	\$123	\$1	\$8	\$133
Underpayment Gap					\$142	\$4	\$10	\$155

Estimated Gross Tax Gap

\$1,425 \$17 \$93 \$1,536

Gross Tax Gap as % of True Liability

24.1%

Voluntary Withholding Payments Not Claimed on Timely Returns

-\$250

Other Receipts Beyond Reported Tax (est = 2.3% of Total Liability)

-\$148

Estimated Net Tax Gap

\$1,137.4

Net Tax Gap as % of True Liability

17.8%

Corporate Income Tax

The estimation of a state-level corporate income tax gap is especially speculative, and the resulting gross tax gap estimate is probably a lower bound. The gross tax gap estimate is composed of two parts, one related to underreported income of corporations and the second reflects the corporate underpayment gap.

The foundation for Oregon's corporate underreporting gap is the federal estimate by the IRS, which includes only noncompliance due to federal issues. The IRS estimate for the federal corporate income tax gap for tax year 2006 was 19% of tax liability after credits. Applying the IRS underreporting percentage to Oregon tax year 2010 tax after credits yields an underreporting estimate of \$79.3 million.

The underpayment gap exists when a corporation's return is filed on time but timely payments are insufficient to cover the corporation's reported tax liability. The underpayment gap was estimated using Oregon DOR return and transaction data. For tax year 2010, the underpayment gap was estimated at \$19.6 million. However, nearly all of that (\$19.3M) was delinquent

TY 2010 Corporate Tax Gap (\$ Millions)	
\$ 417.9	TY 2010 OR tax after credits
x 19.0%	TY 2006 IRS underreporting %
= <u>\$79.3</u>	OR underreporting amount
+ \$ 19.6	Underpayment gap
= <u>\$ 98.9</u>	Gross tax gap
- \$ 28.9	Delinquent and enforcement payments
= <u>\$ 70.0</u>	Net tax gap
14.1%	Net tax gap as % of true liability
Note: The tax gap estimate presented here should be viewed as a lower bound estimate.	

paid causing the underpayment portion of the gap to only slightly contribute to the overall net corporate tax gap estimate.

Combined, the tax year 2010 Oregon corporate gross tax gap is estimated at \$98.9 million. After accounting for late voluntary and enforcement payments, the corporate net tax gap is estimated to be \$70.0 million, or 14.1% of true tax liability.⁴⁴

⁴⁴ The 14.1% figure should not be compared against the 19% federal figure as the federal percentage is a gross tax gap percentage.

Appendix B: Personal Income Tax Accounts Receivable: Components of Change in FY 2013

To help with the context of collections at DOR, a detailed look at how the accounts receivable changed in the last fiscal year may be helpful. A taxpayer can have multiple liabilities, and categories are as defined on page 16.

First is a high-level summary of changes:

Personal Income Tax Accounts Receivable Approximate Balances and Summary of Change: Fiscal Year 2013 Liability Basis

FY End 2012	Self Assessed	Deficiencies	Enforced Filing	Total
Number of Liabilities	234,685	64,995	64,570	364,250
Balance 6/30/2012	\$ 270,140,000	\$ 86,220,000	\$ 264,440,000	\$ 620,800,000

Summary of All Liabilities in A/R System during Fiscal Year

Number of Liabilities	368,275	96,800	93,640	558,715
Balance 6/30/2012	\$ 270,140,000	\$ 86,220,000	\$ 264,440,000	\$ 620,800,000
Payments	\$ 150,010,000	\$ 30,950,000	\$ 49,740,000	\$ 230,700,000
Withholding Included	\$ 6,450,000	\$ 570,000	\$ 13,670,000	\$ 20,690,000
Change in Tax	\$ 134,670,000	\$ 21,860,000	\$ 66,160,000	\$ 222,690,000
Change in Interest	\$ 13,240,000	\$ 5,470,000	\$ 14,250,000	\$ 32,960,000
Change in Penalty	\$ 2,670,000	\$ 3,840,000	\$ 38,810,000	\$ 45,320,000
Change in Balance	\$ 380,000	\$ 240,000	\$ 69,550,000	\$ 70,170,000
Balance 6/30/2013	\$ 270,520,000	\$ 86,460,000	\$ 333,990,000	\$ 690,970,000

FY End 2013	Self Assessed	Deficiencies	Enforced Filing	Total
Number of Liabilities	224,535	57,310	75,800	357,645
Balance 6/30/2013	\$ 270,520,000	\$ 86,460,000	\$ 333,990,000	\$ 690,970,000

The balance due is the sum of tax, penalty and interest due on each liability. While a tax liability is in the accounts receivable, the balance can change based on amended returns, waiver of penalty, abatement, cancellation of tax, recalculation of interest or other changes. Payments are the primary reason for balances to be reduced, and taxpayers who provide appropriate documentation that a third party already withheld tax can have that prior withholding credited as a payment.

The next table presents the liabilities in the accounts receivable at any time during fiscal year 2013 and breaks down the changes in liabilities based on when the liability was originated, and (potentially) when the liability was closed. This provides an illustration and some context to help understand the churning that goes on in the accounts receivable balance over the course of a year.

Personal Income Tax Accounts Receivable

Approximate Components of Change: Fiscal Year 2013

FY End 2012	Self Assessed	Deficiencies	Enforced Filing	Total
Number of Liabilities	234,685	64,995	64,570	364,250
Balance 6/30/2012	\$ 270,140,000	\$ 86,220,000	\$ 264,440,000	\$ 620,800,000

Transitory Liabilities

New in FY 2013, and closed in FY 2013

Number of Liabilities	29,625	9,910	2,725	42,260
Balance 6/30/2012	\$ 60,000	\$ -	\$ -	\$ 60,000
Payments	\$ 37,590,000	\$ 6,800,000	\$ 4,580,000	\$ 48,970,000
Withholding Included	\$ 4,280,000	\$ 160,000	\$ 1,560,000	\$ 6,000,000
Change in Tax	\$ 37,270,000	\$ 5,520,000	\$ 3,710,000	\$ 46,500,000
Change in Interest	\$ 450,000	\$ 610,000	\$ 260,000	\$ 1,320,000
Change in Penalty	\$ (140,000)	\$ 670,000	\$ 610,000	\$ 1,140,000
Change in Balance	\$ (40,000)	\$ 10,000	\$ 10,000	\$ (20,000)
Balance 6/30/2013	\$ 20,000	\$ 10,000	\$ 10,000	\$ 40,000

New Liabilities

New in FY 2013, and still open on June 30, 2013

Number of Liabilities	103,965	21,895	26,345	152,205
Balance 6/30/2012	\$ 30,000	\$ -	\$ 40,000	\$ 70,000
Payments	\$ 33,090,000	\$ 6,930,000	\$ 6,910,000	\$ 46,930,000
Withholding Included	\$ 890,000	\$ 140,000	\$ 1,270,000	\$ 2,300,000
Change in Tax	\$ 107,610,000	\$ 21,530,000	\$ 65,450,000	\$ 194,590,000
Change in Interest	\$ 4,110,000	\$ 2,880,000	\$ 10,820,000	\$ 17,810,000
Change in Penalty	\$ 4,850,000	\$ 3,800,000	\$ 50,290,000	\$ 58,940,000
Change in Balance	\$ 83,660,000	\$ 21,300,000	\$ 119,680,000	\$ 224,640,000
Balance 6/30/2013	\$ 83,690,000	\$ 21,300,000	\$ 119,720,000	\$ 224,710,000

Closed Liabilities

Open before FY 2013, and closed during 2013

Number of Liabilities	114,115	29,580	15,115	158,810
Balance 6/30/2012	\$ 61,110,000	\$ 16,940,000	\$ 36,830,000	\$ 114,880,000
Payments	\$ 46,010,000	\$ 10,350,000	\$ 20,640,000	\$ 77,000,000
Withholding Included	\$ 1,080,000	\$ 230,000	\$ 7,740,000	\$ 9,050,000
Change in Tax	\$ (10,150,000)	\$ (4,600,000)	\$ (3,110,000)	\$ (17,860,000)
Change in Interest	\$ (2,270,000)	\$ (1,250,000)	\$ (4,000,000)	\$ (7,520,000)
Change in Penalty	\$ (2,090,000)	\$ (680,000)	\$ (8,940,000)	\$ (11,710,000)
Change in Balance	\$ (61,070,000)	\$ (16,920,000)	\$ (36,760,000)	\$ (114,750,000)
Balance 6/30/2013	\$ 40,000	\$ 20,000	\$ 70,000	\$ 130,000

Persistent Liabilities

Open before FY 2013, and still open on June 30, 2013

Number of Liabilities	120,570	35,415	49,455	205,440
Balance 6/30/2012	\$ 208,940,000	\$ 69,280,000	\$ 227,570,000	\$ 505,790,000
Payments	\$ 33,320,000	\$ 6,870,000	\$ 17,610,000	\$ 57,800,000
Withholding Included	\$ 200,000	\$ 40,000	\$ 3,100,000	\$ 3,340,000
Change in Tax	\$ (60,000)	\$ (590,000)	\$ 110,000	\$ (540,000)
Change in Interest	\$ 10,950,000	\$ 3,230,000	\$ 7,170,000	\$ 21,350,000
Change in Penalty	\$ 50,000	\$ 50,000	\$ (3,150,000)	\$ (3,050,000)
Change in Balance	\$ (22,170,000)	\$ (4,150,000)	\$ (13,380,000)	\$ (39,700,000)
Balance 6/30/2013	\$ 186,770,000	\$ 65,130,000	\$ 214,190,000	\$ 466,090,000

FY End 2013	Self Assessed	Deficiencies	Enforced Filing	Total
Number of Liabilities	224,535	57,310	75,800	357,645
Balance 6/30/2013	\$ 270,520,000	\$ 86,460,000	\$ 333,990,000	\$ 690,970,000

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