

Tax Administration 2025

Comparative Information on OECD and other Advanced
and Emerging Economies



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COMPARATIVE INFORMATION ON OECD AND OTHER
ADVANCED AND EMERGING ECONOMIES

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Preface



The 2025 edition of the Tax Administration Series (TAS) presents comparative insights into the performance of both advanced and emerging tax administrations worldwide and highlights key trends and shared challenges facing global tax administrations today.

Since it was first published in 2004, the TAS has been a valuable resource for tax administrations, governments, taxpayers, and other stakeholders by supporting efforts to improve the effectiveness of tax administration globally.

This edition offers a ten-year comparative perspective, analysing data from the 2023 fiscal year collected through the International Survey on Revenue Administration and comparing it in several instances with historical data from 2014. The many examples of innovative practices show how the implementation of digital transformation and the rapid adoption of artificial intelligence in tax administration will help us to enhance services to taxpayers, support improved efficiency and compliance and reduce burdens.

I wish to express my appreciation to everyone involved in producing this engaging and informative report, especially the team at the OECD Secretariat.

This 2025 edition of the TAS continues to deepen our understanding of the challenges that we face collectively. It also highlights opportunities to strengthen our approaches within individual jurisdictions and encourages greater collaboration as we work to enhance services to taxpayers around the world.

Bob Hamilton

Chair of the OECD Forum on Tax Administration
Commissioner of the Canada Revenue Agency

Foreword

Tax Administration 2025 is the 13th edition of the OECD Centre for Tax Policy and Administration's comparative information series. First published in 2004, the primary purpose of the Tax Administration Series (TAS) is to share information that will facilitate analysis and dialogue on the design and administration of tax systems.

This edition of the TAS provides internationally comparative data on aspects of tax systems and their administration in 58 advanced and emerging economies. While the publication traditionally put its emphasis on performance-related data and ratios for the latest available fiscal year, in this case 2023, a key focus of this edition is a 10-year perspective on the evolution of tax administration.

The publication presents the results of the International Survey on Revenue Administration (ISORA). To provide the longer-term perspective, it compares the latest ISORA data with the 2014 data collected through the very first ISORA survey.

The ISORA survey is a multi-organisation survey to collect information and data on tax administration. It is governed by five partner organisations: the Asian Development Bank (ADB), the Inter-American Center of Tax Administrations (CIAT), the International Monetary Fund (IMF), the Intra-European Organisation of Tax Administrations (IOTA) and the OECD.

To provide further insight into the ISORA data in certain places, TAS 2025 also uses data from the Inventory of Tax Technology Initiatives (ITTI). ITTI is an online database containing information on technology tools and digitalisation solutions implemented by tax administrations across the globe. It has been developed by the OECD's Forum on Tax Administration (FTA) together with nine key partner organisations.

This report was approved by the Committee on Fiscal Affairs on 29 October 2025 and prepared for publication by the OECD Secretariat.

Acknowledgements

The OECD has produced the TAS, its comparative information series on tax administration, since 2004. Since that time the publication has grown in terms of its coverage, influence and importance and is now widely recognised as an authoritative source of information on tax administration around the globe.

The 2025 Tax Administration publication presents the results of the ISORA survey, the last version of which was launched in September 2024. It would not have been possible without the direct support and help of a large number of people, particularly the staff in the 58 tax administrations that provided data and jurisdiction examples, reviewed content and responded to feedback and questions on the data and text that form the basis of the publication.

The authors of the publication were Paul Marsh, Fiona May and Oliver Petzold all from the OECD Centre for Tax Policy and Administration (CTPA) Secretariat. Management and analysis of the ISORA data was undertaken by Oliver Petzold. They would also like to thank the administrative team at the OECD CTPA Secretariat for their work on the publication, and the OECD CTPA's Communications team.

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Reader's guide

Tax Administrations covered by the report

Tax Administration 2025 is the 13th edition of the TAS. The primary purpose of the series, which commenced in 2004, is to share information that will facilitate dialogue among tax officials on important tax administration issues, and to identify opportunities to improve the design and administration of their systems.

This edition of the series provides internationally comparative data on various aspects of tax systems and their administration in 58 advanced and emerging economies. It covers 54 jurisdictions that are members of the OECD's FTA. In addition, it includes information on the non-FTA jurisdictions that are members of the European Union as well as Morocco and Thailand (which increases the report's geographical coverage).

ISORA data gathering process and reporting

The 2025 Tax Administration publication presents the results of the ISORA, the last version of which was launched in September 2024. ISORA is a multi-organisation international survey that collects national-level information and data on tax administration. It is governed by five partner organisations: the ADB, CIAT, the IMF, IOTA and the OECD. The 2024 ISORA survey was completed by 164 jurisdictions.

The ISORA survey

The ISORA survey consists of two parts:

1. **An annual survey part**, collecting data mainly on the annual operational performance of tax administrations; and
2. **A periodic survey part**, looking at the wider tax administration processes and arrangements which are less likely to change regularly, such as governance, human resource management and compliance risk management.

The ISORA survey that was launched in September 2024 covered the annual survey part. The comprehensive version of the survey, covering both the annual and the periodic survey parts, was last conducted in 2023 and is expected to be run again in 2028.

The different ISORA survey forms can be accessed via the ISORA online data portal (<https://isoradata.org>; accessed on 1 October 2025) in the section "Documents".

Survey management

The last five iterations of the ISORA survey collected data for fiscal years from 2018 to 2023. Survey information was gathered online using the IMF's RA-FIT data collection tool. Participation was voluntary

and 164 administrations completed the 2024 ISORA survey. Each partner organisation supported participants by assisting them with the completion of the ISORA survey, based on an upfront agreed allocation key. The 58 administrations included in this publication corresponds to the group of administrations supported by the OECD.

While all data contained in the publication has been subject to a high-level review by the OECD, neither the OECD nor any other partner organisation formally validated the data. As a result, all data included in the publication should be considered as self-reported by the administrations concerned.

Publication of data

Since July 2025, the ISORA data is made available to the public on the ISORA online data portal (<https://isoradata.org>). The data from the 2024 ISORA survey was published in July 2025.

Historically, the OECD made all ISORA data for TAS participants also publicly available through the TAS and its data annex. This approach changed with the 2024 edition of the TAS. Since then, the TAS does not anymore have its own data annex. Instead, it refers to the publicly available tables on the online data portal. (It should be noted that with the launch of the new ISORA data portal in July 2025 and the decommission of the old data portal, the links to the ISORA data included in the TAS 2024 publication do not work anymore. Readers should instead refer to the data tables on the new portal. See Annex A.)

As regards the other organisations:

- The ADB publishes jurisdiction-level ISORA data for its members, for example, *A Comparative Analysis of Tax Administration in Asia and the Pacific: Eighth Edition* (Asian Development Bank, 2025^[1]).
- CIAT publishes in aggregated form as well as selected data points, for example, *Innovation, Digitalization and Technology Index (INDITEC): A tool for benchmarking Tax Administrations at the international level (Based on data from ISORA 2020 Survey)* (Morán and Díaz de Sarraalde Miguez, 2024^[2]), and *Overview of Tax Administrations in CIAT Countries: Results of ISORA 2023 - Volume II (Special forms)* (Garcimartín and Díaz de Sarraalde Miguez, 2025^[3]).
- The IMF publishes in aggregated form as well as on selected data points, for example, *ISORA 2018: Understanding Revenue Administration* (Crandall, Gavin and Masters, 2021^[4]) and *Revenue Authorities and Their Boards of Management: Recent Developments* (Crandall et al., 2024^[5]).

Data comparability

TAS 2025 includes performance-related data, ratios and other information for the fiscal years from 2018 to 2023. The data was collected through different rounds of the ISORA survey. Several administrations updated some of their previously supplied data during the process of producing the 2025 edition of the TAS. For that reason, there might be some differences between this and previous editions of the TAS in figures and tables displaying 2018 to 2022 data.

In several areas, TAS 2025 also uses fiscal year 2014 data from the 2016 ISORA survey to show trends for the 10-year period between 2014 and 2023. However, over the past years a number of changes were made to ISORA questions to improve clarity and data quality. Therefore, care needs to be taken when comparing results from the different ISORA versions, and the wording of survey questions compared whenever relevant. The different ISORA survey forms can be accessed on the ISORA online data portal (<https://isoradata.org>) in the section “Documents”.

Also, it should be noted that statistical data is often subject to revisions after publication. As a result, some data may not correspond to what has been published by administrations. For example, it may be that

opening balances of a specific year (t) may not correspond to closing balances of the preceding year (t-1) that were published in earlier editions of this publication.

Even more care should be taken when comparing ISORA data with data gathered through pre-ISORA surveys, i.e. data included in the sixth and prior editions of the TAS. When the ISORA survey was initially created and at the request of survey participants, the partner organisations made considerable effort to agree and document a range of words and terms used in the survey and their meaning. While this has improved data integrity and comparability between administrations, comparisons with pre-ISORA data may be limited as definitions may now exist for terms not previously defined, or in some instances, have changed.

Further, in relation to combined tax and customs administrations, it should be noted that the data in this publication refers to the tax administration activities of such administrations. The data may therefore not be directly comparable with key performance indicators published by them as these indicators may include both tax and customs related data.

Data from the Inventory of Tax Technology Initiatives

To complement the ISORA survey data, this edition of the TAS continues to draw on data from the ITTI database which contains information on technology tools and digitalisation solutions implemented by tax administrations globally. ITTI has been put together with the assistance of the ISORA partners, the African Tax Administration Forum, the *Cercle de Reflexion et d'Echange des Dirigeants des Administrations Fiscale*, the Commonwealth Association of Tax Administrators, the Pacific Islands Tax Administrators Association and the Study Group on Asia-Pacific Tax Administration and Research. (OECD et al., 2025^[6])

The inventory data was collected in 2024 and 2025 through a global survey on digitalisation and can offer further insight into the ISORA data in certain places. Therefore, where available, the TAS uses the ITTI data published in the 2025 OECD report *Tax Administration Digitalisation and Digital Transformation Initiatives* (OECD, 2025^[7]).

Publication structure

The tax administration series examines the fundamental elements of modern tax administration systems and uses data analysis and examples supplied by tax administrations to highlight key trends, recent innovations, and performance measures and indicators.

Structure

The main body of the publication is structured around nine chapters: (i) an introduction followed by chapters on (ii) responsibilities and revenue collections; (iii) registration and identification; (iv) assessment; (v) services; (vi) compliance management; (vii) collection; (viii) disputes; and (ix) budget and workforce.

The publication also contains two annexes:

- Annex A holds an overview of the ISORA data tables published on the ISORA data portal (<https://isoradata.org>).
Until the 11th edition of the TAS, this annex replicated the ISORA data for the 58 tax administrations¹ covered in the publication. Starting with the 12th edition, i.e. TAS 2024, Annex A contains an overview of, and the links to, the data tables that hold the latest available annual and periodic ISORA data.
- Annex B has the details of the administrations that participated in this publication.

Tables and figures

The source notes below the tables and figures in the main body of the publication refer readers to the underlying tables on the ISORA data portal. In some cases, they may refer to previous editions of the TAS or, where ITTI data is used, to the relevant sections in the 2025 ITTI report (OECD, 2025^[7]).

The figures in the publication are also accompanied by hyperlinks (OECD StatLinks) that direct readers to corresponding MS Excel spreadsheets containing the underlying data. These links are stable and will remain unchanged over time.

Symbols and abbreviations that are used in the ISORA data tables are explained at the bottom of each table. The reader should note that where no data is shown for a specific jurisdiction in a table this is primarily due to the question not being applicable to a particular jurisdiction, or an opening question to a sub-section of the survey being answered in the negative and, therefore, the jurisdiction did not have to answer the follow-up questions.

Forum on Tax Administration

The FTA is a unique body bringing together tax commissioners and tax administration officials from over 50 OECD and non-OECD economies. The FTA is a forum through which tax administrators share knowledge, undertake research and develop new ideas to enhance tax administration around the world. Readers wishing to find out more about the FTA should go to: <https://www.oecd.org/en/networks/oecd-forum-on-tax-administration.html>. For more information on the OECD's work on tax administration, please visit: <https://www.oecd.org/en/topics/tax-administration.html>. (Both links accessed on 1 October 2025.)

Caveat

Tax administrations operate in varied environments, and the way in which they each administer their taxation system differs in respect to their policy and legislative environment and their administrative practice and culture. As such, a standard approach to tax administration may be neither practical nor desirable in a particular instance. Therefore, this report and the observations it makes need to be interpreted with this in mind. Care should be taken when considering a jurisdiction's practices to fully appreciate the complex factors that have shaped a particular approach. Similarly, regard needs to be had to the distinct challenges and priorities each administration is managing.

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Notes

¹ For Japan, given that it publishes its currency figures in millions the currency figures included in tables have been added a suffix of “000” in order to fit the survey requirements that currency figures needed to be provided in thousands. For Switzerland, in the context of the ISORA survey the term “tax administration” refers to the Swiss Federal Tax Administration. All duties performed by the Swiss cantonal or communal tax administrations are not attributed to the Federal Tax Administration and are therefore not included. This concerns in particular PIT and CIT, where the Federal Tax Administration merely performs a supervisory function. If a service is indicated as not performed by the “tax administration”, this respective service may be rendered by the Swiss cantonal and/or communal tax administrations.

Abbreviations and acronyms

AAP	Advanced Analytics Platform
ADB	Asian Development Bank
AEAT	Agencia Estatal de Administración Tributaria (Spain)
AI	Artificial Intelligence
APA	Advance Pricing Agreement
API	Application Programming Interface
ATO	Australian Taxation Office
BEPS	Base Erosion and Profit Shifting
CIAT	Inter-American Center of Tax Administrations
CIT	Corporate Income Tax
CPFB	Central Provident Fund Board (Singapore)
CRA	Canada Revenue Agency
CTPA	Centre for Tax Policy and Administration
DGFip	Direction Générale des Finances Publiques (France)
DI	Digital Identity
DIV	Digital Identity Validation
DKK	Danish Krone
DTA	Danish Tax Agency
eRFI	electronic Requirements for Information
EU	European Union
EUR	Euro
ETR	Electronic Transferable Record
FTA	Forum on Tax Administration
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GIS	Geographic Information System
GenAI	Generative Artificial Intelligence

HMRC	His Majesty's Revenue and Customs (United Kingdom)
HNWI	High Net Wealth Individual
HR	Human Resources
ICAP	International Compliance Assurance Programme
ICT	Information and Communication Technology
IMF	International Monetary Fund
IOTA	Intra-European Organisation of Tax Administrations
IRA	Italian Revenue Agency
IRAS	Inland Revenue Authority of Singapore
ISORA	International Survey on Revenue Administration
ITA	Israel Tax Authority
IT	Information Technology
ITTI	Inventory of Tax Technology Initiatives
LLM	Large Language Model
LTO/P	Large Taxpayer Office/Programme
MAP	Mutual Agreement Procedure
MCC	Multichannel Communication Centre
MNE	Multinational Enterprise
M2M	Machine-to-Machine
NIS	New Israeli Shekel
NLP	Natural Language Processing
NOK	Norwegian Krone
NRA	National Revenue Administration (Poland)
NTA	National Tax Agency (Japan)
NTA	Netherlands Tax Administration
NTA	Norwegian Tax Administration
NTCA	National Tax and Customs Administration (Hungary)
NTS	National Tax Service (Korea)
OECD	Organisation for Economic Co-operation and Development
PAYE	Pay-As-You-Earn
PIT	Personal Income Tax
RA-FIT	Revenue Administration Fiscal Information Tool
RFB	Receita Federal do Brasil
RPA	Robotic Process Automation
SAT	Servicio de Administración Tributaria (Mexico)

SEP	Self-Employed Person
SFBII	Service Feedback Business Intelligence Initiative
SII	Servicio de Impuestos Internos (Chile)
SMS	Short Message Service
SRS	State Revenue Service (Latvia)
SSC	Social Security Contribution
SSOT	Single Source of Truth
STA	State Taxation Administration (People's Republic of China)
STA	Swedish Tax Administration
STI	State Tax Inspectorate (Lithuania)
TAS	Tax Administration Series
TDM	Tax and Duty Manual
TFTC	Task Force on Tax Crimes and Other Crimes
UK	United Kingdom
VAT	Value Added Tax
VITARA	Virtual Training to Advance Revenue Administration

Executive summary

The Tax Administration Series (TAS) is a unique product containing a wealth of comparative data and other information on tax administration. It is intended to be used by tax officials to give them an understanding of the global trends in the design and administration of tax systems and to draw cross-border comparisons. While primarily aimed at analysts, it can also be a useful tool for senior tax administration managers or officials in ministries of finance when considering changes in tax system administration.

The 2025 edition of the TAS takes a closer look at national-level tax administrations in 58 jurisdictions. While the publication traditionally put its emphasis on performance-related data and ratios for the latest available fiscal year, a key focus of this edition is a 10-year perspective on the evolution of tax administration and how the rise of artificial intelligence is shaping the future of tax administration.

The rise of artificial intelligence

Past editions of the TAS have commented on the impact of the digitalisation of the wider economy and technological advancements on the operating models of tax administration. Some of these changes can take many years to implement, and the incremental progress that has been noted in the past continues to be observed in this 2025 edition.

There is one technology, however, that has experienced rapid growth in a relatively short period: Artificial intelligence (AI). The increased availability of the systems that can support AI over the past few years has prompted many tax administrations to adopt it to provide new and better services that can support improved efficiency and compliance, as well as reducing burdens.

Around 2015, when the first ISORA survey was developed, AI did not play a significant factor in tax administration. It was not even covered in the first ISORA survey, which is why there is no data on the use of AI by tax administrations for fiscal year 2014. First data on the use of AI by tax administrations is available for 2016, when 9% of administrations reported its implementation and use. Since then, the percentage of tax administrations that use AI has rocketed to 69% in 2023, with another 24% reporting they are implementing it for future use.

This significant increase in the use of AI is also visible in the number of examples that tax administrations provided for inclusion in this edition. Around 25% of the examples are AI related, and they highlight the wide range of deployments of AI across administrations – from, for example, supporting analytical work, to providing faster and more efficient services to taxpayers, or to improving case work selection. In addition, AI is automating high volume repetitive tasks so that tax administration resources can be focused on the more complex tasks.

10 years of ISORA data: Insights and perspectives

While AI is undoubtedly a hot topic in tax administration, the ISORA data also provides other high-level insights and perspectives regarding the evolution of tax administration. Highlights from comparing ISORA data over a 10-year period include:

- **Tax administrations continue to be the primary actor in government revenue collection:** Net collections by tax administrations average 63% of total government revenue, an increase of almost 8 percentage points since 2014. Tax administrations are the principal government revenue collection agency in three-quarters of jurisdictions covered in this report.
- **A structural shift towards self-service channels:** The data shows a move away from contact channels that occur during tax office working hours to channels that can be used 24/7. Since 2014, in-person contacts declined by 56%. At the same time, online contacts have tripled since 2018 to more than 3 billion contacts in 2023.
- **Filing tax returns electronically has become the norm:** Over the 10-year period, e-filing rates have increased significantly – between 18 and 24 percentage points – across the three main tax types. In 2023, close to 90% of personal income tax (PIT) returns were filed electronically. The share is even greater for corporate income tax (CIT, 96%) and value added tax (VAT, 99%). However, **average on-time filing rates did not improve** despite e-filing and prefilling regimes. On average, the rates have remained broadly static since 2014, although the underlying data for on-time filing shows significant variation in the evolution of on-time filing rates between jurisdictions.
- **A potential effect of more data and new approaches for compliance risk management on compliance behaviour:** While the available audit data indicates that audit adjustments rates have remained similar since 2014, the additional assessments raised from audits decreased significantly for PIT, CIT and VAT. This could hint at effective up-front compliance programmes and improved compliance behaviour, potentially a result of better services and taxpayer education programmes, and a deterrent effect with taxpayers understanding that tax administrations hold an increasing amount of data.
- **Revenue collections grow faster than tax arrears:** The total amount of outstanding arrears at the end of fiscal year 2023 was in the region of EUR 2.7 trillion. While this is a significant increase from the EUR 1.5 trillion reported in 2014, the average ratio of fiscal year-end arrears to net revenue collections has declined since then by around 10%.
- **Technology helps fewer staff to serve more taxpayers:** With an often increasing population and labour force, 60% of administrations report declining staff numbers, meaning that the remaining staff are having to serve more people. On average the population and labour force per full-time employee increased by around 15% between 2014 and 2023. Digital transformation is helping tax administrations respond to this challenge.
- **A shift in the workforce profile:** Between 2014 and 2023, the percentage of staff with less than 5 years of service has increased by 7.4 percentage points. With a significant number of staff expected to retire in the next few years – on average 28% of staff are 55 years or older – tax administrations will lose further knowledge. While this may also open opportunities to get new digital skills into administrations, a key challenge will be to transfer knowledge and experience.

1 Introduction

This chapter provides an overview of the content of the 2025 edition of the OECD's Tax Administration Series.

In 2017, the seventh edition of the TAS described the changing face of tax administration noting how new technologies, analytical tools and a significant increase in the data tax administrations had access to was allowing them to rethink their operational models, providing new opportunities to improve services, enhance compliance and reduce burdens. (OECD, 2017^[1])

The embedding of technology into tax administration has continued at pace since then, including the rise of AI, and, in 2020, the OECD formulated its vision of a digitally transformed tax administration, referred to as *Tax Administration 3.0* (OECD, 2020^[2]). This future of tax administration has inspired the strategic plans of many tax administrations, and some are well underway with their digital transformation.

Box 1.1. Denmark – Strategic framework for digital transformation

The Danish Tax Agency (DTA) has developed a strategic framework for digital transformation, to keep up with wider technological advances in society and create future-proof solutions, strengthening the public's trust in the tax administration.

The framework consists of three main deliverables:

- A vision: The vision reflects where the administration wants to get to in a specific business area over the next fifteen years.
- Business and Information Technology (IT) architecture: The business and IT architecture is the “translation” of the vision into an architectural design that includes capabilities, applications and technologies. By using business and IT architecture methods, the DTA is able to identify initiatives that will enable the organisation to reach its target state.
- Roadmap: The roadmap will be composed of all the identified initiatives being implemented to achieve the vision. These can be split into the short, medium and long-term. Furthermore, the roadmap will also enable the DTA to track the effectiveness of each initiative.

The ambition is to apply the strategic framework to every domain in the domain landscape. The landscape consists of fourteen business domains, where each domain includes different core tasks and deliverables. Applying the framework to each business domain allows officials to better understand the DTA, and to strategically follow the development of each domain within the landscape. Last year, the framework was applied on four business domains:

- Corporate taxation
- Equity shares, dividends, and pensions
- Value added tax
- Preliminary income assessment and tax assessment notice.

Source: Denmark (2025).

To obtain insights as to how tax administration has evolved over the past years, this edition of the TAS compares in several instances 2023 fiscal year data collected through the 2024 ISORA survey, with the historical 2014 data.

While this 10-year perspective, comparing ISORA data for fiscal years 2014 and 2023, needs to be considered with caution due to changing circumstances of tax administration, such as new responsibilities, it nevertheless allows high level insights as to the evolution of tax administration.

As previously, alongside the ISORA data, the tax administrations covered in this edition of the TAS were also invited to provide examples of innovative practices that they are undertaking to help achieve their objectives. They have provided a rich source of over 80 examples, covering a wide range of topics. While

these examples do not form a basis for comparison across tax administrations in the same way as the ISORA data points can in some circumstances, they do add more colour to the data and give pointers to the strategic direction of travel of tax administrations globally, as is evident by the large number of AI related examples provided.

Furthermore, this edition of the TAS continues to use information from the ITTI database (OECD et al., 2025^[3]). ITTI collects data on the digital transformation and digitalisation work of tax administrations from across the globe, and this rich source of data can provide further insight into the developments taking place in tax administration, facilitating mutual learning and collaboration.

Structure of the 2025 edition

Regardless of the country context that a tax administration operates in, the core objective remains the same, namely the timely and accurate collection of tax revenues to fund public services. **Chapter 2** explores this topic in more detail and provides statistics on the range and value of taxes that administrations are responsible for.

Central to achieving their objective is the work of tax administrations to ensure that all relevant taxpayers are registered and can be identified, as necessary, both quickly and securely. **Chapter 3** sets out the work of tax administrations in this field, including the impact of digital transformation on identity management.

Chapter 4 looks at the tax assessment function, including all activities related to processing tax returns and payments. This chapter also examines the use of e-channels for filing and paying, and outlines administrations' efforts to provide pre-filled returns, as well as the levels of on-time return filing and payment.

Providing services aligned with taxpayer expectations and supporting them in meeting their tax obligations, is essential for high levels of voluntary compliance. **Chapter 5** highlights the work of tax administrations in this space, including how they are encouraging "self-service" by taxpayers and the increasing role that artificial intelligence plays in service provision.

Managing compliance is the core topic of **Chapter 6** and it explores how tax administrations are identifying compliance risks, often through the use of data and new technology tools. This chapter further comments on the performance of tax administrations in the delivery of compliance actions undertaken.

The efficient collection of outstanding taxes is essential to maintaining high levels of voluntary compliance and citizens' confidence in the overall tax system. **Chapter 7** looks at how tax administrations manage this and examines the features of a modern tax debt collection function.

However, inevitably, disputes between taxpayers and tax administrations do arise, and **Chapter 8** considers those processes that safeguard taxpayer rights and ensure appropriate checks and balances exist on the exercising of tax powers by administrations.

Underpinning all this work are the resources that are available to tax administrations. **Chapter 9** provides information on the resources that tax administrations have at their disposal and describes how working practices are changing.

Finally, last year's publication contained several additional aspects of tax administration, that were covered in the extended ISORA 2023 survey that is run every 5 years. The 2024 edition of this series remains the most recent source of information on that extended survey. (OECD, 2024^[4])

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- OECD et al. (2025), *Inventory of Tax Technology Initiatives*, <https://www.oecd.org/content/oecd/en/data/datasets/inventory-of-tax-technology-initiatives.html> (accessed on 1 October 2025). [3]

2 Responsibilities and revenue collections

This chapter looks at the performance of tax administrations in their primary role of collecting taxes. It provides figures on the aggregate net tax revenues collected and other key information related to the activities of the administrations covered in this publication.

Introduction

The primary purpose of a tax administration is the collection of tax revenue to fund public services, although over time, as previous editions of this series have highlighted, many tax administrations have also been tasked with other responsibilities. This chapter provides an overview of the revenue related responsibilities given to tax administrations and the net revenues collected. It also looks at the importance of withholding regimes to support overall compliance.

Responsibilities of tax administrations

With few exceptions, jurisdictions have unified the collection of direct and (most) indirect taxes within a single body for tax administration, and Table 2.1. summarises for which revenue types the tax administrations covered by this publication have responsibility. More details on institutional set-ups of tax administrations can be found in Chapter 9 in the 2024 edition of this series (OECD, 2024^[1]).

Table 2.1. Revenue types for which the tax administration has responsibility, 2023

Percentage of administrations that have responsibility for the following revenue types

Personal income tax	Corporate income tax	Value added tax	Excises - domestic	Motor vehicle taxes	Real property taxes	Wealth taxes	Estate, inheritance, gift and other taxes	Other taxes on good and services	Social security contributions	Customs
98.3	100.0	94.8	65.5	48.3	44.8	22.4	50.0	53.4	39.7	46.6

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.1 Revenue types for which the administration has responsibility: Income tax and taxes on goods and services, A.2 Revenue types for which the administration has responsibility: Other taxes, A.3 Revenue types for which the administration has responsibility: Other taxes (continued), SSC and non-tax revenue, A.4 Employer withholding taxes and combined tax and customs administrations, <http://isoraodata.org> (accessed on 1 October 2025).

Also, as highlighted in Chapter 2 of the 2024 edition of this series, governments have given tax administrations other areas of responsibility (or shared responsibility with other parts of government in some areas) in addition to their traditional tax roles. Confidence in the proven ability of tax administrations to deliver complex administrative processes on a large scale undoubtedly plays a significant part in such decisions. Typically, these may be to provide financial benefits to taxpayers (for example, welfare-type benefits) or to collect loans or debts owing to the government (for example, student loans or child support). In other situations, the role/function is less directly related to the tax system, for example oversight of certain gambling activities or population registries. (OECD, 2024^[1])

Box 2.1. Finland – Credit register

The Finnish Tax Administration has established a credit register, with the following aims:

- Prevent households from taking on too much debt.
- Improve the ability of creditors to assess the creditworthiness of credit applicants.
- Help private individuals manage their own finances.
- Provide reliable information on the credit market.
- Facilitate the monitoring and supervision of credit markets.

In the first phase, which was finalised in 2024, information on consumer credits and other comparable credits was included in the register. Several functionalities were also implemented:

- Credit institutions report data on all consumer credits issued to Finnish individuals and on any changes on loan contracts to the register. In 2024, over 15.5 million loans have been reported to the register.
- Lenders use data from the register to assess applicants' creditworthiness. Data on the credit register extract includes information on the applicant's loan contracts and current income. Income data is derived from the income register and regularly updated. Lenders pay for each credit register extract inquiry from the system, with over 5 million enquiries taking place in 2024.
- Specific public authorities can utilise data from the positive credit register for carrying out their legal duties.
- Private individuals can view their personal credit information online, and they can also set up a voluntary credit ban free of charge.

In the second phase of the programme, lenders will start reporting loans granted to private individuals other than consumers. This is due to be completed in June 2026.

Source: Finland (2025).

An expansion of responsibilities, while it can bring useful economies of scale and scope, can also potentially increase risks to the core task of raising the tax revenue needed to fund public services and public goods. It therefore requires strong governance, risk management and appropriate resourcing.

Tax crime investigation responsibilities

Finding ways to fight tax crime is a high priority as money laundering, corruption, terrorist financing, and other financial crimes can threaten the strategic, political and economic interests of jurisdictions. Tax administrations, as gatekeepers to a sound financial system, play a critical role in countering these activities as they are in possession of information that could be crucial for a successful criminal tax investigation.

A jurisdiction should have an organisational model with defined responsibilities for fighting tax crime and other financial crime. (OECD, 2021^[2]) There is a range of organisational approaches for conducting tax crime investigations, and the ISORA survey continues to look at the role of tax administrations in this process. As can be seen from the data, close to two-thirds of the tax administrations covered in this publication are involved in conducting tax crime investigations (Table A.87). The majority of those administrations have responsibility for both conducting and directing tax crime investigations, while the others have responsibility for solely conducting investigations, under the direction or authority of another agency, such as the police or public prosecutor (see Table 2.2.).

In situations where administrations do not have any responsibility for conducting tax crime investigations, this work is done by another agency, such as the police or public prosecutor. This could also be a specialist agency, established outside the tax administration.

Table 2.2. Role of administrations in tax crime investigations, 2022

Percentage of administrations

Tax administration has responsibility for directing and conducting tax crime investigations	Tax administration has responsibility for conducting investigations, under the direction or authority of another agency	Another agency outside of tax administration has responsibility for conducting tax crime investigations
43.1	25.9	46.6

Note: In some jurisdictions, the organisational approach for tax crime investigations may depend on the tax offence or tax-related criminal proceedings. In those cases, an administration may have selected multiple answer options. This is why the percentages add up to more than 100 percent.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.87 Tax crime investigations: Role of the administration, <http://isora.data.org> (accessed on 1 October 2025).

Jurisdictions should have a strategy for addressing tax crimes. (OECD, 2021^[2]) Information on the rationale for adopting a national strategy for countering tax crime and on the design of such strategies, is included in the 2024 OECD report *Designing a National Strategy against Tax Crime: Core Elements and Considerations* (OECD, 2024^[3]). The report draws on the practices of members of the OECD's Task Force on Tax Crimes and other Crimes (TFTC), which includes officials from many tax administrations.

Box 2.2. Tax crime investigations

Brazil – Innovation in combatting complex tax fraud schemes

Faced with the growing challenge of combating structured tax fraud schemes, the Federal Revenue Service of Brazil (*Receita Federal do Brasil*, RFB) has implemented practices to tackle sophisticated illicit operations that can cause significant economic impact.

One of the most significant advances has been the identification of the need for full integration between specialist areas of the RFB, such as those responsible for conducting confidential investigations, performing risk analyses, and executing enforcement actions. It was recognised that the isolated work of these units limited the potential for action in highly complex schemes.

To address this, a methodology was developed to promote institutional and operational synergies between the specialist areas of the RFB. The first measures under this new methodology are already underway, with teams working together on investigations involving large-scale structured frauds. Efforts include identifying and tracking networks of shell companies, atypical financial transactions, and fraudulent operations related to taxes. In this context, collaboration has utilised the skills and knowledge of each unit, creating institutional synergy and maximising the efficiency of the RFB in combating tax fraud.

Another important aspect has been the introduction of a more centralised control that has oversight of all the different units. This makes it easier to prioritise actions and coordinate the distribution of tasks among the units. This robust governance structure ensures the RFB focuses on the most relevant cases, maximising the impact of operations and ensuring the efficient allocation of resources.

Israel – Identifying fraudulent invoices

In recent years, the distribution of fraudulent tax invoices has become a growing issue and causes significant economic impacts in terms of lost revenue. To tackle this, the Israel Tax Authority (ITA) has taken a preventative approach, by developing a model aimed at identifying these invoices. It does this by providing prior approval for tax invoices so that those which have not been approved (by receiving an allocation number) will be prohibited from deducting input tax for VAT purposes. This is an online

process done using an application programming interface that connects the trader's accounting software to the ITA.

The VAT Law was amended to make it mandatory to receive an allocation number for tax invoices that exceed NIS 50 000. It also authorised the ITA to withhold the allocation numbers for invoices in cases where there are reasonable grounds to believe that the invoice was issued illegally. This NIS 50 000 threshold will be gradually decreased to NIS 5 000 by 2028.

The amendment has had a positive impact. The ITA's computer system automatically adds 50-100 000 allocation numbers to invoices per day, with response times that do not exceed half a second.

In 2024, the ITA identified fraudulent invoices worth approximately NIS 30 billion, and closed hundreds of businesses that were disclosing them. The estimated VAT saved as a result is estimated at approximately NIS 6 billion.

Spain – Preventing fraudulent invoices

Aiming to aid the digitalisation of the business sector and reducing tax fraud, the Spanish Tax Agency (*Agencia Estatal de Administración Tributaria*, AEAT) has launched the VERI*FACTU project. This establishes requirements that must be met by the computer invoicing systems used by entrepreneurs and professionals.

The purpose of the VERI*FACTU project is to prevent the prevalence of computer programmes that facilitate the manipulation or concealment of invoice records. For this reason, invoicing systems and computer programmes must guarantee the integrity, accessibility and traceability of invoicing records. This obligation falls on the manufacturers and developers of invoicing software, who must guarantee this by means of a certification for the products they sell.

Taxpayers may voluntarily automatically submit to the tax administration all invoicing records generated in their computer systems or keep the invoicing records in the issuing system. In addition, for small entrepreneurs who do not have a computer invoicing system, the AEAT makes a form available on the AEAT web portal that facilitates the preparation of their invoices.

One of the new features to be included in the invoices is a QR code that allows the recipients of the invoice to check whether it has been sent to the AEAT. Additionally, all invoices must also incorporate a further QR code, which can be used either to validate the content of the invoice received, or to communicate it to the AEAT.

Sweden – Crime script analysis to tackle tax fraud

Understanding how re-occurring types of tax fraud work is essential to formulating appropriate counter measures. The Swedish Tax Agency (STA) innovation team has conducted crime script analysis to identify how the agency can structure the information it has to gain insight on how a particular tax evasion scheme is carried out.

Crime script analysis is a technique used to understand how crimes are committed by breaking them down into a sequence of steps and is based on the idea that crimes follow a structured process. Mapping out the whole process gives a holistic overview of the scheme, and this way of organising information can be used to decide how to prevent tax schemes while they are still in an early phase.

A development process within the STA has started to explore how this approach (which is currently a Proof-of-Concept) can be scaled up to be applied to large datasets. When this has been achieved, the understanding of where the STA can effectively intervene can be used for risk analysts to decide which areas are best to focus on. Selection analysts can use the analysis to understand how current tax evasion schemes work in their case selection to tax investigators and officials. Additionally, intelligence operators can use information on the wider scheme to add additional information on the different actors involved.

Sources: Brazil (2025), Israel (2025), Spain (2025) and Sweden (2025).

Revenue collections

This section looks at the net revenue collection of tax administrations, as well as a number of other key figures related to their activities.

Overall, the increase in revenue collections that was noted in previous editions has continued. Between 2022 and 2023, revenue collections increased in the vast majority of jurisdictions covered. The average increase remains significant (+9.7% on average, see Table 2.3.) but has slowed down compared to the previous two years which were marked by the substantial recovery of economic activity following the COVID-19 pandemic during which lockdown measures were introduced by many governments and the forced closure of many businesses negatively affected taxable income and sales.

Table 2.3. Change in total net revenue collections, 2018-23

Change (from ... to ...)	2018 to 2019	2019 to 2020	2020 to 2021	2021 to 2022	2022 to 2023
Increase (percentage of administrations)	96.5	22.8	94.7	96.5	87.7
Decrease (percentage of administrations)	3.5	77.2	5.3	3.5	12.3
Average change in percent	+6.2	-3.8	+17.2	+17.3	+9.7

Note: The table is based on the data from jurisdictions covered in this publication. Data for India was excluded as the Indirect Tax Board information was only available from fiscal year 2021.

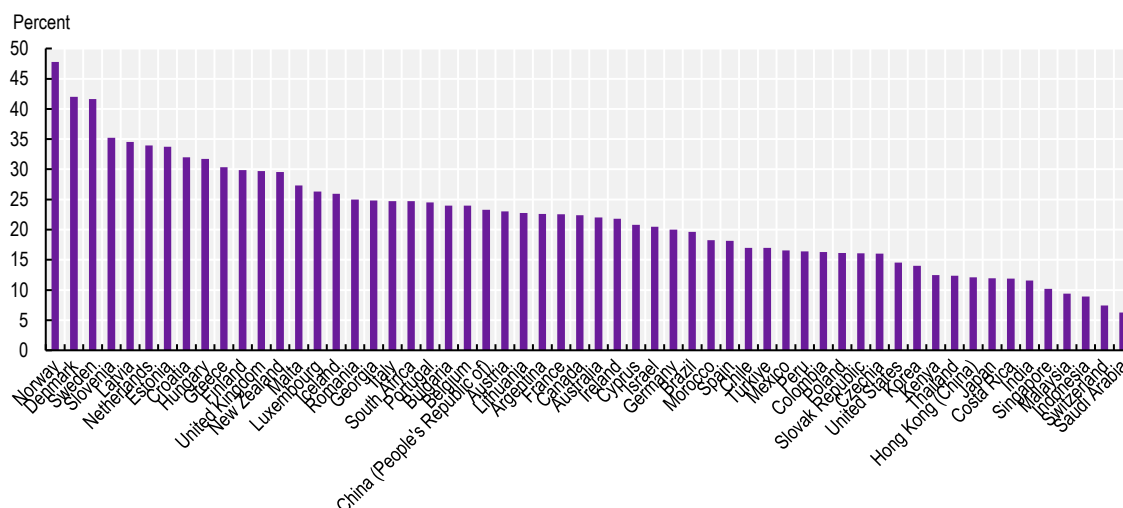
Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.5 Net revenue collected by the tax administration: Total, <http://isoradata.org> (accessed on 1 October 2025).

Net collections by tax administrations averages 22% of jurisdiction GDP

Through its Global Revenue Statistics Database (OECD, 2024^[4]), the OECD seeks to publish internationally comparable data on the tax revenues of its members, as well as a number of other jurisdictions for all levels of government. As the information contained in the Global Revenue Statistics Database reports data at a jurisdiction and not an administration level, tax administrations were asked in the ISORA survey to provide a range of information on their revenue collection activity. This information aptly demonstrates the importance of tax administrations to their respective economies.

Net revenue collected by tax administrations participating in this report, as a percentage of gross domestic product (GDP) in 2023, ranges from less than 10% to reach more than 40% in the case of Norway, Denmark and Sweden. Average net revenue collected by administrations in this report is 22% of GDP (see Figure 2.1.).

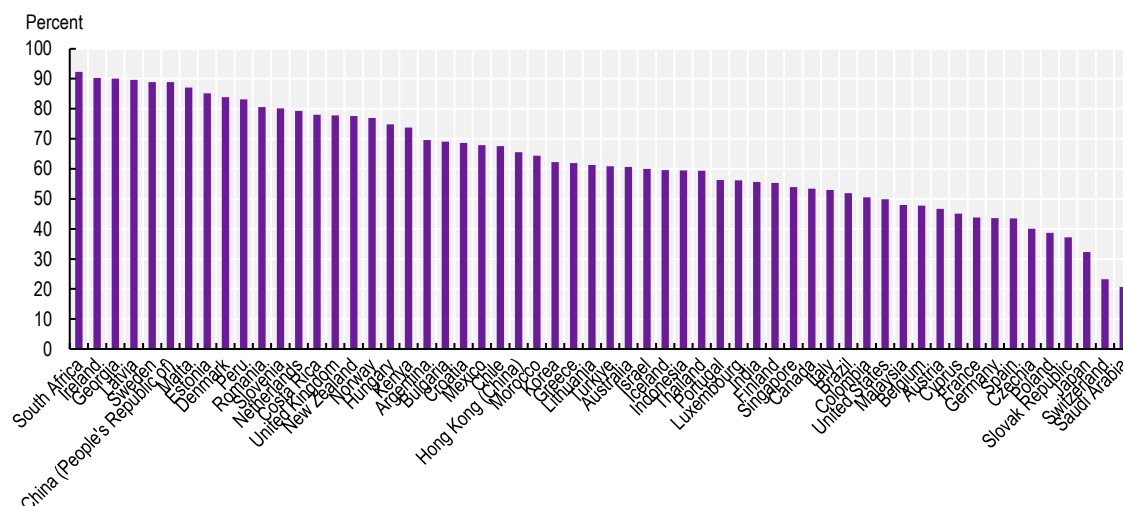
Figure 2.1. Net revenue collected as a percentage of gross domestic product, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.1 Revenue related ratios: Revenue to total government revenue and GDP, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/m4wdih>

Figure 2.2. Net revenue collected as a percentage of total government revenue, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.1 Revenue related ratios: Revenue to total government revenue and GDP, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/hdpulw>

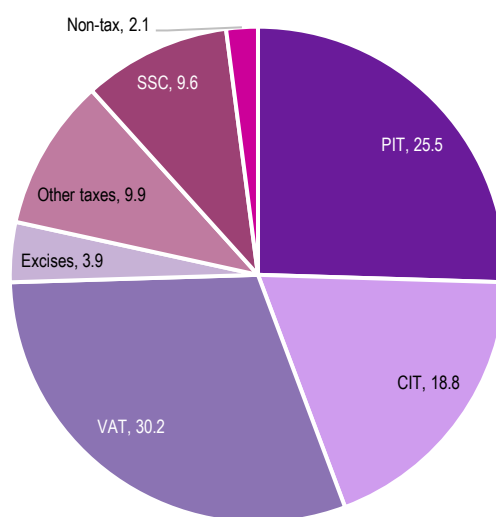
Net collections by tax administrations averages 63% of total jurisdiction revenue

Forty-four tax administrations report net revenue collections exceeding more than 50% of total government revenue in 2023, making tax administrations the principal government revenue collection agency in three-

quarters of jurisdictions covered in this report. Average net revenue collected by administrations in this report is 63% of total jurisdiction revenue (see Figure 2.2.)

VAT accounts for 30% of net revenue collections and is the major tax type collected by 47% of the tax administrations covered in this report. This is followed by PIT, which accounts for 26% of net revenue collections, and is the major tax type collected by 33% of administrations. CIT (19%) and social security contributions (SSC, 10%) comprise the other major revenue types as reflected in Figure 2.3. In many jurisdictions, social security contributions are not collected by tax administrations and are therefore underrepresented when looking at average net revenue collections for all jurisdictions covered in this publication. Where collected, they are often one of the major sources of revenue collected by the tax administration (see Table D.4).

Figure 2.3. Average net revenue collections (in percent) by major revenue type, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.2 Revenue related ratios: Tax to GDP and non-tax revenue to total revenue, D.3 Tax structure and SSC proportions: PIT, CIT and VAT, and D.4 Tax structure and SSC proportions: Excises, Other taxes and SSC, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/ow0tf1>

A comparison of the average net revenue collected in relation to GDP and total government revenue between 2014 and 2023 is presented in Table 2.4. It illustrates the growing importance of tax administrations for collecting government revenues. (It should be noted that the table only takes into account information from jurisdictions for which data was available for both years 2014 and 2023, which explains the differences in 2023 averages mentioned in the previous paragraphs.)

Table 2.4. Average net revenue collected as a percentage of GDP and total government revenue, 2014 and 2023

Indicator	2014	2023	Difference in percentage points
Net revenue collected as a percentage of GDP (52 jurisdictions)	20.9	22.8	+1.9
Net revenue collected as a percentage of total government revenue (47 jurisdictions)	54.7	62.3	+7.6

Note: The table is based on the data from jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parentheses.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.1 Revenue related ratios: Revenue to total government revenue and GDP, <http://isoradata.org> (accessed on 1 October 2025), and *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.1, https://doi.org/10.1787/tax_admin-2017-en.

Streamlining collections: Withholding at source

Withholding regimes can form part of compliance-by-design approaches which support overall compliance while significantly reducing administrative burdens for large numbers of taxpayers depending on the extent of taxpayer involvement in any post-payment adjustments that might be needed (i.e. where withholding results in under-payment or over-payment of tax). In place of self-reporting and paying, withholding taxes are taxes paid directly to the tax administration, usually by a principal who pays the net income to the recipient (for example withholding by an employer on salary paid to an employee), or by an intermediary between the payer and customer.

The most common withholding tax in operation globally is income tax on employment income, so called Pay-As-You-Earn (PAYE) approaches, and 93% of the jurisdictions covered in this publication operate a PAYE regime (see Table A.4). Other examples include withholding taxes on interest, dividends or royalties. Depending on the underlying tax regime and nature of the payments, withholding can vary from a simple system, at a universal set rate, to a more complex system that is responsive to the customer's wider circumstances. For further information on the types of income that are generally subject to tax withholding at source, please see Table 2.5 of the 2024 edition of this series (OECD, 2024^[1]).

In addition to minimising burdens, withholding regimes can also reduce misreporting and underpayment as the principals or intermediaries responsible for forwarding taxes to the administration have no right over the respective amounts. Of course, there remains scope for failures in such approaches by misapplication of rules or errors by principals or intermediaries where the system relies on them providing information. However, increased automation, greater cross-checking of data and whole of government approaches have the potential to reduce such risks.

To understand the importance of withholding at source for personal income taxes, the ISORA survey asked participating administrations to provide the total value of PIT withheld by third parties and subsequently paid to the administration which was then put in relation to the total value of PAYE and PIT payments received by the administration (see Table D.40). This is a change from previous ISORA surveys which did not ask for the value but directly for the percentage of total PIT withheld. It appears that this change in the ISORA 2024 survey had some unintended consequences as (i) a reduced number of jurisdictions were able to provide the information (for the period 2018 to 2023 there is data for only 27 jurisdictions, compared to 39 jurisdictions for which data is available for 2018 to 2022), and (ii) some jurisdictions show significant and unexpected variations between 2023 and pre-2023 data. As a result, this data needs to be looked at with care. Despite the data issues, Table 2.5. shows that withholding taxes play an important part in revenue collection systems.

Table 2.5. Average percentage of personal income tax withholding, 2018-23

2018	2019	2020	2021	2022	2023
86.5	85.9	88.1	87.4	87.0	78.5

Note: The table shows the average percentage of personal income tax withholding for 27 jurisdictions that were able to provide the information for the years 2018 to 2023.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.40 Electronic payment proportions and third-party withholding, <http://isoradata.org> (accessed on 1 October 2025).

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- OECD (2024), *Global Revenue Statistics Database*, <https://www.oecd.org/en/data/datasets/global-revenue-statistics-database.html> (accessed on 1 October 2025). [4]
- OECD (2024), *Tax Administration 2024: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://doi.org/10.1787/2d5fba9c-en>. [1]
- OECD (2021), *Fighting Tax Crime – The Ten Global Principles, Second Edition*, OECD Publishing, Paris, <https://doi.org/10.1787/006a6512-en>. [2]

3

Registration and identification

Taxpayer registration and identification is critical for the effective operation of a tax system. This chapter comments on some of the significant characteristics of these processes.

Introduction

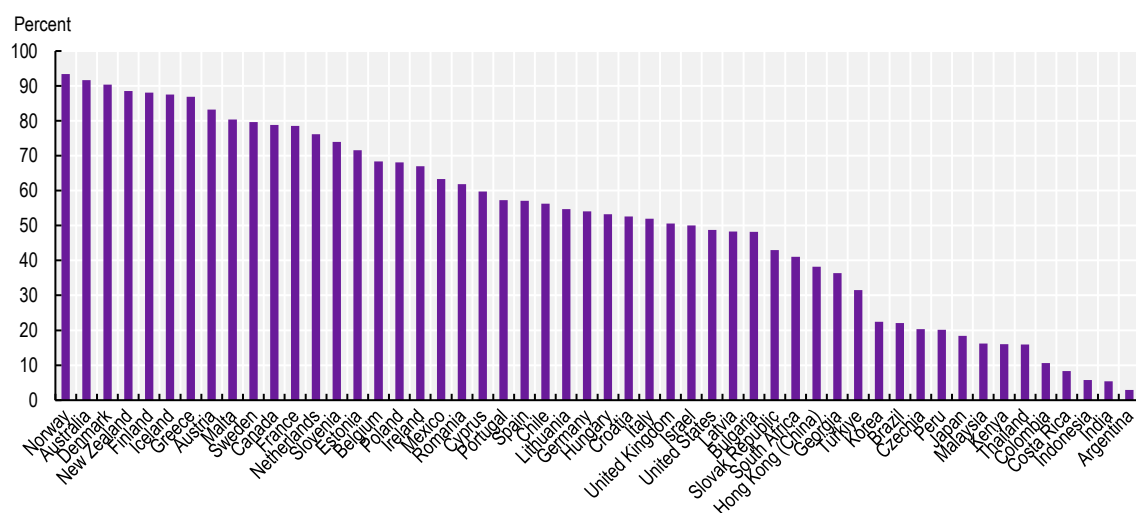
A comprehensive system of taxpayer registration and identification is at the foundation of an effective tax system. It is the basis for supporting a wide range of core tax administration work such as self-assessment, value-added tax and withholding tax regimes, as well as third party reporting and data matching. This chapter picks out several issues of significance in taxpayer registration and identification, including levels of registration, registration channels and identity management, and how digital transformation affects these services.

Levels of registration

The fundamental importance of an effective tax registration system cannot be overstated. These processes need to both manage those taxpayers that are “part of the system” and to help identify those yet to register. Furthermore, they need to be able to monitor and determine actions and interventions to establish any liability to tax for both individuals and corporate bodies, even in systems where filing is not mandatory.

Figure 3.1. provides information on the rate of registered personal taxpayers as a percentage of the total population. This shows a wide range of registration rates, often reflecting the level of integration the tax administration has with other parts of government, as well as income thresholds for tax purposes.

Figure 3.1. Registration of active personal income taxpayers as percentage of population, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.19 Registration of personal income taxpayers, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/xs1z2d>

Registration channels

While the majority of administrations are solely responsible for the system of registration for tax purposes within their jurisdictions, previous editions of this series have shown that in many jurisdictions the registration processes can also be initiated outside of the tax administration through other government agencies (OECD, 2019^[11]).

In looking at how taxpayers can register, all administrations reported they provide more than one channel for taxpayers to use and 98% report that it is possible to register online (see Table 3.1.). Compared to the 2014 data included in the 2017 edition of this series (OECD, 2017^[2]), this is a 35-percentage point increase, and it illustrates the advances in digitalisation over the 10-year period between 2014 and 2023.

Although in-person registration continues to be an important channel or element of the registration process (often due to the need to provide physical evidence of identity), it is expected that as digital identity systems become more sophisticated and embedded within government systems, the range of digital channels will grow.

Table 3.1. Availability of registration channels for taxpayers, 2022

Percentage of administrations that provide the respective registration channel

Online	Telephone	Email	Mail / post	In-person	Other channel
98.3	46.6	55.2	62.1	94.8	41.4

Note: The registration channels may not always be available for all tax types or taxpayer segments.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.94 Registration channels: Online, Telephone, Email, and A.95 Registration channels: Mail / post, In-person, other, <http://isoraodata.org> (accessed on 1 October 2025).

While the underlying survey does not allow identification of whether the online registration channel is available for all tax types or taxpayer segments, jurisdictions report that it is being integrated in their ongoing digital transformation process. This shift to digital channels may also help drive further efficiencies, though as the shift to digital gathers pace further attention is being paid to those who may not have access to digital services.

Integration with other parts of government

Given the pivotal role that registration and taxpayer identification play in underpinning the tax system, having up-to-date tax registers remains a high priority for most tax administrations. As past editions have shown, the large majority of administrations have formal programmes in place to improve the quality of the tax register (OECD, 2019^[1]).

Therefore, it is unsurprising that other government bodies may wish to use the tax administration register for their own purposes to provide services or ensure compliance with laws and regulations. This is leading to the creation of cross government databases. As data from the 2025 OECD report *Tax Administration Digitalisation and Digital Transformation Initiatives* (OECD, 2025^[3]) illustrates, 76% of administrations report the existence of a range of such databases, for example, population or business registers (see Table 3.2.).¹

Table 3.2. Common cross government databases, 2024

Percentage of jurisdictions

Common cross government databases exist	If yes, type of cross government databases				
	Population register	Property register	Business register	Motor vehicle register	Other
75.9	82.9	80.5	85.4	75.6	46.3

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 4.7., <https://doi.org/10.1787/c076d776-en>.

Data integration across government is further increasing as governments see the potential in using information maintained by tax administrations, such as taxpayer address and bank information, to contact citizens and businesses or to make direct benefit or support payments (OECD, 2020^[4]). As a result of this closer collaboration between government agencies, many of them are integrating (parts of) their IT systems to make tax registration part of other actions taxpayers undertake. For example, registering for tax at the same time as registering a company or registering the birth of a child. Further, there is a growing trend that the digital identities that taxpayers create as part of the registration process provides access to services from other parts of government or third parties (see Table 3.3.).

Table 3.3. Use of digital identities, 2024

Percentage of administrations that have the respective process in place

Taxpayer type	Taxpayers are required to use an approved digital identity (DI) to access secure digital services offered by the administration	If yes, ...					
		DI used to access the services can be provided by (<i>multiple answers possible</i>)			DIs are interoperable (<i>if several bodies can provide a DI</i>)	DI offered by the tax administration can also be used to access services from ...	
		Tax administration	Another government body	Private sector body		Another government body	Private sector body
Individual	98.1	71.7	66.0	34.0	67.7	55.3	15.8
Business	96.3	71.2	48.1	36.5	75.0	59.5	13.5

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 2.1., <https://doi.org/10.1787/c076d776-en>.

Identity management

All tax administrations, whether required to by law or as a matter of sound business practice, put considerable effort into ensuring the security of taxpayer information. In addition to internal processes to prevent unlawful attempts to obtain information and to ensure taxpayers' rights are protected, all administrations have processes to ensure the person they are dealing with is in fact the taxpayer or their authorised representative. Increasingly these approaches, which in many instances have now been extended to multi-factor authentication, are making use of biometric information, unique to the taxpayer.

For example, in relation to online services, Table 3.4. shows that administrations use some type of authentication method to verify the digital identity. The type of verification method varies. As can be seen in Table 3.4., password-based authentication is used by 77% of administrations, followed by multi-factor authentication, mobile app and ID card. A few administrations also reported using facial recognition or fingerprint recognition to authenticate the digital identity of a taxpayer. Two-thirds of the administrations reported that their use of different authentication methods is based on the level of security required for certain types of interactions.

Table 3.4. Digital identity authentication, 2024

Percentage of administrations that have the respective process in place

Authentication methods used by the tax administration									Use of different authentication methods based on the level of security required for certain types of interactions
Password-based authentication	ID card	Mobile app	Voice recognition	Facial recognition	Retina scan	Finger-print	Multi-factor authentication	Other	
77.4	39.6	41.5	1.9	17.0	1.9	17.0	69.8	22.6	66.7

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 2.4., <https://doi.org/10.1787/c076d776-en>.

Tax administrations face similar challenges to other organisations in dealing with individuals or organisations that may misuse personal information to impersonate taxpayers in order to commit fraud. The rise of AI enabled image and audio generators will complicate this even further. The on-going and, in many cases, organised nature of this activity is requiring administrations to devote considerable effort to the prevention of identity theft.

Box 3.1. Examples – Identity management

Austria - Digital identity verification and secure customer communication in the financial sector

The Austrian Ministry of Finance has increasingly utilised digital solutions to make access to its online portal (FinanzOnline) more secure and efficient. A key milestone was the introduction of regular video appointments, providing an alternative to in-person visits. Customers and employees can attend these meetings from any location, with identification carried out via ID Austria. The technical implementation builds on established video conferencing solutions and integrates seamlessly with existing appointment scheduling systems.

Building on these experiences, the Video-Ident procedure was developed to serve taxpayers who cannot use ID Austria or other European Union compliant identification methods. Identity verification is conducted via video and is supported by an external database for verifying international identity documents. Trained staff carry out the standardised process, with appointments available in both German and English. A dedicated regulation provides the legal framework for this service, making it a secure alternative to in-person visits at tax offices, particularly benefiting users abroad who need access to FinanzOnline.

Simultaneously, customers can now securely retrieve personalised information and update their personal data via phone or chat. The secure authentication ensures that sensitive inquiries are processed efficiently while maintaining a focus on data protection and user-friendliness. In the field of telephone authentication in particular, this enables the secure and seamless handling of confidential information for the first time.

Canada – Digital identity validation

The Canada Revenue Agency's (CRA) Digital Identity Validation (DIV) service leverages AI to validate user identities online, providing a seamless method for gaining instant full access to the CRA's online services. It eliminates the need for a user to wait for a physical code to be sent by mail, which typically takes up to 10 business days to arrive, and allows users to self-serve and gain immediate access to online services, enhancing convenience and efficiency.

Since its launch, 60% of users have opted to use DIV over the traditional mail option. This shift has reduced the workload on call centres, decreased paper mail which can be costly, and reduced processing times, allowing staff to focus on other more complex tasks.

In the future, the focus will be on expanding use cases and enhancing the DIV solution to support additional parts of CRA services such as streamlining account recovery processes.

Japan – Digital certificates for smartphones

To make it easier for taxpayers to verify their identity online, Japan has introduced digital certificates for smartphones. This removes the need to use a physical card when filing individual income tax returns online. Online tax-return filing using the physical card in Japan comprised around 70% of all online tax returns filed at home in 2023.

“Digital certificates for smartphones” is a service that allows taxpayers to certify their identity using their smartphones, by installing digital certificates with an equivalent personal identification function on smartphones (only available on smartphones with certain operating systems as of February 2025). This simplifies the verification process and increases convenience for taxpayers, reducing the burden when it comes to filing tax returns.

Netherlands - Using digital identification and wallets: electronic invoicing

The Netherlands Tax Administration (NTA) is exploring the use of digital identity and wallets, in alignment with the Tax Administration 3.0 vision. The aim is to collaborate with stakeholders to improve seamless and trustworthy business transactions. One example of where this can be effective is in electronic invoicing (e-invoicing), which faces challenges such as diverse protocols and varying identifiers and reliance on intermediaries.

Initial experiments utilised the European Blockchain Services Infrastructure Trust Registry for issuing verifiable credentials and demonstrating interoperability among organisational wallets. Additionally, a pilot project showcased the interaction between personal and organisational wallets, and the use of the VAT identification number to verify the existence of online shops. Currently, the NTA is developing a decentralised address book for verified metadata and selective disclosure mechanisms for e-invoices. Future developments include integrating organisational wallets with bookkeeping software and enterprise resource planning systems for automated invoice verification.

For further information, please see the following links: <https://companypassport.com/> and <https://fides.community/> (accessed on 1 October 2025).

United Kingdom – Repayment agent registration

To improve His Majesty’s Revenue and Customs’ (HMRC) performance and overall customer experience, a commitment was made by United Kingdom (UK) ministers to introduce a new requirement for paid income tax repayment agents to register with HMRC. This was part of wider work to explore options to enhance the regulatory framework for tax advice and tax services.

Previously, paid tax agents who specialised in submitting income tax repayment claims on behalf of their customers used paper forms and did not need to register with HMRC. This was in contrast with other agents who use HMRC digital services. This limited HMRC’s ability to proactively check if the agent was registered for anti-money laundering supervision and whether they met the HMRC standard for agents before processing their claims.

Introduced in February 2024, HMRC now has the capability to link paper tax relief claim forms to digital registration processes, strengthening HMRCs commitment to ensuring no unregistered repayment agents are actively submitting claims without the consent of the taxpayer. These changes aim to reduce associated customer complaints annually (2024-2025) by 40%, with a target of issuing repayments to the correct person running at 99.98% by September 2024. The progress resulted in HMRC mandating agents to use its Agent Services Account registration process for all work relating to income tax, to ensure they can track who is an agent and that they meet the right standards.

Sources: Austria (2025), Canada (2025), Japan (2025), the Netherlands (2025) and the United Kingdom (2025).

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Note

¹ The 2025 OECD publication *Tax Administration Digitalisation and Digital Transformation Initiatives* (OECD, 2025^[3]) summarises the data from the Inventory of Tax Technology Initiatives (OECD et al., 2025^[5]) for the 54 members of the OECD Forum on Tax Administration.

4

Assessment

This chapter looks at the tax assessment function, which includes all activities related to processing tax returns and payments. It examines the use of e-channels for filing and paying, outlines administrations' efforts to provide pre-filled returns, and discusses the level of on-time return filing and payment.

Introduction

The tax assessment function includes all activities related to processing tax returns, including issuing assessments, refunds, notices and statements. It also includes the processing and banking of payments. These activities continue to be an area of significant change and focus as administrations look to take costs out of high-volume processes.

As reported in previous editions of this series, the widespread enabling of electronic filing and payment by taxpayers has helped administrations to reduce their costs and improve the services they provide. This trend continues with an increasing range of supporting services and options being made available.

Tax administrations are also managing an expanding range of data that administrations are collecting electronically, including from a growing number of third-party organisations. This is facilitating a shift towards more intelligent use of data, and more complete pre-filled returns, increasingly driven by the use of artificial intelligence and machine learning. This is also helping to create more upstream compliance approaches that can minimise or prevent errors in returns. As well as updating information on the channels used for filing and paying, this chapter will outline:

- Administrations' efforts to provide pre-filled returns for individual and corporate taxpayers, including the expansion of this approach by some into completely pre-filled returns for individuals and businesses;
- The levels of on-time return filing and payment; and
- Examples of how technology and the application of data sciences are further improving these processes.

Use of e-channels for filing and paying

To increase uptake in the use of e-filing and e-payment channels, many jurisdictions have also mandated the use of electronic channels for most taxpayers (or most employers in the case of employer withholding taxes).

Thanks to mandating the use of e-channels, and with digitalisation continuing to transform everyday life, it is unsurprising that the actual use of e-filing and e-payment channels is high. With the implementation of those channels embedded across a wide range of administrations these rates are expected to remain stable with only incremental increases going forward.

Table 4.1. Average e-filing rates (in percent) by tax type, 2018-23

Tax type	2018	2019	2020	2021	2022	2023
Personal income tax (48 jurisdictions)	82.5	84.9	87.8	88.8	89.7	90.5
Corporate income tax (47 jurisdictions)	91.9	92.8	93.7	94.3	94.8	95.1
Employer withholding (37 jurisdictions)	–	–	–	–	93.9	94.4
Value added tax (42 jurisdictions)	94.2	96.0	96.9	97.6	98.3	99.0

Note: The table shows the average e-filing rates for those jurisdictions that were able to provide the information for the years 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses. As regards Employer withholding (i.e. PAYE) return, the underlying question was introduced in ISORA 2023 and therefore data is only available for the years 2022 and 2023.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.26 Electronic filing: CIT and PIT, and D.27 Electronic filing: PAYE and VAT, <http://isoradata.org> (accessed on 1 October 2025).

Table 4.1. outlines average e-filing rates from jurisdictions that provided details of channels used by taxpayers to file for the years 2018 to 2023. Over that period, around 95% of business taxpayers filed their returns electronically. For personal income tax return filers this figure is around 90% as well. Also, it should be noted that for a significant number of administrations a 100% e-filing rate is the reality across the main tax types (see Tables D.26 and D.27).

The evolution of e-filing rates over the 10-year period from 2014 to 2023 is shown in Table 4.2., and it is clear that e-filing rates have increased significantly – between 18 and 24 percentage points – across the three main tax types. (It should be noted that the table only takes into account information from jurisdictions for which data was available for both years 2014 and 2023, which explains the differences in 2023 averages shown in Table 4.1. and Table 4.2.)

Table 4.2. Average e-filing rates (in percent) by tax type, 2014 and 2023

Tax type	2014	2023	Difference in percentage points
Personal income tax (34 jurisdictions)	65.6	88.9	+23.3
Corporate income tax (35 jurisdictions)	77.2	95.7	+18.5
Value added tax (31 jurisdictions)	81.0	99.4	+18.3

Note: The table shows the average e-filing rates for those jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parentheses.

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.26 Electronic filing: CIT and PIT, and D.27 Electronic filing: PAYE and VAT, <http://isoraadata.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.8., https://doi.org/10.1787/tax_admin-2017-en.

As for electronic payments rates, as can be seen in Table 4.3., around 90% of payments, measured by number and value, were made electronically in 2023. This represents an increase since 2018 of around 10 percentage points as measured by number and value of payments. The percentage of e-payments by value is slightly higher than the percentage of e-payments made by number, suggesting that particularly larger taxpayers make use of this payment channel. However, as with e-filing, it should be noted that for a significant number of administrations a 100% e-payment rate is the reality across the main tax types (see Table D.40).

(Due to a change in the definition of the underlying survey question, comparisons that examine the evolution of e-payment rates since 2014 would not be reliable.)

Table 4.3. Average e-payment rates (in percent) by number and value of payments, 2018-23

Measurement type	2018	2019	2020	2021	2022	2023
Percentage by number of payments (48 jurisdictions)	78.3	80.6	84.6	86.9	88.2	89.7
Percentage by value of payments (48 jurisdictions)	83.9	85.3	87.9	89.9	91.5	92.8

Note: The table shows the average e-payment rates for those jurisdictions that were able to provide the information for the years 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.40 Electronic payment proportions and third party withholding, <http://isoraadata.org> (accessed on 1 October 2025).

It is worth noting though that despite the progress made on digital filing and payments, the scale of tax administration means that the small percentage of returns filed through non-electronic channels translates into large numbers. Among those jurisdictions that provided data, more than 75 million returns (for PIT, CIT, PAYE and VAT) were still filed on paper (see Tables A.48, A.52, A.56 and A.61).

Although it is to be expected that this figure will further decline over time, it is clear that the incentives for administrations to take steps to encourage more taxpayers to use electronic platforms remain. This will not only lower administration costs but could also reduce the administrative burden on taxpayers over time.

Box 4.1. Examples – Electronic filing

Korea - Automated platform for electronic filing

The Korean National Tax Service (NTS) has introduced Hometax, an automated platform with 37 million users and 8.8 million daily visits. Hometax is Korea's largest electronic government platform. It enables electronic filing for all types of taxes, offering tax calculation and error-checking features.

Hometax also enhances the tax filing experience with several AI features:

- **AI search engine:** Users can find relevant information without knowing exact tax terms. The system analyses user data, similar inquiries, and filing periods to provide accurate search results. For example, if a delivery worker enters "delivery" during the filing season, the system prioritises the income tax filing page for them.
- **Pre-filled tax forms:** Hometax provides pre-filled income tax and VAT return forms using NTS data, replacing blank forms for a more streamlined process.
- **Tailored services:** The system offers personalised information based on user and NTS needs. For example, when a taxpayer logs and they have outstanding tax payments, this is prominently displayed.

This offers significant benefits for the taxpayer, as Hometax functions like a personal assistant. It understands their needs and guides them through the tax filing process efficiently.

Switzerland – VAT online obligation

Switzerland's Federal Tax Administration is taking a significant step towards more modern and efficient tax administration with the complete digitisation of its VAT declarations.

Since 1 January 2024, companies are obliged to submit their VAT returns online via the electronic Portal (ePortal). A transitional period allowed companies that previously used paper-based accounting to switch to the purely electronic procedure by 31 December 2024, however from 1 January 2025, electronic filing is mandatory for all companies.

The aim of this is to make tax processes more efficient, error-free and transparent. Automated systems allow companies to calculate their tax burden directly, which significantly reduces the administrative burden. Digital transmissions also minimise typical input errors. The centralised storage of all relevant data in the ePortal promotes traceability and facilitates control for both, companies and the administration.

The ePortal offers a wide range of user-friendly functionalities. In addition to completing and submitting the VAT return online, companies can also submit amendments and fix inaccuracies retrospectively, apply for deadline extensions and track their VAT obligations. The integration with accounting software also allows relevant data to be uploaded directly by the taxpayers, while fiduciary companies and tax advisers can manage all their customers in the ePortal and are notified of declaration deadlines.

This illustrates how targeted digitisation measures can modernise tax administrations and make their processes more efficient, facilitate compliance and significantly improve services for taxpayers.

Sources: Korea (2025) and Switzerland (2025).

Pre-filled returns

One of the significant innovations in tax return process design over the last two decades has been the development of pre-filled tax returns. The pre-filled approach involves administrations “pre-populating” the taxpayer’s return or on-line account with information from third parties. The pre-filled return can be reviewed by the taxpayer and either filed electronically or in paper form. Table 4.4. shows that close to 90% of administrations are pre-filling PIT returns. This percentage has now been stable since 2021.

As the extent of pre-population is generally determined by the range of electronic data sources available to the administration, it is critical to this approach that the legislative framework provides for extensive and timely third-party reporting covering as much relevant taxpayer information as possible. The complexities of the legal frameworks governing tax can be a barrier to more automated tax calculations, and to help overcome this some tax administrations are exploring the use of machine-readable legislation which can help automate the calculation process through the use of algorithms.

Table 4.4. Pre-filling of personal income tax returns, 2018-23

Percentage of administrations that pre-fill personal income tax returns

2018	2019	2020	2021	2022	2023	Difference in percentage points (2018 - 2023)
78.9	80.7	84.2	87.7	87.7	87.7	+8.8

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.99 Pre-fill of PIT returns: Income information - Personal information, and wage and salary, <http://isoradata.org> (accessed on 1 October 2025).

Advocates of pre-filling initially encouraged its use with individual tax regimes that allowed relatively few deductions and credits, and where they could be verified with third party data sources. Advances in rules-based technologies, information-reporting requirements and the application of data science techniques mean that the approach can now be considered more widely. For example, survey responses show that in many jurisdictions PIT returns are pre-filled with different income information and deductible expenses such as donations, school and university fees and insurance premiums (see Table 4.5. and Table 4.6.).

Table 4.5. Categories of third-party income information used to pre-fill personal income tax returns or assessments, 2023

As a percentage of administrations that pre-fill personal income tax returns

Taxpayer personal information	Wage and salary	Pension	Interest	Dividends	Capital gains/ losses	Other income
98.0	88.0	82.0	58.0	56.0	40.0	68.0

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.99 Pre-fill of PIT returns: Income information - Personal information, and wage and salary, A.100 Pre-fill of PIT returns: Income information - Pension, interest, and dividends, and A.101 Pre-fill of PIT returns: Income information - Capital gains / losses, and other income, <http://isoradata.org> (accessed on 1 October 2025).

Table 4.6. Categories of tax deductible expenses used to pre-fill personal income tax returns or assessments, 2023

As a percentage of administrations that pre-fill personal income tax returns

Donations	School and university fees	Childcare expenses	Certain insurance premiums	Health and medical expenses (other than premiums)	Pension/ retirement contributions and savings	Interest on loans and mortgages	Other expenses
42.0	28.0	26.0	50.0	28.0	52.0	40.0	50.0

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.102 Pre-fill of PIT returns: Expense information - Donations, school and university fees, and childcare expenses, A.103 Pre-fill of PIT returns: Expense information - Insurance premiums, health and medical expenses, and retirement contributions, and A.104 Pre-fill of PIT returns: Expense information - Interest, and other expenses, <http://isoradata.org> (accessed on 1 October 2025).

In a growing number of jurisdictions, this concept now goes as far as totally pre-filling PIT returns, which the taxpayer then has to either agree (which may be by deemed agreement after a certain period of elapsed time) or provide further information which may lead to an upwards or downwards adjustment (see Table A.53B). In their most advanced form, complete pre-filled returns are being generated for large proportions of the individual tax base. In addition, the availability of technology solutions and approaches, such as electronic invoicing systems, allows tax administrations to start to go beyond PIT returns and pre-fill CIT, PAYE and VAT returns (see Tables A.49B, A.57B and A.62B).

The latest pre-filling developments in some jurisdictions are described in Box 4.2.

Box 4.2. Examples – Pre-filling developments

Brazil - Electronic receipts for health services

Brazil have introduced electronic receipts for health services provided by healthcare professionals, which can be used in the completion of tax returns. The electronic receipts are stored on the Revenue Service application (app) and are automatically loaded as deductible expenses in the pre-filled income tax return of the patients and as income in the professional's declaration. This tool eliminates the need for patients and professionals to keep paper receipts, as the electronic receipts can be checked in the application. In addition to facilitating the completion of declarations, issuing electronic receipts aims to reduce the issuance of false receipts and receipts issued by unqualified professionals.

China (People's Republic of) - Optimising and upgrading the confirmation and supplementary pre-payment declaration mode of corporate income tax

In recent years, the State Taxation Administration of the People's Republic of China (STA) has been analysing behaviours related to CIT declarations to provide taxpayers with an improved filing model. This model, whose main features include "classification based on key characteristics, intelligent pre-filling and dynamic declaration," aims to continuously enhance the convenience and personalisation of CIT prepayment declarations and optimise the business tax environment.

The STA has upgraded the filing process to allow the automatic pre-calculation of the tax amount allowing taxpayers to complete their declarations simply by clicking "confirm." The system can also automatically generate partial data, allowing taxpayers complete the declaration by filling in the remaining data.

Through this the tax declaration system can optimises the calculation process, reducing the burden of tax filing, and enhancing the accuracy of the data. Taxpayers can also access, enquire about, and print complete declaration forms at any time through the system.

Georgia - Pre-filled income tax declaration mechanism for small businesses

The Georgian Revenue Service introduced the "Pre-Filled Income Tax Declaration Mechanism for Small Businesses", as part of its focus on customer-oriented services and to promote voluntary tax compliance. This was first introduced for the income tax declaration of small businesses, as individuals with small business status are less likely to use accounting services, and allows for the timely declaration, completeness, and accurate administration of tax returns.

As part of the implementation process it was necessary to modify the income tax declaration form for small businesses, including breaking down declaration fields according to income types. When filling out the small business income tax declaration, taxpayers have now the option to use the tax authority's pre-filling service by selecting the "Auto-Fill" button. By selecting this option, the relevant fields of the declaration are automatically populated according to the taxpayer's income type. The taxpayer is then required to review and verify the accuracy of the provided data.

This mechanism is available for tax declarations starting from the reporting period of December 2024. So far, approximately 20 000 taxpayers have used this service.

Sources: Brazil (2025), China (People's Republic of) (2025) and Georgia (2025).

As the levels of data available to support pre-filling grows, tax administrations are able to develop predictive techniques that can spot errors that taxpayers make as they finalise their return, and also prevent non-compliance. Examples of this have been included in previous editions. See, for example, Box 4.3. in Tax Administration 2022 (OECD, 2022^[1]). These can be combined with techniques to prompt action, creating whole new approaches to compliance which are bringing the compliance work 'upstream' into tax administration processes, as Box 4.3. highlights.

Box 4.3. Examples – Spotting errors

Denmark – Real-time validation of tax returns

As part of its strategic focus on moving activities and compliance checks to the earlier phases of its business model, the DTA has implemented a series of digital controls and validations. The aim is to secure as much tax revenue as possible at the 'front door' - during the registration, declaration, or payment phases - thereby reducing reliance on the final and often costly phase of audit reviews.

One prominent example is the use of real-time validation in the Danish Electronic-tax system, where several checks are implemented that automatically reject changes to taxpayers' annual tax assessment notices that are inconsistent, considered highly improbable, or do not align with other information available to the tax administration. When these changes are blocked, to complete their tax returns taxpayers are required to either amend their submissions or contact the tax administration for assistance. Errors and incorrect information are therefore intercepted and reduced in the declaration phase.

The checks are activated more than 1 million times a year by over 500 000 different taxpayers. Analysis reveals a total difference of nearly DKK 1.1 billion (approximately EUR 150 million) between taxpayers' initially rejected submissions and their most recent tax assessments. Furthermore, only a small proportion of taxpayers whose declarations are blocked – for example, due to the size of the deduction amount – do subsequently contact the DTA, meaning a minimal burden.

Spain – Warning system to increase the accuracy of tax returns

The Spanish Tax Agency has implemented a warning system for after a taxpayer has filed their self-assessments and tax returns, to improve the quality of information obtained from third parties.

With this system, when submitting information, the taxpayer is immediately informed if there are any inaccuracies that have not prevented its submission, but which affect the quality of the information submitted.

This is advantageous for the taxpayer because the tax return calculation is free and enables any discrepancies to be spotted and fixed, as opposed to requiring an audit. In this sense, it is important to bear in mind that the initiation of an audit process requires a lot of time from the taxpayer in terms of providing the relevant documentation and adhering to the process, but also can generate anxiety for taxpayers. Most of the time taxpayers want to comply with the rules and discrepancies are genuine mistakes, so investigations or audits can generate uneasiness for them.

Sources: Denmark (2025) and Spain (2025).

On-time return filing

Even allowing for changes occurring because of pre-filled or no-return regimes, typically the filing of a tax return is still the principal means by which a tax liability is established and becomes payable. As a result, the on-time filing rate is seen as an effective measure of the health of the tax system as well as the performance of the tax administration itself.

Traditionally, the ISORA survey measured on-time return filing by putting the number of returns received on-time in relation to the total number of returns expected. However, ISORA 2023 introduced a new data point which allowed on-time return filing rate also to be measured in relation to the total number of returns received.

Table 4.7. summarises on-time return filing for those administrations able to supply information by tax type. As regards the on-time filing rate in relation to the number of **returns expected**, apart from CIT, the rates are around 85%. The picture is similar when calculating the on-time filing rate in relation to the number of **returns received**, where the rates for PIT, PAYE and VAT on-time return filing are around 90% while the CIT on-time filing rate is 5 percentage points lower. This lower rate is understandable as there is often more complexity in the corporate income tax system and the preparation of financial statements and year-end reports. However, as Figure 4.1 and the accompanying text illustrate there is a wide variance in these rates.

As anticipated, the on-time filing rates expressed as the number of returns received on-time as a percentage of returns received, are noticeably higher than the on-time filing rates expressed in relation to the number of returns expected.

Table 4.7. Average on-time filing rates (in percent) by tax type, 2018-23

Tax type	Returns received on-time as a percentage of returns expected							Returns received on-time as a percentage of returns received		
	# of jurisdictions	2018	2019	2020	2021	2022	2023	# of jurisdictions	2022	2023
Personal income tax	36 jurisdictions	87.1	84.4	84.3	83.6	83.1	84.0	49 jurisdictions	90.2	90.6
Corporate income tax	39 jurisdictions	75.3	76.1	76.0	76.7	75.3	74.6	49 jurisdictions	85.0	85.4
Employer withholding	25 jurisdictions	84.4	84.1	83.0	83.3	84.1	83.0	38 jurisdictions	92.8	93.2
Value added tax	42 jurisdictions	86.0	85.3	84.8	83.6	85.2	84.1	49 jurisdictions	89.8	89.0

Note: The table shows the average on-time filing rates for those jurisdictions that were able to provide the information for the years 2018 to 2023 in relation to returns expected, and for the years 2022 and 2023 in relation to returns received. The number of jurisdictions for which data was available is shown in the table.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.22 Rate of returns received on-time: CIT, D.23 Rate of returns received on-time: PIT, D.24 Rate of returns received on-time: PAYE, and D.25 Rate of returns received on-time: VAT, <http://isoradata.org> (accessed on 1 October 2025).

Table 4.8. shows the evolution of on-time filing rates over the 10-year period 2014 to 2023. Due to the available time series this is only expressed as a percentage of returns expected. On average, the rates have remained broadly static over this period, although the underlying data for on-time filing shows significant variation in the evolution of on-time filing rates between jurisdictions. It should be noted that the table only takes into account information from jurisdictions that were able to provide data for both years 2014 and 2023, which explains the differences in 2023 averages shown in Table 4.7. and Table 4.8.

Table 4.8. Average on-time filing rates (in percent) by tax type, 2014 and 2023

Returns received on-time as a percentage of returns expected

Tax type	2014	2023	Difference in percentage points	No. of jurisdictions with a decreasing on-time filing rate	No. of jurisdictions with an increasing on-time filing rate
Personal income tax (36 jurisdictions)	86.2	86.8	+0.6	16	20
Corporate income tax (35 jurisdictions)	79.9	77.1	-2.7	19	16
Employer withholding (20 jurisdictions)	87.8	89.2	+1.3	12	8
Value added tax (38 jurisdictions)	85.1 (2016)	84.1	-1.0	20	18

Note: The table shows the average on-time filing rates for those jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parenthesis. For VAT, the table compares information for the years 2016 and 2023, as the underlying question was changed with ISORA 2018. For PIT, data for Romania has been excluded from the calculations as it would distort the average ratios.

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.22 Rate of returns received on-time: CIT, D.23 Rate of returns received on-time: PIT, D.24 Rate of returns received on-time: PAYE, and D.25 Rate of returns received on-time: VAT, <http://isoradata.org> (accessed on 1 October 2025), OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.6., https://doi.org/10.1787/tax_admin-2017-en, and OECD (2019), *Tax Administration 2019: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table D.12., <https://doi.org/10.1787/74d162b6-en>.

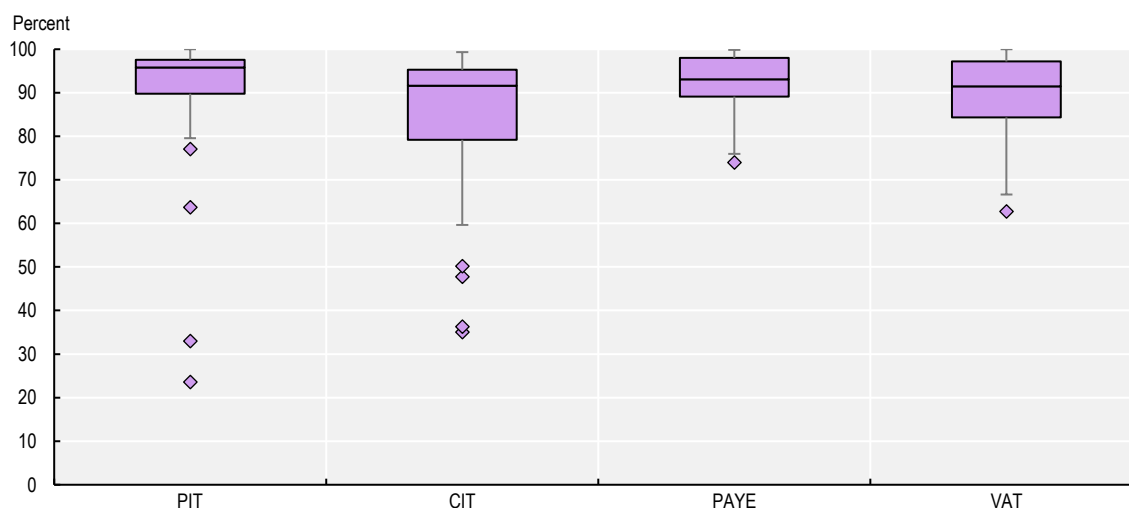
Figure 4.1 takes a different look at the on-time filing performance (expressed as a percentage of returns received) by illustrating the distribution of individual jurisdiction data for each tax type. The boxes depict the 2nd and 3rd quartile (i.e. the central 50% of jurisdictions) with the middle line indicating the median value. This shows that:

- The median values for PIT and CIT are well above the average values shown in Table 4.7. (around 5 percentage points), while the median values for PAYE and VAT are similar to the averages;
- The median values for CIT, PAYE and VAT are very similar, in the range of 91 to 93%;
- There is a greater distribution with more outliers for PIT and CIT.

While this requires more analysis, it could mean that the above observation that lower on-time filing rates for CIT may be a result of complexity in the CIT system is only true for a number of jurisdictions. In addition, the high median value for PIT of 96% might be an indication of less complexity in the PIT system but also a result of the positive impact of prefilling regimes for PIT.

Figure 4.1. Range in on-time filing performance across jurisdictions by major tax type, 2023

Returns received on-time as a percentage of returns received



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.22 Rate of returns received on-time: CIT, D.23 Rate of returns received on-time: PIT, D.24 Rate of returns received on-time: PAYE, and D.25 Rate of returns received on-time: VAT, <http://isoraadata.org> (accessed on 1 October 2025).

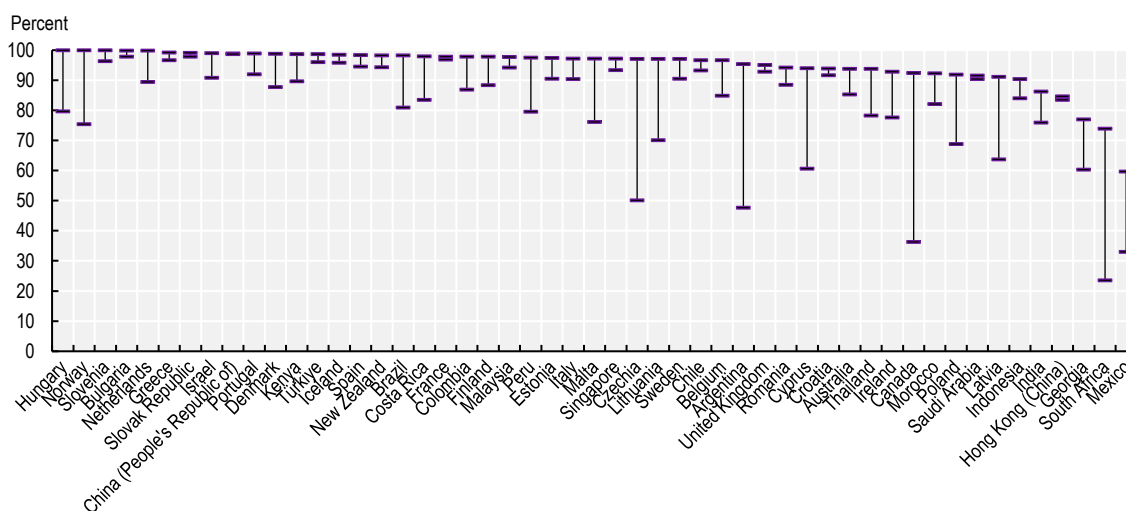
StatLink  <https://stat.link/ijedkl>

The variation of on-time filing rates (expressed as a percentage of returns received) can be seen in Figure 4.2 which shows the range of on-time filing rates across major tax types by jurisdiction. For a number of jurisdictions this range is significant.

Given the impact on compliance rates, many tax administrations are applying behavioural insight techniques to try and encourage more timely and accurate filing, and they report that 'nudges' at key points in the filing process can increase the timeliness of filing. Not only is this improving compliance rates, but it is also freeing up resources that can be used elsewhere. Chapter 6 contains further information on the use of behavioural insights.

Figure 4.2. Range in on-time filing performance across major tax types by jurisdiction, 2023

Returns received on-time as a percentage of returns received



Note: The figure shows for each jurisdiction the range in on-time filing performances in 2023 across the four tax types: PIT, CIT, Employer withholding and VAT (where applicable). It only includes jurisdictions for which information was available for at least two tax types.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.22 Rate of returns received on-time: CIT, D.23 Rate of returns received on-time: PIT, D.24 Rate of returns received on-time: PAYE, and D.25 Rate of returns received on-time: VAT, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/dh21zg>

On-time payment

Payment of tax constitutes one of the most common interactions between taxpayers and tax administrations, especially for businesses that are typically required to regularly remit a variety of payments covering both their own tax liabilities and those of their employees. Administrations continue to make progress in increasing the range of e-payment options available to taxpayers and to increase their use. This progress not only lowers the cost to the administration, it can also increase on-time payments and reduce the number of payment arrears cases by providing improved access and a better payment experience. One significant development is the growth of payment facilities being built into the natural systems of taxpayers. This is making payment more seamless for taxpayers, as they can use their existing banking or accounting software to make payments.

Box 4.4. Netherlands – Tax-splitter on Value Added Tax

The vision of the NTA is to create a future where tax assessment and collection occur automatically and in real-time.

The administrative burden for entrepreneurs to pay VAT is high, and the way in which VAT is levied and collected is not always part of the taxpayer ecosystem. This may result in reduced compliance. Carousel fraud is also a risk if the tax administration has insufficient insight into the VAT paid and received by companies. At the same time, new payment and financial services are growing rapidly, creating a need for the tax administration to evolve.

To address these challenges, the NTA is working on a tax splitter, which is where the taxpayer immediately pays the VAT element of a transaction to the tax administration. By using distributed ledger technologies in each transaction, the VAT payment goes directly to the tax administration and the rest to the entrepreneur. This gives the tax administration access to an audit trail, while the entrepreneur maintains data sovereignty.

For more information, please see here: <https://www.government.nl/topics/taxation-and-businesses/documents/reports/2024/06/30/a-first-step-to-real-time-taxation> (accessed on 1 October 2025).

Source: The Netherlands (2025).

Traditionally, and similar to on-time return filing, the ISORA survey measured on-time payment by putting the value of payments received on-time in relation to the total value of payments due. But, here as well, ISORA 2023 introduced a new data point allowing the on-time payment rate to also be measured in relation to the total value of payments received. On-time payment rates for those administrations able to supply information by tax type are summarised in Table 4.9. and Table 4.10.

Table 4.9. shows that on-time payment rates (expressed as a percentage of **payments due**) are increasing again following the pandemic related reduction that can be observed for years 2020 and 2021, and are close to their pre pandemic values. As expected, on-time payment rates expressed as a percentage of **payments received** are noticeably higher.

Table 4.9. Average on-time payment rates (in percent) by tax type, 2018-23

Tax type	Payments made on-time as a percentage of payments due							Payments made on-time as a percentage of payments received		
	# of jurisdictions	2018	2019	2020	2021	2022	2023	# of jurisdictions	2022	2023
Personal income tax	27 jurisdictions	81.7	81.1	78.7	76.8	78.4	79.3	33 jurisdictions	85.1	86.8
Corporate income tax	30 jurisdictions	83.0	82.9	78.5	79.9	82.0	84.9	34 jurisdictions	88.7	89.9
Employer withholding	26 jurisdictions	94.4	94.3	90.6	90.1	90.0	90.8	29 jurisdictions	93.4	93.3
Value added tax	30 jurisdictions	87.7	87.7	86.3	85.2	85.8	86.7	32 jurisdictions	91.0	91.4

Note: The table shows the average on-time payment rates for those jurisdictions that were able to provide the information for the years 2018 to 2023 in relation to the value of payments due, and for the years 2022 and 2023 in relation to the value of payments received. The number of jurisdictions for which data was available is shown in the table. Data for Poland regarding payments due has been excluded from the calculations as it would distort the average ratios.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.36 Rate of payments received on-time: CIT, D.37 Rate of payments received on-time: PIT, D.38 Rate of payments received on-time: PAYE, and D.39 Rate of payments received on-time: VAT, <http://isoradata.org> (accessed on 1 October 2025).

Table 4.10. illustrates the changes in average on-time payment rates (expressed as a percentage of payments due) over the 10-year period 2014 to 2023. While there is only limited individual jurisdiction data for this period, it shows that the rates have slightly declined across all tax types. However, looking at the data by jurisdiction it becomes obvious that the number of jurisdictions with decreasing rates and those with increasing rates are almost split evenly.

Table 4.10. Average on-time payment rates (in percent) by tax type, 2014 and 2023

Payments received on-time as a percentage of payments due

Tax type	2014	2023	Difference in percentage points	No. of jurisdictions with a decreasing on-time payment rate	No. of jurisdictions with an increasing on-time payment rate
Personal income tax (15 jurisdictions)	79.6	77.4	-2.1	8	7
Corporate income tax (15 jurisdictions)	89.6	88.2	-1.5	6	9
Employer withholding (13 jurisdictions)	92.8	90.8	-2.0	6	7
Value added tax (17 jurisdictions)	88.7	88.4	-0.3	9	8

Note: The table shows the average on-time filing rates for those jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parenthesis. Data for Costa Rica has been excluded from the calculations as it would distort the average ratios.

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.36 Rate of payments received on-time: CIT, D.37 Rate of payments received on-time: PIT, D.38 Rate of payments received on-time: PAYE, and D.39 Rate of payments received on-time: VAT, <http://isora.data.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.9, https://doi.org/10.1787/tax_admin-2017-en.

Figure 4.3 looks at the on-time payment performance (expressed as a percentage of payments received) from a different angle. By illustrating the distribution of individual jurisdiction data for each tax type in form of a box and whisker plot it well illustrates the positive effects of PAYE withholding regimes on on-time payment performance as:

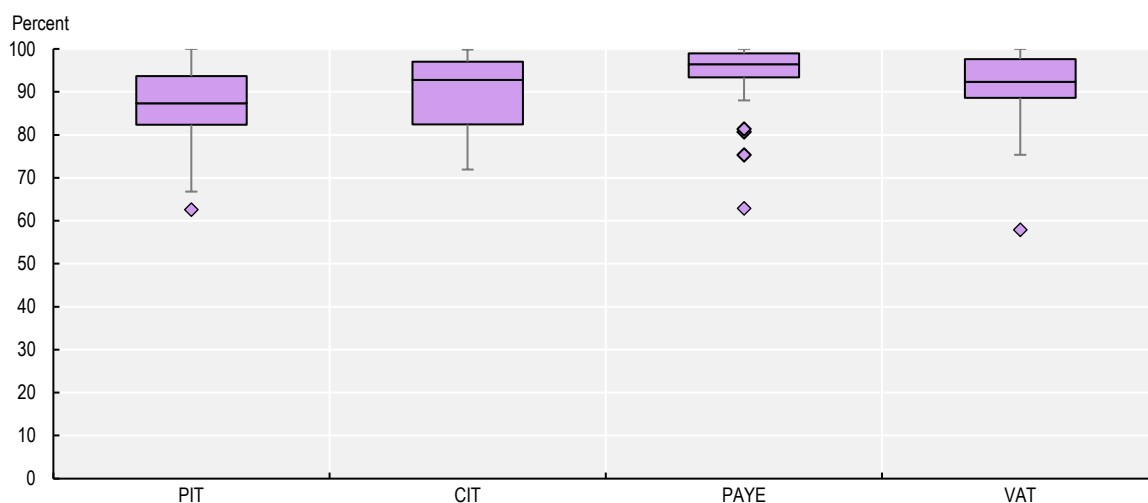
- At 96% the median value for PAYE is well above the median values for CIT and VAT (92% each) as well as PIT (87%); and
- The central 50% of jurisdictions (i.e. the box depicting the 2nd and 3rd quartile) is very narrow between 93 and 99%.

In addition, the figure also confirms the lower PIT on-time payment performance that was noted above. However, comparing PIT and CIT on-time payment performance there does not seem to be much of a difference as regards the central 50% of jurisdictions, despite the different median values.

While the previous tables and figure looked at aggregate data, Figure 4.4 shows the range of on-time payment performance for individual jurisdictions. It illustrates a significant gap in on-time payment across the main tax types for a number of jurisdictions, in some cases around 30 percentage points or above.

Figure 4.3. Range in on-time payment performance across jurisdictions by major tax type, 2023

Payments received on-time as a percentage of payments received

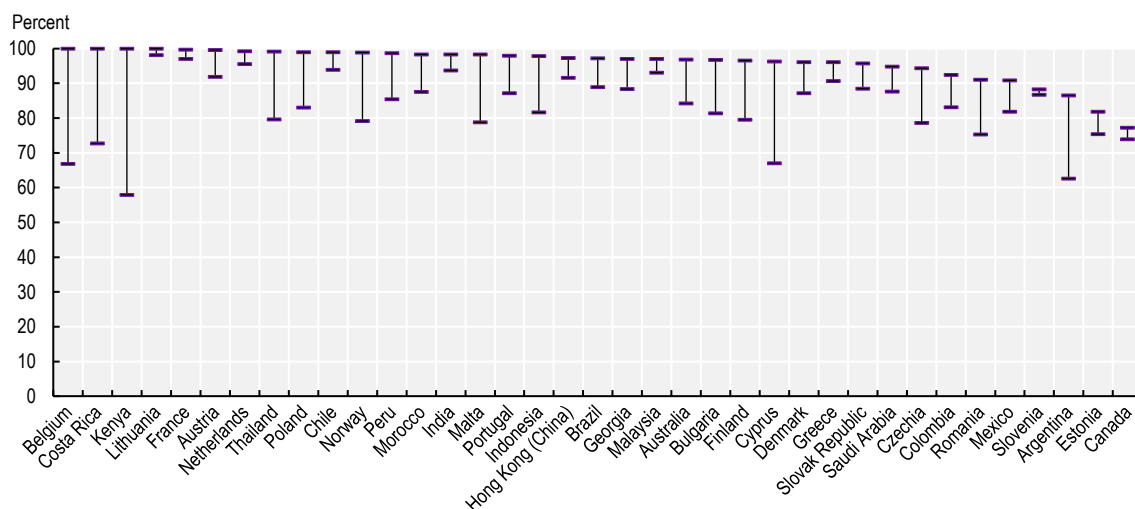


Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.36 Rate of payments received on-time: CIT, D.37 Rate of payments received on-time: PIT, D.38 Rate of payments received on-time: PAYE, and D.39 Rate of payments received on-time: VAT, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/f3r28w>

Figure 4.4. Range in on-time payment performance across major tax types by jurisdiction, 2023

Payments received on-time as a percentage of payments received



Note: The figure shows for each jurisdiction the range in on-time payment performances in 2023 across the four tax types: PIT, CIT, Employer withholding and VAT (where applicable). It only includes jurisdictions for which information was available for at least two tax types.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.36 Rate of payments received on-time: CIT, D.37 Rate of payments received on-time: PIT, D.38 Rate of payments received on-time: PAYE, and D.39 Rate of payments received on-time: VAT, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/j2wt9q>

Future editions of this report will continue to track and analyse these trends, and recovering and increasing on-time payment rates will no doubt remain an area of focus for administrations given the amounts of revenue involved, with many tax administrations reporting investing additional resources in this area, to make payments easier and more in real time.

Refunds and credits

Given the underlying design of the major taxes administered (i.e. PIT, CIT and VAT), some element of over-payment by a proportion of taxpayers is unavoidable. Excess tax payments represent a cost to taxpayers in terms of “the opportunity cost”, which is particularly critical to businesses that are operating with tight margins where cash flow is paramount. Any delays in refunding legitimately overpaid taxes may therefore result in significant “costs” to taxpayers.

Table 4.11. shows the different treatment of VAT refunds, and highlights that the majority of administrations pay out refunds immediately. This is helpful to business, but tax administrations need to continue to be cognisant of fraud risks. Tax regimes with a high incidence of tax refunds are particularly attractive to fraudsters (especially via organised criminal attacks) necessitating effective risk-based approaches for identifying potentially fraudulent refund claims.

Table 4.11. Treatment of VAT refunds, 2023

Percentage of jurisdictions where ...			
VAT refunds are automatically paid out immediately	VAT refunds are paid out immediately subject to the availability of funds	VAT refund are established as a 'credit' in the taxpayer's account, until such time as the taxpayer may legally request the refund	VAT refund are established as a 'credit' in the taxpayer's account, until such time as the taxpayer may legally request the refund, subject to the availability of funds
61.8	3.6	32.7	1.8

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.72 Treatment of most approved VAT refunds, <http://isora.data.org> (accessed on 1 October 2025).

Box 4.5. China (People's Republic of) - Innovations in data-driven approaches to review of Value Added Tax credit refunds

The STA has explored data-driven approaches to review the VAT credit refunds process. It has the following features:

- **Pre-management:** This focuses on enhancing services through innovating digital infrastructure. A new model has been developed which identifies eligible taxpayers (among 15 million general taxpayers nationwide), facilitating automatic reminders for VAT credit refund applications. Over 85% of refund application data is pre-filled by the system, saving time for taxpayers. Additionally, 59 risk indicator models have been launched to scan taxpayers with VAT credits by category, recording risks in a dedicated database.
- **In-process review system:** This includes a "data-driven review" module that gathers the necessary tax-related information for review, enhancing efficiency and accuracy. It also features an "intelligent interception" function that scans taxpayers daily based on risk ratings. A "precise response" strategy has also been adopted, with medium and high-risk taxpayers undergoing extra checks.

- Ex-post supervision: A risk prevention and control system has been implemented. First, dynamic tracking and analysis is conducted. Continuous monitoring of refunded taxpayers is carried out in real-time, with the database being regularly updated, and a chained risk scanning model has been established. Second, random and targeted spot checks are also conducted, taking place more frequently for industries with relatively higher risks or those that trigger numerous risk indicators despite the system assigning a lower risk level. Third, traceable control is implemented, and data analysis is used to trace VAT credit refund risk cases to update risk indicators, improving the model and enhancing efficiency.

Source: China (People's Republic of) (2025).

References

- OECD (2022), *Tax Administration 2022: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://doi.org/10.1787/1e797131-en>. [1]
- OECD (2019), *Tax Administration 2019: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://doi.org/10.1787/74d162b6-en>. [3]
- OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, OECD Publishing, Paris, https://doi.org/10.1787/tax_admin-2017-en. [2]

5 Services

This chapter examines how tax administrations' compliance goals are met by providing effective and efficient services to taxpayers, increasingly through technology. This is helping increase voluntary compliance amongst taxpayers by making it easier to understand tax obligations, report taxable income and make payments.

Introduction

While taxpayer compliance can be heavily affected by elements outside of the control of the tax administration, for example the state of the economy, changes in the reporting environment (such as a shift from salaried work to self-employment) and the perceived fairness of tax policy among other things, a core part of supporting taxpayer compliance is the provision of a wide range of effective and easy to use services for taxpayers. Providing the right services, to the satisfaction of taxpayers and other stakeholders, will increase the level of participation, taxpayer trust, and confidence in the tax system as a whole.

This chapter comments on areas that tax administrations can consider when supporting taxpayer compliance through their service offerings as well as providing relevant country examples. These areas are:

- Understanding and meeting taxpayer preferences;
- Supporting self-service;
- Providing educational and support initiatives; and
- Providing collaborative services.

Understanding and meeting taxpayer preferences

Taxpayer contact volumes are very large scale. Administrations reported more than 3 billion incoming contacts via online taxpayer accounts, and there are still more than 300 million incoming telephone contacts (see Tables A.96 and A.97 in the ISORA database). However, unlike many other government services, at the individual level taxpayers will often have very limited periodic contact with tax administrations and for some this may be in relatively stressful situations involving significant sums of money or with risks of penalties in the background. For many taxpayers, expectations have also changed as regards the availability of services and response times, particularly following the COVID-19 pandemic and in light of the ongoing digital transformation of the economy.

Taxpayer satisfaction surveys and other feedback mechanisms can provide valuable information to tax administrations regarding services' expectations as well as insights into service perception. In this respect, Table 5.1. shows that 91% of administrations measure, for example, taxpayer experiences in using online services. Surveys are used most often, followed by other online feedback channels.

Table 5.1. Measuring taxpayer experience in using online services, 2024

Percent of administrations that have the respective process in place

Administration measures taxpayer experience in using online services	If yes, approach used...					
	Survey (online or paper)	Online feedback channels (other than survey)	User testing	Web analytics	Interview (phone or in-person)	Other
90.7	89.8	71.4	55.1	53.1	49.0	8.2

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 3.8., <https://doi.org/10.1787/c076d776-en>.

Box 5.1. describes a few approaches used by tax administrations to understand and meet taxpayer preferences. Additional information on the use of taxpayer satisfaction surveys can be found in Chapter 5 of the 2024 edition of this series (OECD, 2024^[1]).

Box 5.1. Examples – Understanding and meeting taxpayer preferences

Canada – Use of generative artificial intelligence for web content optimisation

In order to improve the CRA website experience, a feedback tool was added at the bottom of each of its web pages asking users if they found what they were looking for. If a user answers “no,” they can provide an anonymised comment. The CRA uses this information to identify and prioritise areas for improvement.

The CRA began work on a project to improve the instructions on how to register for, or sign-in to, its online accounts. To understand what the main issues were with these user tasks, it looked at the comments it had received via the feedback tool over a one-year period. In that time, users had provided over 90 000 comments about their experience. A Generative Artificial Intelligence (GenAI) tool was piloted to help summarise and categorise the feedback by key themes.

As a result, ten key areas for improvement were identified and became the focus of a content optimisation project, which resulted in a 158% increase in user success for registration and sign-in tasks, with the use of the GenAI tool allowing the CRA to efficiently support its optimisation efforts.

China (People’s Republic of) – Intelligent and manual interactive services model between taxpayers and tax authorities

As the STA has been steadily advancing towards digital transformation in recent years, it has developed an “Intelligent + Manual” interactive services model to bridge the gap between taxpayers and the tax administration. Currently, 97% of tax-related matters and 99% of tax filings can be processed online. This shift has driven a growing demand among taxpayers for online consultation and guidance services. To meet this need, the STA has developed a more interactive service system and embedded it into the electronic tax office platform, providing taxpayers with a seamless integration of intelligent and manual support.

This system has four key features:

- **AI-powered guidance:** This focuses on common tax matters, providing 24/7 intelligent support to taxpayers through AI technology.
- **Real-time assistance:** To support taxpayers with their tax-related business, the system offers real-time consultation via screen sharing, audio-visual interaction, and collaboration with the relevant local tax authorities. This integrates service resources to assist taxpayers in completing their transactions smoothly.
- **On-demand problem-solving:** This provides scenario-based, on-demand services at any time throughout the transaction process. In 2024, nearly 60 million interactive services were delivered, significantly enhancing online service experience.
- **Remote virtual counter:** A remote virtual counter has been established, enabling taxpayers to handle cross-regional tax matters nationwide without altering data permissions. This innovation further streamlines the process and improves accessibility.

Italy – Digital assistance to taxpayers

The Italian Revenue Agency (IRA) has made improvements to the digital services it offers to taxpayers. In line with the trend of tax administrations making their services more sophisticated and user friendly, the IRA have introduced a new appointment booking system which is accessible via the website, mobile application or a free phoneline. This was introduced to improve the relationship between the taxpayer

and tax administration, and simultaneously allow taxpayers to receive assistance more easily through their preferred channel, with reduced waiting times and without the need to travel to an office.

Using a Customer Relationship Management technological solution, the IRA have used video calls to enable taxpayers to interact directly with tax officials and create a 'virtual tax counter' environment. Features include being able to exchange files and screen share.

Launched at the end of 2023, the virtual counter has been extended with approximately 5 000 officials servicing it, with over 130 000 interactions recorded by the end of 2024. It has been particularly useful for serving taxpayers with disabilities and helping resolve questions related to specific tax benefits.

Sources: Canada (2025), China (People's Republic of) (2025) and Italy (2025).

An important aspect of meeting taxpayer preferences is getting the mix of channels right. Table 5.2. highlights the shift in channel usage over the 10-year period from 2014 to 2023 and illustrates the move to digital that occurred over the past years, accelerated by the COVID-19 pandemic. The decline of in-person visits to the tax office is particularly notable.

Digital assistance, for example through chatbots, has become an important channel in many jurisdictions, but service contacts through online taxpayer accounts dominate the overall picture. The data confirms a structural shift away from channels that occur during tax office working hours to channels that can be used 24/7.

Table 5.2. Service demand by channel, 2014-23

Channel type	Number of incoming service contacts		
	2014	2023	Difference in percent
Online via taxpayer account (31 jurisdictions)	1 076 833 409 (2018)	3 091 848 263	+187.1
Telephone call (37 jurisdictions)	292 973 732	288 899 301	-1.4
In-person (25 jurisdictions)	129 237 960	56 976 308	-55.9
Mail / post (14 jurisdictions)	15 132 056	19 121 148	+26.4
E-mail (22 jurisdictions)	11 794 253	30 604 471	+159.5
Digital assistance (34 jurisdictions)	11 404 668 (2018)	89 173 086	+681.9

Note: The table shows the number of incoming service contacts for those jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parentheses. For "Online via taxpayer account" and "Digital assistance", the table compares information for the years 2018 and 2023, as this data was not captured via ISORA 2016.

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.96 Incoming service contacts: Track keeping and number of contacts by channel - Online and digital assistance, A.97 Incoming service contacts: Number of contacts by channel - Telephone call and e-mail, and A.98 Incoming service contacts: Number of contacts by channel - Mail / post and in-person, <http://isora.data.org> (accessed on 1 October 2025), and *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Tables A.116. to A.119., https://doi.org/10.1787/tax_admin-2017-en.

Supporting self-service

The self-service offering from tax administrations continues to grow, with an expanding range of services being offered. Common examples of this include the ability to register, file and pay on-line, along with a range of interactive tools. This is leading to efficiency gains in tax administrations, as well as being able to provide a more 24/7-style service to taxpayers.

Using ITTI data (OECD et al., 2025^[2]), Table 5.3. gives an overview of some of the online services that administrations are offering for the main three tax types. It illustrates that most tax administrations have moved many of the interactions between them and taxpayers online.

Table 5.3. Online services offered by tax administrations by tax type, 2024

Percent of administrations that have the respective process in place

Interaction type	Personal income tax	Corporate income tax	Value added tax
Registering for tax	88.5	87.0	92.0
Filing tax returns	100.0	98.1	100.0
Making tax payments	90.4	92.6	92.0
Requesting extensions of deadlines (filing and payment)	65.4	61.1	60.0
Asking for tax payment arrangements	75.0	72.2	76.0
Asking confidential enquiries in a secure environment	75.0	74.1	74.0
Filing tax related objections	88.5	77.8	84.0
Dealing with correspondence	90.4	88.9	90.0
Uploading data into the tax administration's systems	86.5	87.0	86.0

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 3.1., <https://doi.org/10.1787/c076d776-en>.

To increase efficiency and reduce administrative costs, many tax administrations are also increasingly automating their online services. As Table 5.4. demonstrates, there are a range of online services for which tax administrations are now fully automating responses (when pre-determined criteria are met).

Table 5.4. Online services with automated responses by tax type, 2024

Percentage of administrations that provide automated responses (when pre-determined criteria are met) without human intervention

Interaction type	Personal income tax	Corporate income tax	Value added tax
Registering for tax: Registrant receives automated response with the tax registration number	69.2	70.4	56.0
Filing tax returns: Returns are automatically processed and assessments sent to taxpayers	76.9	64.8	74.0
Making payments: Payments are instantaneously processed and reflected in balances visible to the taxpayer	46.2	51.9	52.0
Requesting extensions of deadlines: Requesting person receives automated response whether request has been accepted or rejected	26.9	22.2	22.0
Asking for tax payment arrangements: Requesting person receives automated response whether request has been accepted or rejected	48.1	44.4	42.0

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 3.3., <https://doi.org/10.1787/c076d776-en>.

Box 5.2. Examples – Enhancing self-service through online channels

Chile – Enabling taxpayers to self-serve online

Chile has improved its taxpayer's ability to self-serve, through updates to the taxpayer portal on the Internal Revenue Service (*Servicio de Impuestos Internos*, SII) website. The "My Requests" option has been enabled in the taxpayer's personal site (Mi SII) located on the SII website, and includes three sections:

- **Tax Key:** This section is divided into two components. The first part provides a historical record of the main key tax activities. The second component displays the usage history of the tax key, both for accessing the SII website and for authentication on other public institution platforms.
- **Current Requests:** Taxpayers can track the status of requests submitted through the SII website, such as modifications, administrative requests, inquiries, complaints, and business closures.
- **Finalised or Closed Requests:** Once a request from the Current Requests section is resolved or closed, it is registered in this section for future reference.

Poland – Multichannel communication centre

The National Revenue Administration (NRA) has deployed a system, the Multichannel Communication Centre (MCC), which services taxpayers on remote channels. This enables taxpayers to get easier and faster access to tax information and makes it easier for them to comply with their obligations.

The MCC enables taxpayers to obtain general tax and customs information via telephone, email and chat channels. The telephone channel has a voicebot which redirects the taxpayer to the appropriate topic queue and enables them to speak to specialists who can answer their queries. There is also an application that enables the officials advising taxpayers to see relevant data on the taxpayer to personalise the assistance they offer and deliver a better service. A chatbot has been introduced that is available 24/7, and can answer general queries.

United Kingdom – Digitise agent authorisations

In April 2024, HMRC made enhancements to its Agent Services Account, fulfilling a key policy requirement to strengthen its security and foundations. Agents are now able to use the digital service to view/ update their contact and anti-money laundering supervision details, giving HMRC enhanced capabilities to run system background checks to counter fraud.

In eight weeks, the project delivered enhancements that enabled:

- Agents to more efficiently self-serve by having the ability to update their contact and anti-money laundering details.
- Automated digital checks of agents on sign-in to the Agent Services Account.
- The reduction of data protection risks to HMRC.
- Efficiency reductions in print and postal costs.

These enhancements meant that by January 2025, a total of 5 355 agents had updated their details, 1 843 had updated their anti-money laundering supervision status and 377 were identified for further compliance checks.

The rate at which agents are using the enhancements continues to rapidly increase – positively impacting HMRC’s ability to regulate and upskill the paid tax agent market. This in turn aligns with the UK Government’s key priorities for HMRC to modernise, close the tax gap and improve performance.

Sources: Chile (2025), Poland (2025) and the United Kingdom (2025).

Virtual assistants

The previous editions of this series highlighted how a growing number of administrations are using virtual or digital assistants to help respond to taxpayer enquiries and support self-service. This is confirmed through the data in Table 5.2. on service demand by channel, but also in Table 5.5. which shows that the growth has been significant between 2018 and 2023 (plus 36 percentage points) and that these services are now commonly used by many administrations.

Table 5.5. Use of virtual assistants, artificial intelligence and application programming interfaces, 2018-23

Percentage of administrations that use this technology

Status of implementation and use	Artificial intelligence (AI), including machine learning					Virtual assistants (e.g. chatbots)			Application programming interfaces (APIs)		
	2016	2018	2023	Difference in p.p.		2018	2023	Diff. in p.p.	2018	2023	Diff. in p.p.
				2016-23	2018-23						
Technology is implemented and used	8.6	29.8	69.0	+60.4	+39.2	34.5	70.7	+36.2	79.0	98.3	+19.3
Technology is in the implementation phase for future use	13.8	15.8	24.1	+10.3	+8.3	13.8	17.2	+3.4	7.0	1.7	-5.3
Technology is not used, incl. situations where the implementation has not started	77.6	54.4	6.9	-70.7	-47.5	51.7	12.1	-39.6	14.0	0.0	-14.0

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.108 Innovative technologies: Implementation and usage - Blockchain, artificial intelligence, and cloud computing, A.109 Innovative technologies: Implementation and usage - Data science, robotic process automation, and APIs, and A.110 Innovative technologies: Implementation and usage - Whole-of-government identification, digital authentication technology, and virtual assistants, <http://isoraadata.org> (accessed on 1 October 2025), and OECD (2019), *Tax Administration 2019: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.27, <https://doi.org/10.1787/74d162b6-en>.

Artificial intelligence

Using data from the 2019 edition of this series, a surge in the use of AI is visible over the few years. While only 9% of administrations used AI in 2016, this has increased to 69% with another 24% implementing this for future use (see Table 5.5.). Part of this development is the use of AI for service provision, including self-service. For example, AI is used to power virtual assistants to cope with more complex questions being asked by taxpayers and/or for providing more personalised answers.

AI is also used during other interactions with taxpayers, for example, to provide guidance as well as to assist tax officials. Just over a fifth of administrations use AI during such interactions, as can be seen in Table 5.6. This includes the use of AI to assist taxpayers during the filing of tax returns, to suggest potential responses to tax officials while dealing with incoming correspondence, or to assist tax officials during live chats with taxpayers. Box 5.3. contains examples on how AI is used as part of service provision.

Table 5.6. Use of AI during interactions with taxpayers (other than virtual assistants), 2024

Percent of administrations that have the respective process in place

AI is used during interactions with taxpayers (other than virtual assistants)	If yes, type of interaction ...			
	To suggest potential responses for incoming correspondence	To assist tax officials during live chats with taxpayers	To assist taxpayers during the filing of returns	Other interactions
22.2	25.0	25.0	33.3	50.0

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 3.5., <https://doi.org/10.1787/c076d776-en>.

All of this is part of a much wider trend on the use of AI in tax administration which can be seen throughout this report, for example, in relation to compliance risk management (see Chapter 6).

Box 5.3. Examples – Artificial intelligence

Austria - Bot Federation: A networked artificial intelligence strategy for public administration

The Austrian Tax Administration has introduced a new concept, the Bot Federation, for networking specialised chatbots (bots) used by public administration. Its goal is to provide citizens with a more efficient and user-friendly digital interaction through the intelligent collaboration of bots by using AI. The bots – including Fred (for tax-related inquiries), Mona (for general information on various government services), and ID-Austria (for digital identity verification) – share their knowledge and always provide the best possible answer, regardless of which bot is contacted.

This minimises the administrative burden, as each administrative unit is responsible only for its own content but gets the benefit of centrally organised knowledge exchange. Citizens benefit from fast and precise responses, reducing the need for phone calls, in-person visits, and paper-based processes.

The project went live in August 2023. Initial results have shown increased efficiency, significant relief for customer service teams, and high user acceptance.

In the long term, the Bot Federation serves as a scalable solution that can be extended to other areas of public administration. It sets new standards for digitalisation in public services by leveraging AI to make citizen-centred services more efficient and accessible.

Canada – Service feedback business intelligence initiative

The CRA has embarked on a research partnership with Western University, known as the Service Feedback Business Intelligence Initiative (SFBII). The CRA receives thousands of individual service feedback submissions annually. Currently, each service submission, be it complaint, compliment, or suggestion, is reviewed and manually categorised. One challenge is that manually categorising the feedback does not allow for easy trend detection or consistency in categorisation.

The SFBII experiment has created a multi-lingual Large Language Model (LLM) capable of analysing vast amounts of service feedback information and efficiently identifying service quality elements. As a first of its kind model within the CRA, this initiative introduced a more sophisticated approach to trend analysis, which provides the CRA with insights into potential service improvements. By harnessing the power of the multi-lingual LLM-based model, it saves a lot of time compared to if the analysis was carried out manually. However, it still allows for human intervention and oversight, as is necessary with any artificial intelligence tool.

A decision was made to include intersectional variables to perform gender-based analysis plus the trend and cluster analysis. Upon the experiment's successful completion, the model provided the CRA with an enhanced ability to identify and triage specific trends within the data, enabling deeper understanding of how trends may affect intersectional groups. This advancement positions the CRA to better serve its taxpayers, underscoring this initiative's potential to reshape how feedback may be analysed and utilised.

Ireland – Automating the categorisation of taxpayer queries

Revenue have improved the efficiency of their online portal, MyEnquiries, by utilising AI and Natural Language Processing (NLP) technology. Previously, this service required the taxpayer to categorise their queries via dropdown menus. Picking the correct categories was often difficult and confusing for taxpayers, resulting in most queries being submitted either as 'general' or to be incorrectly categorised.

To address this business and IT teams worked collaboratively to identify a range of customer enquiries, and then used these to train AI/NLP technology models to automate the categorisation task. The result is that the categorisation process is now automated when taxpayers submit queries, and the enquiry is routed to the appropriate subject matter experts for action. An AI model has been established which has significantly simplified the online interface.

The benefits of this project include:

- An uplift was achieved that boosted accuracy levels from under 65% when taxpayers were self-categorising, to 97% accuracy when done by AI.
- On average, autotclassification has reduced the overall routing time to the correct subject matter experts by over 24 hours.
- Simplifying the customer facing interface by removing layers of complicated drop-down menus such that a customer could now submit an enquiry to Revenue in 'free text' format without having to consider Tax categories and sub-categories.
- Encourages taxpayers to use digital first channels when contacting Revenue by making the submission of an enquiry much simpler.
- Drives more accurate classification of enquiries, gives more business insight into customer requirements, and allows for a more targeted response.

Korea – Artificial intelligence tax helpline

In 2024, the Korean NTS launched the AI Tax Helpline, which provides consultation services by phone using AI voice recognition. The NTS trained this AI system with more than 2 million records of taxpayer inquiries, along with a vast amount of tax provisions, tax rulings, and judicial precedents.

When a taxpayer receives a filing notice and seeks assistance, they can utilise the AI Tax Help Line. Upon calling, a virtual assistant answers the call and verifies the caller's identity using the phone number registered in the database. The system then provides tailored basic information specific to the taxpayer.

During the call, additional resources such as Frequently Asked Questions, video links, and step-by-step instructions related to the taxpayer's inquiries are sent via text message in real time. Once the call is completed, the taxpayer can click the provided link to directly access the filing section and proceed with reporting their tax returns.

Thanks to the AI Tax Help Line, 98 percent of incoming calls were successfully answered in 2024, marking a significant improvement from 26 percent in 2023. The NTS answered a total of 1.42 million calls, which is 2.5 times more than the previous year. Among these, approximately 74 percent were managed by the voice-based virtual assistant.

While there may still be some gaps in terms of expertise, the implementation of this AI system is equivalent to hiring 1 000 additional employees, demonstrating its substantial impact on efficiency and service capacity.

Singapore – Artificial intelligence assistant for handling taxpayer queries

The Inland Revenue Authority of Singapore (IRAS) has developed IRASearch, an in-house tool powered by LLMs and GenAI to serve as an AI assistant for officers when handling taxpayers' inquiries. IRASearch exemplifies IRAS' commitment to continuous innovation, capturing various machine learning and AI functionalities to enhance operational efficiency and decision-making. It leverages LLMs to refine queries and enhance search, and uses GenAI to customise responses.

One of IRASearch's core strengths lies in its ability to generate tailored responses using GenAI. With both built-in and customisable prompts available, the GenAI response feature empowers IRAS officers to compose replies to taxpayers' queries that take into account the tax issues raised as well as taxpayers' circumstances. Additionally, officers can also request for GenAI to simplify complex tax concepts to help taxpayers better understand their obligations, such as reporting taxable income requirements. This enhanced communication between IRAS and its taxpayers not only elevates the quality of service being offered, but also fosters trust and reduces barriers to voluntary compliance. Ultimately, it improves taxpayers' overall satisfaction with the services rendered, facilitating more positive interactions between taxpayers and the tax administration.

In conclusion, IRASearch streamlines the information gathering process, enabling officers to retrieve accurate information and generate responses swiftly. By reducing the time taken to collate information and enhancing consistency, it boosts efficiency and service quality. This innovative tool demonstrates how AI transforms service delivery, driving operational excellence.

Sweden – Transforming operations with artificial intelligence assistants

The STA is developing three AI driven tools to enhance operational efficiency and service delivery. These AI assistants are designed to automate tasks, accelerate processes, and improve decision-making across key areas:

- **AI code assistant:** This tool is being developed to assist STA's developers and analysts by automating repetitive tasks such as generating code and debugging. By speeding up development cycles and reducing human error, it will enable staff to focus on more complex problem-solving. This will enhance code quality and accelerate the delivery of systems and services.
- **AI for tax crime investigations:** This AI tool is under development to assist investigators in identifying similar cases, transcribing speech, and translating documents. By streamlining data retrieval and analysis, it will improve decision-making speed and accuracy. It will also support international collaboration, breaking down language barriers and enhancing cross-border cooperation.
- **AI-powered email response automation:** This system is being developed to assist STA officers in automatically generating replies to tax-related emails, as well as inquiries regarding the real estate and population register. By automating responses, it will allow staff to handle a higher volume of inquiries without sacrificing quality. The goal is to fully automate responses, ensuring consistent, professional communication while significantly reducing time spent drafting replies. Over time, user feedback will be integrated to improve response accuracy and relevance.

Together, these AI assistants will transform STA's operations. By automating routine tasks, accelerating processes, and improving decision-making, they will significantly increase efficiency, scalability, and the agency's ability to deliver timely, accurate, and high-quality services to the public.

Sources: Austria (2025), Canada (2025), Ireland (2025), Korea (2025), Singapore (2025) and Sweden (2025).

Educational and support initiatives

Education of taxpayers has two aspects, one around taxpayers' understanding of their own obligations and their abilities to meet them and the other awareness-raising around the role of tax in society. Both are important factors in supporting voluntary compliance. Influencing beliefs, attitudes and norms is generally considered an effective and efficient way to influence compliance behaviour over the long term. The 2024 edition of this series noted that the majority of tax administrations carry out educational initiatives and around half provide free tax services for new businesses and lower income individuals (OECD, 2024^[1]). In practice, this often includes the provision of online material and e-learning, information campaigns (including through social media), as well as conferences and community outreach.

In addition, tax administrations are also creating support programmes, such as advice or temporary loosening of tax obligations that can help taxpayers in difficult circumstances, such as a result of natural disasters or personal hardship. This can help prevent future compliance issues as well as additional stress for taxpayers in difficult circumstances. It can prevent reputational issues for the tax administration, and have wider benefits such as help maintain trust in the system, improving perceptions of the tax administration as well as assisting wider economic resilience.

Box 5.4. includes examples of educational and support initiatives undertaken by tax administrations. Additional information and links to other relevant OECD reports can be found in the 2024 edition (OECD, 2024^[1]).

Box 5.4. Examples – Educational and support initiatives

Canada – Geospatial analysis to support disaster relief measures for taxpayers

The CRA has recognised that natural disasters - such as floods, wildfires, and hurricanes - can make it hard for individuals to meet their tax obligations, and so uses advanced tools and real-time disaster data to map regions impacted by these events.

By linking geographic data, taxpayer location and real-time disaster information, the CRA can pinpoint within 24 hours impacted postal codes, allowing the quick development of robust, evidence-based recommendations for taxpayer relief measures. This approach has not only improved CRA's disaster preparedness and resiliency, but also ensured taxpayer support can be expedited, enhancing service delivery during crises.

Denmark – Digital Personal Tax Guide

The Digital Personal Tax Guide is a pilot project which aims to create a digital solution through using data analysis to detect life events relevant to tax assessment, which then enables personal and automated guidance.

An example of this is the impact of transport deductions triggered by a job change or lost job. The purpose of providing guidance proactively is to strengthen the user experience and provide the most effective guidance possible to foster higher compliance and reduce the number of enquiries around peak periods. This is achieved by:

- Making taxpayers aware of the possible consequences that detected changes in their circumstances have on their tax assessment during the income year, instead of waiting until the annual statement period at the end.
- Increasing awareness of the DTA's digital self-service solution and thus empowering citizens to be self-serving.

The pilot project's technical solution consists of a simple search which prompts a guidance package, distributed via the official e-government mailing system. If this method proves successful, then it could be developed into an automated and integrated Information Technology-solution.

The solution itself searches for data in the DTA's data warehouse based on established criteria. The guidance package is tailored based on which changes in the taxpayer's life situation have been detected and which of these can be updated by the taxpayer using the DTA's digital self-service solution.

Italy – Online chat channel and social media engagement

Over the past year, IRA's communication strategy on social media has been enriched by its online chat channel. Launched in late 2023, this official channel has reached over 770 000 subscribers.

Through its presence on social media, the IRA has helped taxpayers to use digital services and increased its credibility and visibility, creating a more open dialogue with taxpayers.

In line with the digital communication strategy (which aims to disseminate simple and clear information to help taxpayers fulfil their tax obligations), the IRA has used the online chat channel to develop integrated communication actions on different topics. These topics vary from relaunching the annual information campaign on pre-filled tax returns, promoting mandatory electronic invoicing and online services.

A notable feature of the IRA's chat channel is that it provides daily real-time updates on the tax news of the day, as well as in-depth opportunities on national and territorial initiatives of widespread interest.

Through social media, the IRA promotes clear and timely information on tax matters, with columns dedicated to a particular issue (keywords, surveys and polls, infographics, breaking news, press releases) which aim to engage and retain users who follow the channel and consolidate social engagement.

The results are extremely positive. Usually, polls see the participation of between 5 - 8 000 users, while individual posts receive hundreds of reactions.

Japan – Tax education for young people

The National Tax Agency Japan (NTA) is working to develop an environment that enables its citizens to be educated about the significance of taxation and the role it plays in the smooth running of society.

Specifically, the Council for Promoting Tax Education was formed between related government ministries (comprising the NTA, Ministry of Internal Affairs and Communications and Ministry of Education, Culture, Sports, Science and Technology), which meets to discuss effective support measures on tax education.

The NTA also sends its staff to teach in tax education classes at the request of schools, organises tax essay contests, and conducts various tax-related events in cooperation with the Certified Public Tax Accountants' Associations and other relevant private organisations. In 2023, 9 720 officials were sent to conduct tax education classes. As for the essay contest, 174 008 senior high school students and 445 945 junior high school students entered.

Moreover, with consideration of the national curriculum standard and the digitalisation of schools, the NTA is striving to develop courses and teaching materials that deliver a better learning experience by accurately determining educators' needs and collaborating with related agencies.

Content is uploaded to the "Tax Learning Corner" of the NTA website so that students can learn about taxes by themselves. Also, the NTA provides education programmes using a dedicated tax education facility located in the Tokyo Ueno Tax Office.

Türkiye – Taxpayers starting a new business

The Turkish Revenue Administration has implemented a proactive communication policy aimed at taxpayers starting new businesses. The primary aim is to enhance these taxpayers' awareness of their legal obligations and rights, and to ease the compliance processes. In this context, a comprehensive brochure was prepared, detailing the obligations and rights that self-employed and commercial income taxpayers are required to fulfil under the legislation. This brochure has been made accessible both in print and digitally, providing taxpayers with swift and easy access to essential information.

To further enhance the compliance processes of taxpayers starting new business, a concise video explaining their rights and obligations was created. This video was published on the Turkish Revenue Administration's social media accounts to reach a wide audience.

Moreover, informative SMS messages are sent each month following the registration of new taxpayers. In 2024, a total of 415 626 SMS messages were sent to new taxpayers. These SMS reminders ensure that taxpayers access accurate information about legal processes right from the beginning. Additionally, the initiatives are not limited to providing information, but they also include a comprehensive monitoring strategy to analyse and track the compliance behaviours of taxpayers starting new business.

The aim of this work is to reduce the barriers encountered by taxpayers in fulfilling their obligations and to build trust in the tax system. A comparative analysis of taxpayer compliance levels in 2025 and the compliance levels of those who started their businesses in 2025 is also planned. This approach is expected to positively influence compliance behaviours by raising awareness about fulfilling future obligations.

Sources: Canada (2025), Denmark (2025), Italy (2025), Japan (2025) and Türkiye (2025).

Collaborative services

As the digital services developed by tax administrations grow, more and more administrations recognise that these services bring opportunities (i) to join-up with other government agencies to provide a whole of government service experience; and (ii) to work with third-party developers to connect with the systems of taxpayers.

Joined-up government services

Tax administrations are reporting joining-up with other government agencies to enhance the overall service experience across government, including through “collect once, use many times” approaches. Tax administrations have a special place within government in this respect since they (i) will often hold up-to-date verified information on identity, (ii) will be involved in both receiving and making payments, and (iii) will receive and send information to third parties (such as financial institutions and employers.)

Table 5.7. shows two examples of joined-up government services. In many jurisdictions registering for tax or making tax payments are now part of wider government processes, thus reducing and simplifying administrative burdens. Also, a number of country examples of such joined-up services have been included in previous editions in this series, for example, in Box 1.7 of the 2019 edition (OECD, 2019^[31]). In addition, the examples in Box 5.5. illustrate how government agencies joining-up can reduce burdens for taxpayers.

Table 5.7. Tax related services as part of a wider government service approach by tax type, 2024

Percent of jurisdictions where the respective tax process is part of a wider government service approach

Interaction type	Personal income tax	Corporate income tax	Value added tax
Registration for tax is part of a wider government online registration approach	50.0	66.7	48.0
Making tax payments is part of a wider government online payment portal	40.4	40.7	42.0

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 3.2., <https://doi.org/10.1787/c076d776-en>.**Box 5.5. Examples – Reducing burdens by joining-up****Hungary – Electronic payroll system**

The National Tax and Customs Administration (NTCA) is going to introduce a new electronic payroll system (ePayroll) to reduce the administrative burden for employers related to managing employment data.

This new system is expected to have many benefits. It will enable employers to send data to the tax administration and other relevant government parties in one go, and in a standardised format, and will enable the provision of data based on employment events. This links to the OECD's Tax Administration 3.0 vision (OECD, 2020^[4]) where the taxpayer is at the centre of the ecosystem, and fits better with the payroll processes of employers, saving time and money. Additionally, the data is expected to be validated in real-time, using information from government databases which will reduce the number of retrospective corrections.

ePayroll will be implemented as a secure, access-controlled blockchain system with built in confidentiality and privacy features. The platform is designed to support cross government collaboration, enabling the tax administration to collaborate with other government departments, for example the treasury, health ministry and statistical office. The project will also successfully reconcile blockchain technology and data protection requirements, which will ensure that data is processed in line with privacy and legal requirements.

For further information, please see here: <https://www.youtube.com/watch?v=qBTDOFA7ZqA> (accessed on 1 October 2025).

Singapore – Single source of truth for self-employed persons' income

Since 2024, IRAS has been the Single Source of Truth (SSOT) within the Singapore government in respect to Self-Employed Persons' (SEPs) income. Previously, SEPs had to declare their income to different government agencies for various purposes. For example, besides declaring their income to IRAS for tax assessment purposes, SEPs applying for government benefits to top-up their income under the Workfare Income Supplement had to also declare their income to another government agency in Singapore - the Central Provident Fund Board (CPF Board). This process resulted in more work for Singapore's SEPs.

In collaboration with the CPF Board, IRAS established itself as the SSOT for SEP income and streamlined the declaration process, enabling all SEPs to electronically-file with IRAS. With SEPs' consent, this creates an accurate and single view of SEPs, with their income data then being shared with different agencies for relevant policy analysis and administration of whole-of-government schemes. This change has benefitted approximately 300 000 SEPs.

Additionally, IRAS proactively collects SEPs' income data from third-party intermediaries such as commission paying agencies and private hire car operators, to pre-fill income information in their tax returns.

This citizen-centric approach has simplified the income declaration process for SEPs. For IRAS and the wider Singapore government, this initiative has resulted in enhanced efficiency and better resource utilisation. This approach provides the government with a comprehensive overview of all SEPs' income and status, enabling swifter and more effective implementation of assistance schemes.

Sources: Hungary (2025) and Singapore (2025).

Working with third-party developers

Embedding services and processes in the natural systems used by taxpayers in their daily lives and businesses will help to improve tax compliance, and also reduce administrative burdens and free up time that owners can use to grow their businesses. Most of those natural systems are prepared by third-party developers and many administrations are driving collaborations with those developers to open up new services.

The connection of the tax administration's system to the natural systems of taxpayers is typically done through Application Programming Interfaces (APIs). APIs are allowing connectivity between systems without providing direct access, and are the critical enablers of many innovative services. It is against this background that around 85% of tax administrations are now creating APIs and three-quarters of them are making those APIs available to third party developers. Further, as part of the process of developing APIs, 55% of tax administrations are engaging in API co-creation with third parties. (See Table 5.8.)

Table 5.8. Development of Application Programming Interfaces, 2024

Percent of administrations that have the respective process in place

Administration develops Application Programming Interfaces	If yes, ...	
	Administration makes a library of Application Programming Interfaces publicly available for third party use	Administration engages in co-creation of Application Programming Interfaces with third parties
83.3	75.6	55.6

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 3.9., <https://doi.org/10.1787/c076d776-en>.

The OECD report *Unlocking the digital economy – a guide to unlocking application programming interfaces in government* (OECD, 2019^[5]) provides an overview of the practices, techniques and standards used to deliver contemporary and effective digital services for taxpayers through APIs. As the services delivered become more sophisticated, and play a greater role in delivering a quality service to taxpayers, tax administrations are having to invest more in the management and oversight of their APIs. Box 5.6. contains examples of some of the latest developments in administration regarding APIs.

Box 5.6. Examples – APIs

Canada – Work in progress service

The Work in Progress (WIP) service was developed to improve the user experience for individual and business clients using the CRA secure portals. Currently, users must complete and submit forms within the portals in a single sitting. If the user's session times out before they submit the form, they must start

again from the beginning on their next attempt. This user experience has the potential to deter users from digital solutions.

To resolve this problem, the CRA created a service that stores a user's "work in progress" on a form and retrieves it when the user is ready to complete the form. The service is a cloud-based, stand-alone database that stores form data. An API retrieves that data and displays it back to the user for completion. The service also permits email notifications to be sent to users to remind them to complete their submission.

The service was launched as a single programme in October 2024, with plans to expand it to additional programmes.

Hungary – General machine-to-machine receipt submission service

The NTCA has introduced a Machine-to-Machine (M2M) receipt submission service, a milestone in transforming from a forms-based, complex data service into an event and data driven, real-time interactive service. The M2M service allows software providers to develop software that connects to the NTCA's processing systems via machine interfaces (application programming interfaces). These are then able to automatically transmit data to the NTCA without human input.

The use of the solution requires a prior two-factor online registration, whereby the end-user (the taxpayer) is identified in a single government customer identification system. The end-users can then submit electronic forms to the tax administration using client software pre-registered with the NTCA.

To ensure that the service adheres to security requirements, there is an activation process after registration to gain access, which includes a complex multi-factor authentication process. Together, these ensure a level of identity protection for users. With activated access, the client application can submit electronic forms (in XML format) to the NTCA. After a preliminary check for any errors, the NTCA forwards the forms to its internal processing systems.

In the first three months following the launch of the service, 34 client programmes were registered and more than 10 000 electronic forms were submitted by around 500 individual and organisational end-users.

For further information, please see here: <https://www.youtube.com/watch?v=NM7f723g--o> (accessed on 1 October 2025).

Norway – Structure and data governance in data sharing

The Norwegian Tax Administration (NTA) shares data with public and private entities to simplify, improve, and streamline daily operations for both businesses and individuals. It is a key part of the administration's societal mission. In practice, the data sharing is accomplished through API's offering data from a range of source systems. In terms of volume, the NTA receives over 300 million API requests per month from approximately 4 000 consumers.

In order to streamline processes, ensure correct and compliant data processing and an efficient administration of the data sharing services, the NTA adheres to the European Interoperability Framework and the NTA's own Policy for Data Sharing, in order to keep the scope of data sharing manageable and standardised.

For organisations with the same data needs in the same sector, the NTA encourages and establishes group collaborations with organisations representing the sectors. The NTA currently has sector collaborations with organisations in finance, municipalities, healthcare, and energy.

Examples of data sharing include:

- Streamlined kindergarten fee applications: An organisation representing local and regional governments in Norway has worked with the NTA to automate the process, significantly reducing manual effort for parents and municipalities.
- Efficient loan applications: When customers grant consent, banks can directly access tax data from the NTA, speeding up loan processing. This system is estimated to save the society up to NOK 1.3 billion annually, ensuring privacy and reducing paperwork.

Sources: Canada (2025), Hungary (2025) and Norway (2025).

In addition to embedding services, a number of administrations are also creating natural systems that will assist taxpayers to fulfil their tax obligations, either directly or in collaboration with third parties. Tax administrations can do this by themselves or in partnership with third parties. The most common software solutions created by tax administrations either by themselves or in commercial partnerships with third parties relate to return-filing processes, followed by solutions for electronic invoicing purposes. See Table 3.11. in the 2025 OECD report *Tax Administration Digitalisation and Digital Transformation Initiatives* (OECD, 2025^[6]).

Inclusive administration

Tax administrations need to provide comprehensive services that ensure equitable access for all citizens, including those with disabilities, those without internet access, or those who do not speak any of the official languages of the jurisdiction. Providing accessible formats, multilingual support, and offline service options facilitates bridging gaps in communication and access, promoting a more inclusive society. These measures can assist enhancing the trust in the system and voluntary compliance.

In addition, tax administrations are also considering how to assist taxpayers in difficult personal circumstances, for example by developing new services or by providing tailored support. This is set out in Box 5.7.

Box 5.7. Examples – Inclusion

Canada – Research on the participation of Canada’s hard-to-reach populations in the tax and benefits systems

The CRA, in collaboration with Employment and Social Development Canada and Statistics Canada, conducted a series of studies on populations that may be hard-to-reach or vulnerable, to improve their access to benefits.

This research was in response to a 2022 government audit which found that hard-to-reach and vulnerable populations may be missing out on certain benefits to which they are entitled to. This is because Canada’s tax system does not require people below a certain income threshold to file a tax return, and certain benefits are only granted to people who file an annual tax return.

The studies linked census data and administrative tax data to identify the characteristics and estimate the number of hard-to-reach individuals who had not filed taxes, but might be eligible for benefits. The results for six population segments - Indigenous Peoples, youth, seniors, newcomers to Canada,

housing insecure individuals, and persons who reported having a disability - were analysed using the gender-based analysis plus criteria.

These results have helped enable the CRA to adjust its strategies and programme activities to increase outreach in specific areas and improve services to hard-to-reach and vulnerable populations. The studies have had a direct impact by informing government activities aimed at increasing their access to benefits and improving equity from a gender and diversity perspective.

Israel – Ensuring fair tax payments

Since Israel does not impose a general reporting obligation, the ITA has initiated measures to help taxpayers maximise their tax benefits and ensure they do not overpay taxes. This has enabled the ITA to directly reach eligible individuals and assist them in exercising their rights.

The target populations for this initiative include:

- Parents of children with disabilities.
- Residents with a qualifying medical disability, including special consideration for Holocaust survivors.
- Individuals who have overpaid taxes but have not submitted a tax refund request.

To achieve this goal, the ITA has taken the following actions:

- Personalised letters were sent to thousands of eligible individuals who had overpaid taxes. These provided the relevant forms and an explanation of the refund process.
- Personalised letters were sent to eligible individuals who had not yet claimed their tax benefits, detailing how to exercise their rights.
- Outreach efforts were conducted via SMS and phone calls to assist taxpayers in claiming their benefits.
- In certain cases, the ITA proactively corrected tax refund requests and annual reports where tax benefits had not been applied.

These efforts were carried out in collaboration with other government ministries, including the Ministry of Education, National Insurance Institute and Holocaust Survivor's Rights Authority.

Approximately 800 000 eligible individuals received letters. From those, 10% submitted a refund request, resulting in direct refunds totalling approximately NIS 340 million.

Sources: Canada (2025) and Israel (2025).

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6

Compliance management

Assessing the accuracy and completeness of taxpayer reported information is a core function of tax administrations. This chapter takes a closer look at tax administrations' work in this area, including what they do to understand and manage compliance risk, and how they prevent non-compliance. Finally, it looks at tax administration performance in addressing non-compliance.

Introduction

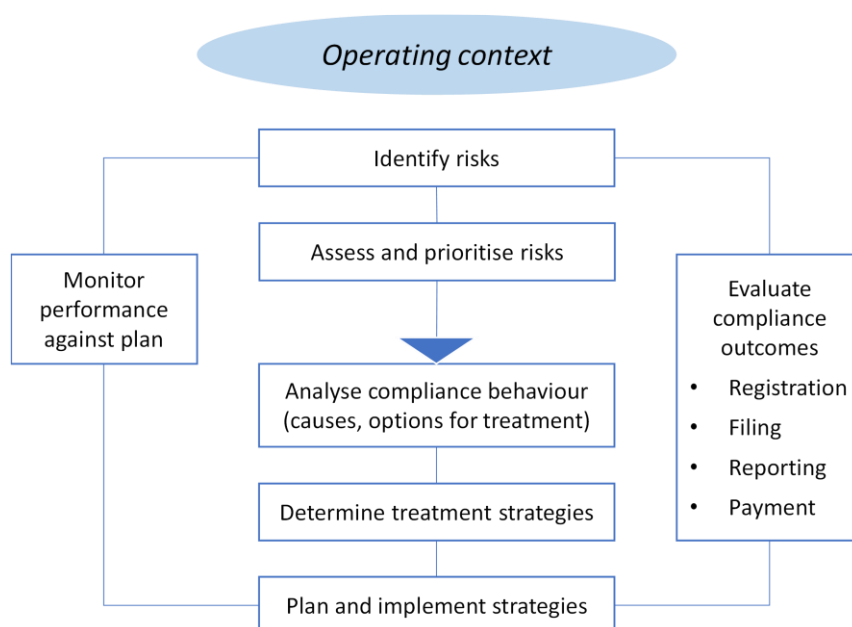
The audit, verification and investigation function assesses the accuracy and completeness of taxpayer reported information. This function employs on average close to 30% of tax administration staff with their core task being to assure that tax obligations have been met. While this often happens through audits, there is an increasing use of automated electronic checks, validations and matching of taxpayer information. The undertaking and visibility of these and other compliance actions is critical in supporting voluntary compliance, including through their impacts on perceptions of fairness in the tax system, as well as creating a 'deterrent effect'. This chapter therefore looks at:

- How tax administrations manage compliance risks, including the different approaches to prevent non-compliance; and
- The delivery of compliance actions undertaken by tax administrations, looking at electronic compliance checks, audits as well as tax crime investigations.

Compliance risk management

The process of compliance risk management, as described in the 2004 OECD guidance note *Compliance Risk Management: Managing and Improving Tax Compliance* (OECD, 2004^[1]), has remained largely unchanged over the years. Its key steps, as illustrated in Figure 6.1., still serve as a blueprint for managing compliance risks. Since then, several OECD reports explored aspects of this framework providing guidance and good practice examples, and the 2017 report *The Changing Tax Compliance Environment and the Role of Audit* (OECD, 2017^[2]) looked at a range of incremental changes occurring across tax administrations which, taken together, were changing the nature of the tax compliance environment, allowing for more targeted and managed compliance.

Figure 6.1. Compliance risk management process



Source: OECD (2004), *Compliance Risk Management: Managing and Improving Tax Compliance*, <https://www.oecd.org/content/dam/oecd/en/topics/policy-issues/tax-administration/compliance-risk-management-managing-and-improving-tax-compliance.pdf> (accessed 1 October 2025).

This section examines how tax administrations are organising their processes in this area by looking at tax administrations approaches towards understanding and managing compliance risks, and some of the steps taken by administrations as regards preventing non-compliance.

Understanding and managing tax compliance risks

Understanding tax compliance risks is crucial for tax administrations as it enables them to identify areas where non-compliance is most likely to occur, whether due to error, negligence or deliberate action. By analysing and managing these risks, administrations can allocate resources more effectively, tailor enforcement strategies, and design programmes to improve voluntary compliance. As noted in the 2024 edition of this series, around 85% of administrations report having a formal compliance risk management strategy, with almost all of those having in place dedicated approaches for identifying, assessing and prioritising key compliance risks. (OECD, 2024^[3])

Increasing availability of data

The huge increase in the amount of data available to tax administrations for compliance purposes is helping them to better understand risk areas and promote tax compliance. As more and more data is stored electronically, and the transfer, storage and integration of data has become easier through the application of new techniques and processes, tax administrations are now frequently tapping into data sources such as:

- ***Data from devices:*** Data can be collected from devices that register transactions such as online cash registers and trip computers for taxis and trucks, and also gate registrations from barriers and weigh bridges. As Table 6.1. illustrates, slightly more than half of the administrations receive data from electronic fiscal devices or cash registers and in two-thirds of those situations, data is transferred automatically. A small number of administrations also receive data from other devices such as taxi meters.
- ***Data from banks, merchants or payment intermediaries and service providers:*** This allows direct verification of income or assets reported by the taxpayer. Some jurisdictions receive transaction details or transaction totals for taxpayers on a regular basis.
- ***Data from suppliers:*** Collecting data from suppliers, either directly or through the taxpayer, allows a more complete picture to be drawn about the activities and income of the taxpayer. This is seen in the increasing use of electronic invoicing systems (see Table 6.1.) which, as noted in Chapter 4, allows some tax administrations to prefill tax returns.
- ***Data from customers:*** This is easiest in cases where the number of customers is limited and known, but increasingly mechanisms to leverage customer data are being used, for example in the verification of cash receipts.
- ***Unstructured data concerning the taxpayer:*** Electronic traces relevant to business activities and transactions can be found on the internet and in social media.
- ***Data from other government agencies:*** Data held by other government agencies for example for licencing, regulatory or social security purposes can be relevant in verifying tax returns or in risk assessments.
- ***Data from international partners:*** International exchanges of data from the *International Standards for Automatic Exchange of Information in Tax Matters* (OECD, 2023^[4]) and *Country-by-Country Reporting* (OECD, 2015^[5]) is massively increasing the quantity of data available on international activity and providing useful information for audit and case selection processes and in some cases for prefilling of tax returns.

Table 6.1. Electronic invoicing and devices that register transactions, 2023

Percentage of administrations

Certain categories of taxpayers are required to use an electronic invoice mechanism that transfers data to the tax administration	Administration receives data from devices that register transactions	If yes, type of device and data transfer			
		Electronic fiscal devices / cash registers		Other devices (e.g. taxi meters)	
		Data is transferred automatically	Data is transferred on request	Data is transferred automatically	Data is transferred on request
46.6	53.4	61.3	41.9	9.7	19.4

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.105 Compliance approaches: Electronic invoicing, and A.106 Compliance approaches: Devices that register transactions, <http://isoraadata.org> (accessed on 1 October 2025).

Box 6.1. Examples – Digitising processes

Mexico – Digitalisation of foreign trade procedures

One of the guiding principles of the Tax Administration Service's (*Servicio de Administración Tributaria*, SAT) audit plan is the digitalisation of foreign trade notices, aiming to simplify processes and make it easier for taxpayers to submit foreign trade notices through the use of various technological tools.

This digital transition has allowed SAT to facilitate and simplify procedures. It saves time for taxpayers as they no longer have to travel to the SAT offices to submit notices in person and guarantees compliance with tax and customs obligations as submitting digitally ensures they are in the correct format. It also means that the SAT has better control of the information collected from the notices as they are stored digitally, which enables ease of access when doing analysis for audits. Finally, it benefits the environment by reducing the use of paper.

United Kingdom – Electronic trade documents

HMRC have made significant progress in digitalising trade processes, which is helpful due to a significant proportion of the data in electronic trade documents being required for tax processes. This also makes trade easier for UK businesses, especially small and medium enterprises, which in turn increases growth.

This therefore presents an opportunity for HMRC to access and use this data quicker to satisfy its requirements. This will not only improve HMRC's risk and compliance processes, but also reduce the administrative burden on businesses. For example, a commercial invoice in the form of an Electronic Transferable Record (ETR) would assure VAT reporting. This offers a potential approach for electronic-invoicing (e-invoicing). Innovation could demonstrate the feasibility of treating an e-invoice in the same manner as an ETR and therefore, the principles of a 'reliable system' would apply with potential applications in VAT reporting.

In support of this, HMRC is identifying current difficulties for both internal and external users, to assess the value of electronic trade documents in relation to improving the design and administration of both tax and trade processes, for businesses and the government. To that effect, user research is underway for both external businesses as well as tax administration officials.

Sources: Mexico (2025) and the United Kingdom (2025).

With increasing amounts of data being handled by tax administrations, the implementation of mechanisms to protect and manage data is now commonplace, and a critical function. These mechanisms support wider

data governance processes, and in turn help maintain taxpayer trust in the system as well as meet legal obligations (see Table 6.2.). Box 6.2. highlights a few examples in this area. Moreover, as data systems become more connected, the importance of cyber security is growing. The 2023 edition of this publication contained a few examples from tax administrations in this space – see Tax Administration 2023, Box 10.5. (OECD, 2023^[6]).

Table 6.2. Data governance, 2024

Percentage of administrations that have the respective process in place

Comprehensive data management strategy exists	Quality of reported data is assessed	Data ethics framework in place	User data access and security is controlled	Unauthorised access is automatically detected	Data Privacy Officer is employed	Cyber security unit exists	External parties hired to test the security of systems	Artificial intelligence used as part of the data governance process
72.2	85.2	75.9	98.1	87.0	85.2	94.4	94.4	16.7

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 4.1., <https://doi.org/10.1787/c076d776-en>.

Box 6.2. Data governance

Australia – Whole-of-government Data Ethics Framework

The whole-of-government Data Ethics Framework provides guidance for the Australian Public Service to safely and appropriately expand their use of data and analytics in new and innovative ways, while building the Australian community's trust that their data is being used in ethical ways. The Framework identifies next steps for extending beyond current data uses as new technologies emerge and are adopted, which is relevant to the Australian Taxation Office (ATO) as it continues its data and digital transformation journey.

The Framework includes:

- Data ethics principles;
- Guidance on applying the principles to identify risks;
- Roles and responsibilities;
- Use cases to demonstrate where the Framework can be applied.

For further information on the Framework see here: <https://www.finance.gov.au/government/public-data/public-data-policy/data-ethics-framework> (accessed on 1 October 2025).

Norway – The data-driven future

The NTA is a data-driven organisation, and over the past years has boosted its effectiveness through data-driven taxpayer management initiatives. However, so far this has been on a relatively small scale. Therefore, to further improve its efficiency, the NTA is seeking to scale up its data-driven solutions.

To achieve this, a cloud-based data and analytics platform has been established, featuring capabilities for analytics, data science/machine learning, as well as dashboards and reporting. It is currently being utilised for a wide range of analytics projects and reporting use cases, from cryptocurrency to data quality and fraud detection. The NTA is also using the platform for the development and training of machine learning models and exploring generative Artificial Intelligence-based solutions with promising results, particularly in customer support and the improved handling of unstructured documents.

Effective data governance measures are key to scaling up data-driven solutions. These include establishing new roles, security mechanisms, and legal processes, as well as ensuring the data quality. The NTA makes analytical data available through data products, which are easily accessible datasets with a range of data, from taxpayer data to more administrative data. Nearly 200 data products have been produced so far, with many more to come. Recognising the scale of the data-driven change, an organisation-wide data literacy initiative is also underway to bring people in the organisation along with the changes and increase understanding.

Spain – Methodology for the development of artificial intelligence projects

AEAT has established a specific methodology to support the development of its AI projects, with the aim of improving the quality of the projects and enhancing their governance. The methodology has been specifically tailored to AI projects, addressing each phase of their lifecycle.

The methodology differs from a software development-oriented approach in that it does not focus on the technical aspects of code development, but rather on the various specific aspects that must be analysed in any AI project - such as data sources, biases and periodic retraining.

The methodology defines a series of stages and tasks, and specifies the roles and stakeholders in each of them. Therefore, most departments of the AEAT, including IT, business, security, and legal, can contribute their knowledge and perspectives to the AI project. All relevant issues related to the projects are analysed, including data quality, the existence of potential biases, transparency, and integration with corporate applications.

If the project fails to gain approval from all parties due to non-compliance with the ethical, legal, or quality standards established by the AEAT, it cannot proceed. Applying the methodology to a specific project ensures its quality and provides documentation that guarantees its traceability. The methodology will undergo periodic reviews, to adapt to new technological and legal situations that arise.

Sources: Australia (2025), Norway (2025) and Spain (2025).

Data analytics

Over recent years, the application of advanced analytics to risk management and risk targeting is becoming increasingly common:

- Table 6.3. shows 87% of tax administrations reporting using big data in their work, and most of those that use big data are using it to improve their compliance work. Big data is also used for forecasting and a variety of other purposes as can be seen in Table 6.3. and the example in Box 6.3.
- Of the 58 tax administrations covered by this report, nearly all report using data science / analytical tools with the remaining administrations in the process of preparing the use of such tools going forward (see Table 6.4.).
- Similarly, the use of artificial intelligence (AI), including machine learning, for risk assessments and detecting fraud is already undertaken by the majority of administrations (see Table 6.3.).

Table 6.3. Use of big data and artificial intelligence for analytical purposes, 2024

Percentage of administrations

Administration uses big data	Use of big data						Use of artificial intelligence (AI)	
	If yes, purpose of big data use ...						Use of AI in risk assessment processes	Use of AI for detection of tax evasion and fraud
	Improve compliance	Identify trends	Policy forecasting	Revenue forecasting	Provide new services	Other purposes		
87.0	89.4	78.7	51.1	63.8	55.3	23.4	64.1	74.4

Source: OECD (2025), *Tax Administration Digitalisation and Digital Transformation Initiatives*, Table 4.11. and Table 5.6., <https://doi.org/10.1787/c076d776-en>.

Box 6.3. Examples – Bringing data together

Australia – Central Dashboard

The ATO has introduced Centrl, a dashboard that brings together data from multiple systems into one place to help staff working with public, private and multinational enterprises to manage their allocated cases. Developed by a cross-functional team from business and data areas, Centrl connects to the ATO's case management, tax filing data store, and profiling systems.

ATO officials can use Centrl for various functions, including to:

- Get a list of their cases at the taxpayer group level with key information displayed upfront;
- Get alerts when entities in a taxpayer group have taken specific actions (for example, filing an income tax return) or been matched in new data (such as property transactions);
- Post notes to other case participants, regardless of team or area, to share information and set due date reminders to assist in keeping the case on-track;
- Access a news feed to stay informed about system updates, changes to procedures or certain risks to look out for in cases;
- Navigate directly (via an application panel) to frequently used systems that will open with pre-loaded data for the selected taxpayer group or entity;
- Search for a taxpayer by their name, Australian business number or tax file number;
- Navigate directly (via footer links) to relevant corporate applications, tools and external resources.

Centrl saves staff from manually monitoring multiple systems for events relevant to their cases, providing an efficient way to collaborate with other staff involved in the engagement and receive targeted news related to their work. This gives them more time to spend on the interpretation and application of tax law.

China (People's Republic of) – Applying tax data to serve national governance

The STA is fully leveraging tax-related data to deepen its tax and economic analysis which it can share with the wider government. This effort aims to provide a high-level service platform for the modernisation of the tax system and ability to effectively govern.

At the macro level, the STA has utilised data from electronic invoice accounting to make up a model which reflects macroeconomic trends such as time, tax category, industry, and region. This provides a solid foundation for the central government to formulate macroeconomic policies.

At the middle level, a tax comparative analysis system has been established. It can automatically conduct comparative analysis between different regions, cities and provinces, both domestically and internationally. This helps identify regions and groups with significant tax contributions and assists local government in understanding the areas' economic development.

At the micro level, real-time aggregation of enterprise “one-household” data allows for a comprehensive view of business operations, tax payments, invoices and risks, as well as corporate financial statements. This provides valuable insights into the underlying patterns, trends and risks of economic activities.

In recent years, the STA has produced over ten thousand analytical reports annually, supporting national macroeconomic decision-making, social operation analysis, and assessments of business conditions.

Sources: Australia (2025) and China (People's Republic of) (2025).

Table 6.4. Use of data science tools, artificial intelligence and robotic process automation, 2018-23

Percentage of administrations that use this technology

Status of implementation and use	Data science / analytical tools			Artificial intelligence, including machine learning			Robotic process automation		
	2018	2023	Difference in percentage points (p.p.)	2018	2023	Difference in p.p.	2018	2023	Difference in p.p.
Technology implemented and used	71.9	96.6	+24.7	29.8	69.0	+39.2	22.8	60.3	+37.5
Technology in the implementation phase for future use	19.3	3.4	-15.9	15.8	24.1	+8.3	14.0	3.5	-10.5
Technology not used, incl. situations where implementation has not started	8.8	0.0	-8.8	54.4	6.9	-47.5	63.2	36.2	-27.0

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.108 Innovative technologies: Implementation and usage - Blockchain, artificial intelligence, and cloud computing, and A.109 Innovative technologies: Implementation and usage - Data science, robotic process automation, and APIs, <http://isoraadata.org> (accessed on 1 October 2025).

This increasingly sophisticated use of analytics on expanded data sets is leading to a sharpening of risk management and the development of a range of intervention actions, including through automated processes. Box 6.4. contains a variety of examples on the use of advanced analytics techniques by tax administrations.

Additionally, the OECD report *Advanced Analytics for Tax Administration: Putting data to work* (OECD, 2016^[7]) provides practical guidance on how tax administrations can use analytics to support compliance and service delivery.

With the use of analytics becoming a common and integrated part of tax administrations across the world, in developed and developing countries alike, the OECD's Forum on Tax Administration (FTA) developed the *Analytics Maturity Model* (OECD, 2022^[8]) to help tax administrations self-assess their current level of maturity in their analytics usage and capability. This provides insight into their current status by identifying areas of weaknesses as well as strengths.

Box 6.4. Examples – Use of advanced analytics techniques for risk management

Australia – Unstructured data analytics

The ATO is developing a selection of tools to support faster, more reliable use and analysis of the large amounts of data it collects in unstructured formats, including AI models, robotic process automation and search functionality.

An example is a new tool used in the Justified Trust programme, which is used to assure the ATO's top 1 000 public and multinational businesses that have substantial economic activity related to Australia. Following the completion of an assurance review, a comprehensive report is prepared outlining ATO's findings and recommendations for each area that is assured. The unstructured nature of the information previously limited the ATO's ability to develop intelligence across the hundreds of reports generated by the programme. However, the new analytics capability extracts information from the reports, using AI to identify information of interest and index the text. A user interface is available through which the information across the set of reports can be filtered and searched.

This enables case teams to better identify taxpayers with similar issues and more efficiently undertake future assurance reviews, as well as ensuring consistency across the population. This has improved the ATO's reporting abilities, due to the ability to provide greater insights and granularity at the same time. This in turn enables the ATO to provide clearer guidance to the population through its annual Findings Report. Risk and intelligence functions are also better able to identify trends and emerging areas of concern, due to the increased visibility they have of the assurance outcomes.

Australia – Advanced Analytics Platform Cloud

The ATO has introduced the Advanced Analytics Platform Cloud (AAP Cloud), which provides a secure environment for data scientists and engineers to develop machine learning models. The AAP Cloud infrastructure is hosted in a private cloud and provides secure access to data in ATO systems.

Open-source services have been used, which deliver cost savings and have the flexibility to adapt when new technologies emerge, or requirements change. The use of cloud computing also provides the ability to dynamically scale operations to access additional computing power, which is an advantage over other options such as on-premises infrastructure.

The machine learning models operating on the AAP Cloud are being used to identify potential non-compliance, and the ability to develop and deploy artificial intelligence at scale has helped support the treatment of risks, particularly fraud, where risk behaviours have rapidly changed. The models have also supported tailored engagement with taxpayers and their representatives in real-time, helping the ATO in providing a better service to taxpayers.

China (People's Republic of) – Integrating geographic information technology with tax management

In 2024, the STA launched the Taxation-Geographic Information System (T-GIS), a system that integrates geographic information technology with tax management. This system enhances the tax filing experience for taxpayers and facilitates the efficiency of tax risk management and decision-making for tax officials.

First, T-GIS transforms tax filing through visualisation. It has established a database with 38.5 million locations and numerous taxpayer addresses, which are integrated into the online E-Tax Platform. This enables taxpayers to have information automatically displayed on their real estate assets, the applicable tax rates, and even to measure land areas. As a result, the efficiency and accuracy of tax filing are significantly improved.

Second, by geocoding taxpayers' registered addresses and mapping housing and land tax sources, T-GIS allows tax officials to identify compliance risks remotely using AI and modelling comparison techniques. AI can automatically identify taxable lands in different forms and achieves an intelligent monitoring of tax sources from remote images, while a modelling comparison superimposes and compares various tax-related information on the map to detect potential tax evasion and avoidance risks.

Third, T-GIS equips tax officials with multi-dimensional analysis tools that cover nine tax categories, looking at a macro to micro perspective. Tax officials can carry out macro research on tax revenue, tax sources and economic analysis of specific taxes, as well as micro-level studies using satellite images and detailed tax source locations.

Italy – Innovations to counter Value Added Tax fraud

The IRA has taken innovative steps to fight against VAT fraud.

Since 2024, the IRA has been working on a project which aims to map 'high intensity VAT evasion', through advanced analytical techniques. The model is used to group taxpayers into clusters corresponding to different levels of risk. This then allows the IRA to predict potential VAT evasion by high-risk persons and prevent revenue loss.

A new tool has also been developed – TaxnetVA – that integrates varied data sources to enable a visualisation of the different relationships between economic entities. This makes it easier to identify any suspicious chains, which characterise intra-community VAT fraud. This information is presented in easily interpretable graphs. Economic entities are displayed as points (called 'nodes'), and the relationships between them drawn as 'edges'. Each node has a list of properties, such as business activity, turnover, legal form etc. Similarly, information is also given for each edge, such as transaction and VAT amount, shareholder percentage, and corporate role. The nodes and edges are characterised with different colours and sizes depending on their specific characteristics (such as active verses ceased activity or partnership verses company), to give a clear visual of how risky the enterprise is.

Japan – Using artificial intelligence and data analytics to collect tax

The NTA is working to refine and improve tax collection by using AI to analyse a wide range of data in determining how best to respond to non-compliant taxpayers based on their circumstances.

Specifically, through business analytics tools and programming languages, the NTA has built a model which can predict the most effective method of contacting each non-compliant taxpayer. This includes making phone calls, in-person visits and sending letters based on various personal information (including previous contact records, tax-return data and the taxpayer's business type), so that taxes can be collected efficiently.

The NTA has also constructed a response prediction model that analyses information on non-compliant taxpayers, including their past contact records, which predicts the days of the week and time of day when they are more likely to respond to phone calls. Consequently, the response rate increased by 8.6 percentage points compared with non-use of AI, during the period of July 2023 to June 2024.

Thailand - Enhanced income and invoice classification

Thailand's tax administration has integrated NLP to innovate and streamline the classification of taxable income and electronic-invoicing (e-invoicing) data.

Previously, manual processing of withholding tax forms and invoices was time-intensive and prone to errors due to the varied and detailed descriptions provided by taxpayers. By implementing NLP, the accuracy of income classification in withholding tax data has improved by 60%, enabling better risk assessment. This system supports the detection of discrepancies, such as inconsistencies between

reported income in withholding taxes versus VAT declarations; and assists in compliance analysis by identifying taxpayers who haven't filed annual returns, despite having tax withheld.

Moreover, NLP plays a crucial role in efforts to expand the tax base through the categorisation of e-invoicing data. By efficiently sorting invoices into personal and business-related expenditures, NLP simplifies the process of identifying businesses that are not registered in the tax system and ensuring they register. The results of this categorisation guide follow-up actions, such as notifying potential non-compliant entities. This integration enhances compliance and equips tax officers with a reliable tool for conducting thorough and efficient tax audits.

The methodology is based on modelling each phase of the process through a suitable probability distribution. These different models are then combined to predict a score expressing the overall profitability of the investigation of each selected taxpayer.

Sources: Australia (2025), China (People's Republic of) (2025), Italy (2025), Japan (2025) and Thailand (2025).

Taxpayer programmes

Another approach for targeted risk management is the creation of units looking into the tax affairs of specific taxpayer segments. Two specific areas where tax administrations have found it advantageous to manage specific groups of taxpayers on a segmented basis are large business taxpayers, and high net wealth individuals (HNWIs). The rationale for focusing administration resources on managing these groups revolves around the:

- **Significance of tax compliance risks:** due to the nature and type of transactions, offshore activities, opportunity and strategies to minimise tax liabilities; and in the case of large business, the differences between financial accounting profits and the profits computed for tax purposes.
- **Complexity of business and tax dealings:** particularly the breadth of their business interests and in the case of HNWI, the mix of private and tax affairs.
- **Integrity of the tax system:** the importance of being able to assure stakeholders about the work undertaken with these high-profile groups of taxpayers.

Box 6.5. Chile – International metrics: risk zones

The SII has implemented a new risk assessment framework, introducing risk zone indicators to monitor multinational business groups, high-net-worth individuals, and strategic industries. This system aims to enhance transparency and compliance by evaluating the tax behaviour of taxpayers engaged in international operations or classified as high net worth individuals.

The framework establishes three risk levels—low, medium, and high—with specific metrics tailored to each category:

- **Mining business groups:** The risk classification is based on four key metrics: effective business tax rate; overall effective tax rate; total tax contribution; and three-year tax burden. These metrics are evaluated using sector-specific interquartile ranges.
- **High-net-worth individuals:** They undergo a two-phase assessment process. Initially, they are categorised based on total wealth. Subsequently, an effective tax rate is calculated considering all income sources, regardless of taxability, to determine their risk classification.

- Industrial sectors involved in transfer pricing operations: Specifically motor vehicles, machinery, healthcare, and electronics—risk zones are determined by analysing the relationship between a company's functional profile, asset ownership, and risk assumption in distribution activities.

This comprehensive framework strengthens SII's ability to identify and manage tax compliance risks while providing taxpayers with clearer guidance on their risk status. By implementing these targeted assessment criteria, SII aims to promote more effective tax oversight and encourage greater compliance among international taxpayers.

Source: Chile (2025).

Additionally, in the case of large taxpayers, while being a small number of taxpayers, they are typically responsible for a disproportionate share of tax revenue collected. Even though large taxpayer offices/programmes manage only 2.7% of corporate taxpayers, on average they account for 44% of all net revenue collected, including withholding payments on behalf of employees (Table 6.5.). Looking at the individual country-level, the data indicates that for most jurisdictions between 30% and 60% of their total net revenue was received from taxpayers covered by their large taxpayer programmes (see Figure 6.2).

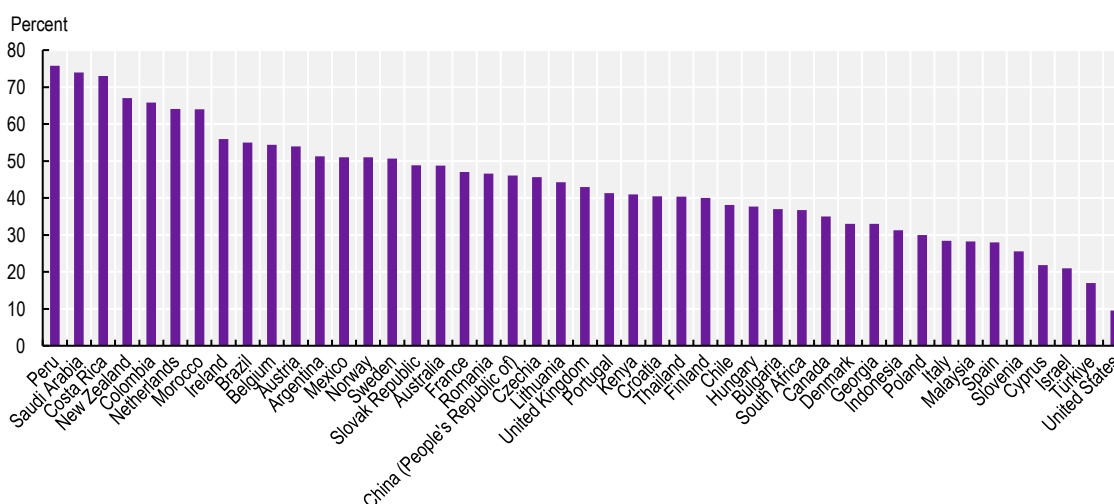
Table 6.5. Importance of large taxpayer offices / programmes (LTO/P), 2023

FTEs in LTO/P as percentage of total FTEs	Corporate taxpayers managed through LTO/P as percentage of active corporate taxpayers	Percentage of net revenue administered under LTO/P in relation to total net revenue collected by the tax administration	FTEs on audit, investigation and other verification function in the LTO/P as percentage of total FTEs in LTO/P	Total value of additional assessments raised through LTO/P as percentage of total value of additional assessments raised from audits
3.8	2.7	43.8	60.4	33.4

Note: The table shows the average percentages across the jurisdictions that were able to provide the information.

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.17 Large taxpayer office / program ratios: Full-time equivalents (FTEs), and D.18 Large taxpayer office / program ratios: Corporate taxpayers, additional assessments raised, and net revenue administered, <http://isoradata.org> (accessed on 1 October 2025).

Figure 6.2. Percentage of revenue administered through large taxpayer offices/programmes, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.18 Large taxpayer office / program ratios: Corporate taxpayers, additional assessments raised, and net revenue administered, <http://isoradata.org> (accessed on 1 October 2025).

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While the management of these groups of taxpayers is often undertaken as a programme, in a large number of jurisdictions these programmes are also structural involving a Large Taxpayer Office or HNWI unit. As can be seen in Table 6.6. for large taxpayer offices / programmes, the scope of the work of these units varies considerably, ranging from undertaking traditional audit activity, through to “full service” approaches which may also encompass co-operative compliance programmes (see Chapter 8 for more on this). However, on average 60% of tax administration staff in large taxpayer offices or programmes are working on audit, investigation and other verification related issues (see Table 6.5.).

Table 6.6. Large taxpayer offices / programmes: Existence and functions carried out, 2023

Percentage of administrations

Large taxpayer office / programme exists	If yes, functions carried out ...					
	Registration	Return and payment processing	Services	Audit	Collection of arrears	Dispute resolution
86.2	52.0	64.0	98.0	100.0	62.0	76.0

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.34 Large taxpayer office / program: Existence and revenue collected, A.35 Large taxpayer office / program: Functions - Registration, return and payment processing, and services, and A.36 Large taxpayer office / program: Functions - Audit, debt collection, dispute resolution, <http://isoradata.org> (accessed on 1 October 2025).

Table 6.7. High net wealth individuals programmes: Existence and functions carried out, 2022

Percentage of administrations

High net wealth individuals programme exists	If yes, ...	Percentage of net revenue administered under high net wealth individuals programme in relation to total tax revenue collected by the tax administration
	Part of large taxpayer office / programme	
43.1	56.0	7.0

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.40 High net wealth individuals (HNWIs) office / program: Existence and revenue collected, <http://isoradata.org> (accessed on 1 October 2025).

Planning for future risks

While it is key for tax administrations to understand current compliance risks and prepare appropriate response strategies, it is equally important to understand and prevent risks which may arise in the future. The increasing availability of data along with the enhanced capacity of tax administrations to handle and analyse that data allows tax administrations to more robustly assess future tax risks.

The ability to identify, understand and manage risks in a rapidly changing environment is a critical element of successful and resilient tax administration. Table 6.3. highlights the large number of tax administrations who engage in forecasting, which is putting them in a position to assess where new compliance risks may arise, and to develop appropriate mitigation strategies. This is leading to the creation of sophisticated risk management programmes, that can embed risk management across the organisation and even across government rather than being carried out in silos, as illustrated by the example from France in Box 6.6.

Box 6.6. France – Using algorithms to detect businesses in difficulty

France have introduced a new project, Signaux Faibles (meaning weak signal), to facilitate the coordination of the General Directorate of Public Finances (*Direction Générale des Finances Publiques*, DGFIP) with other government agencies to detect and support companies in difficulty as early as possible, so that action can be taken to avoid bankruptcy.

This digital project is based on a partnership between five different French government agencies with an interest in supporting businesses - DGFIP, the Bank of France, the General Directorate for Business, the General Delegation for Employment, and the Social Security Agency. These five partners share their data to feed a predictive artificial intelligence algorithm by cross-referencing a range of tax and social security data. Its target is to detect companies (generally small and medium enterprises) likely to enter insolvency within eighteen months. Every quarter, the algorithm is fed the latest data, and produces a list of companies at risk of insolvency.

Signaux Faibles is accessible to approximately 1 000 authorised civil servants from the partner government agencies, and offers the ability to:

- View the quarterly list of companies detected as potential for bankruptcy by the algorithm;
- Consult company data; and
- Exchange information relating to the support of companies in difficulty, in order to ensure everyone has the relevant information, better coordinate actors and record actions.

Once the detected companies have been further investigated, supplemented by internal data and analysis, companies are contacted proactively in order to offer assistance and suggest solutions.

Source: France (2025).

Preventing non-compliance

Tax administrations rely heavily on the positive compliance attitudes of taxpayers in reporting and paying their taxes. This is often termed “voluntary compliance”. Compliance attitudes are particularly important where tax administrations rely heavily on taxpayers to undertake full and accurate self-reporting of taxable income and taxable events and to make payments.

As highlighted in Chapter 5, tax compliance can be heavily affected by elements outside of the control of the tax administration, but they can use a variety of service-related approaches to support voluntary compliance and prevent non-compliance. Typically, those approaches take place before tax returns are filed and include:

- Reminding taxpayers of deadlines (filing and paying);
- Facilitating taxpayer access to third-party data already collected, for example, through pre-filing regimes or access to such data through taxpayer portals;
- Running targeted campaigns to encourage compliance; and
- Providing educational and support initiatives.

However, there are also non-service-related approaches that tax administrations have at their disposal to influence compliance, such as providing taxpayers with information on predetermined compliance interventions. Knowing that an intervention might come, may encourage taxpayers to pay closer attention to tax compliance issues.

Behavioural insights and nudges

Another approach for preventing non-compliance is the use of behavioural insights. Behavioural insights is an interdisciplinary field of research using principles from the behavioural sciences such as psychology, neuroscience, and behavioural economics to understand how individuals absorb, process, and react to information. These principles can be used to design practical policies and interventions based on human behaviour. This can be particularly powerful when combined with insights gathered from the analysis of the increasingly large volumes of data available to tax administration, both internally and externally generated. One example of this are nudge messages during the return filing process, providing taxpayers with an indication where there might be potential issues/ errors in the figures being reported.

As noted in Table 10.4. of the 2024 edition of this series, around half of the administrations report employing behavioural researchers (OECD, 2024^[3]) and the 2021 report *Behavioural Insights for Better Tax Administration: A Brief Guide* prepared by the FTA's informal Community of Interest on Behavioural Insights contains many examples of this in practice (OECD, 2021^[9]). Box 6.7. looks at some of the ways in which administrations are using behavioural insights and nudges to make taxpayers aware of their obligations and increase compliance.

Box 6.7. Examples – Behavioural insights and nudges

Canada – Taxpayer behavioural analytics

The CRA Digital Services allow Canadians to sign up for email notifications when creating a CRA My Account. Upon registration, users receive a confirmation email encouraging them to complete their My Account setup if they have not already.

To enhance My Account registrations, the CRA conducted a behavioural insights campaign in collaboration a post-secondary institution. This four-week experiment in June 2022 targeted approximately 900 000 participants, who received one of nine different follow-up email messages testing various behavioural interventions. The initiative was highly successful, resulting in over 90 000 new My Account registrations and valuable insights into user behaviour.

In March 2024, the CRA launched a new Digital Identity Validation service, enabling Canadians to register and access CRA sign-in services in real-time, thus eliminating the need to wait up to 10 business days for a security code by mail.

Building on this success, in January 2025, the CRA partnered with academics to initiate the second phase of the experiment. This phase targeted individuals who had registered for email notifications but had not completed their My Account registration. By utilizing the new Digital Identity Validation service, the CRA aimed to encourage these users to finalize their registration and access their online mail, ultimately enhancing their overall experience with CRA services.

Türkiye – VAT and Stamp Tax compliance measures

The Turkish Revenue Administration regularly sends informative SMS messages to encourage taxpayers to file their VAT returns and make both Stamp Tax and VAT payments before the deadline. This communication strategy, which is based on behavioural insights, aims to raise taxpayers' awareness and help them adopt the correct behaviours.

These messages are used as an effective tool to enhance taxpayers' compliance levels. The messages emphasise the legal consequences, financial losses, and potential penalties that may arise if obligations are not met, thereby supporting taxpayers in making informed decisions. Additionally, the SMS messages provide practical information on how to fulfil these obligations, simplifying the process for taxpayers.

In 2024, SMS notifications were sent to a total of 7 295 513 VAT taxpayers. Among them, 1 211 782 messages were sent regarding VAT principal obligations, and 6 083 731 messages were sent concerning Stamp Tax responsibilities. SMS reminders were sent every month to taxpayers who had not made their payments within five days after the deadline. Approximately five days after the SMS is sent, collection/accrual rates are measured based on the payments made by taxpayers. The average increase in the collection/accrual rate was calculated at 13.37% for VAT, and 15.30% for Stamp Tax, demonstrating the positive effects of this approach.

Sources: Canada (2025) and Türkiye (2025).

Taxpayer rating programmes

Over the past years, there has been an increasing number of administrations reporting the introduction of taxpayer rating programmes to encourage compliance through instilling a sense of responsibility around paying taxes and providing indicators for taxpayers to measure how well they are complying with their obligations. To further incentivise compliance, this is sometimes accompanied with a rewards system for those who comply. Box 6.8. contains an update from Latvia on one such programme.

Box 6.8. Latvia – Taxpayer ratings update

In the 2024 edition of this publication (OECD, 2024^[3]), Latvia's State Revenue Service (SRS) outlined its taxpayer ratings for companies, which enable companies to track their compliance performance and improve it. Each company can access its rating and an explanation of how it is formed in their Electronic Declaration System profile.

This system is being continuously developed with new improvements. Now, anyone interested can view a company's taxpayer rating overall assessment in the SRS public database. More detailed information about taxpayers' rating indicators is available only to a company in their Electronic Declaration System profile and is not publicly available. These indicators help companies to understand where and how they can improve their rating. However, a company can share this detailed information on their taxpayer's rating with business partners and public bodies, building trust in the tax community. The SRS provides cooperation benefits for companies with higher ratings, whilst restrictions are in place for companies with a lower rating.

A detailed description of the taxpayer rating system and criteria used for evaluation is now also publicly available on the SRS website to ensure transparency. The continuous development of the Taxpayer's Rating System includes improvements to the evaluation criteria and calculation algorithm.

Source: Latvia (2025).

As regards preventing non-compliance, it is important to note that many of the other Chapters also include information on the work tax administrations are doing to positively influence tax compliance, for example, pre-filing regimes (Chapter 4), taxpayer services (Chapter 5), or mechanisms to prevent disputes

(Chapter 8). However, it is essential to be aware that this is only a glimpse of the work tax administrations are doing to ensure compliance.

Performance in addressing non-compliance

Tax administrations determine through a combination of methods and tools whether a taxpayer is non-compliant with their obligations. This may include data matching programmes; data analytics and the use of algorithms, for example, as part of compliance risk models; information sharing between government agencies and jurisdictions; and risk reviews where officials might look into public records and social media.

Based on those methods and tools, a tax administration might request further information or provide a taxpayer the opportunity of voluntary disclosure. Where deemed necessary, a “compliance action” will be launched to determine whether taxpayers have properly reported their tax liability.

Electronic compliance checks

The increasing availability of data and the introduction of sophisticated analytical models and artificial intelligence are allowing administrations to better identify returns and claims or transactions which might require further review or be fraudulent. Furthermore, these models, many of which can operate in real-time, are allowing administrations to conduct automated electronic checks on all returns or on transactions of a particular type.

The use of automated electronic checks or using rules-based approaches to treat some defined risks (for example, automatically denying a claim, issuing a letter or matching a transaction) is providing administrations with more effective and efficient ways to undertake some of this work. As Table 6.8. indicates, more than 90% of administrations are using electronic compliance checks as part of the return filing process, with:

- Around two-thirds of those doing this during the process of completing the return or while submitting it, for example, via prompts and real-time nudging indicating that information might be missing or deductions too high; and
- More than 85% using electronic checks post return submission.

Table 6.8. Electronic compliance checks, 2023

Percentage of administrations that undertake the relevant approach

Electronic compliance checks used as part of the returns filing process	If yes, checks are made ...		
	During process of completing the return	On submitting the return	Post submission of return
91.4	64.2	64.2	86.8

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.86 Verification / audit activity: Electronic compliance checks, <http://isoraadata.org> (accessed on 1 October 2025).

Audits

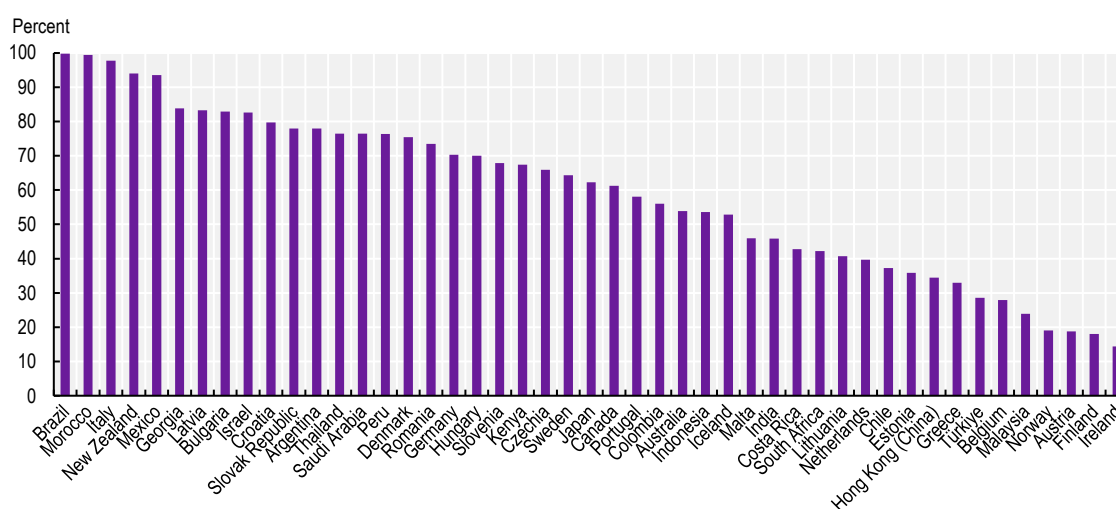
On average, at around 60% audit adjustment rates have remained stable over the period 2018 to 2023 (see Table 6.9.). However, as shown in Figure 6.3., the rates vary significantly across the administrations covered by this report.

Table 6.9. Audit adjustment rates and additional assessments raised, 2018-23

	2018	2019	2020	2021	2022	2023
Audit adjustment rates – in percent (40 jurisdictions)	57.4	58.8	57.9	60.7	61.6	59.8
Additional assessments raised through audits as a percentage of tax collections (48 jurisdictions)	4.0	4.0	4.2	3.9	3.2	3.0

Note: The table shows the average audit adjustment rates and additional assessments raised through audits (excluding electronic compliance checks) for those jurisdictions that were able to provide the information for the years 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.46 Audit ratios: Hit rate and additional assessments raised, <http://isoradata.org> (accessed on 1 October 2025).

Figure 6.3. Audit adjustment rates, 2023

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.46 Audit ratios: Hit rate and additional assessments raised, <http://isoradata.org> (accessed on 1 October 2025).

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A direct comparison of the audit adjustment rates for the 10-year period 2014 to 2023 is not possible as the 2014 ISORA data distinguished between different audit types and the adjustment rates for the total number of audits completed are only available for a few jurisdictions. However, looking at the adjustments rates by audit type, shown in Table 6.10., it appears that the 2014 figures are very similar to the overall adjustment rates reported in Table 6.9. for the period 2018 to 2023.

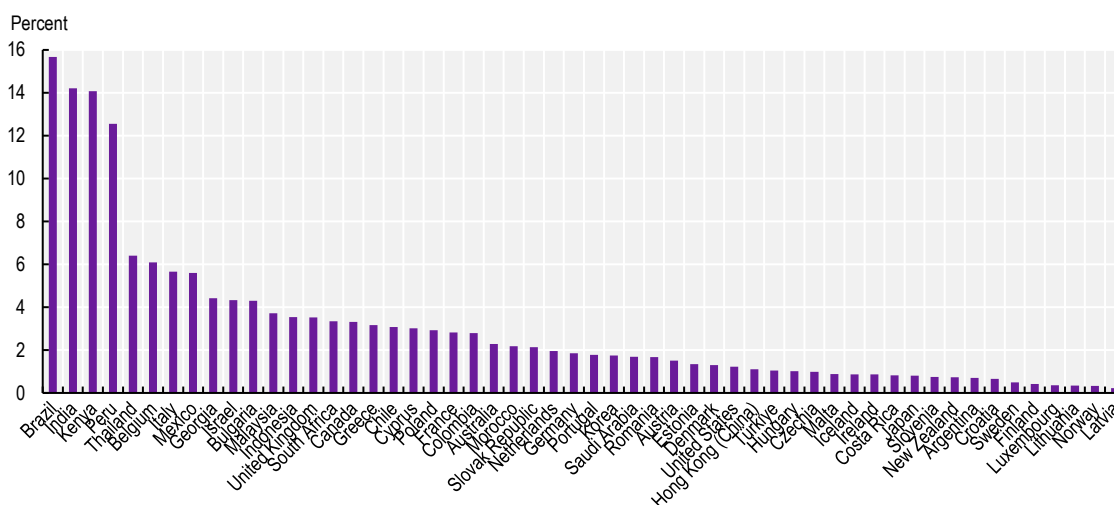
Table 6.10. Audit adjustments rates, 2014

Audit type	2014
Comprehensive audits (30 jurisdictions)	79.0
Issue-oriented audits (29 jurisdictions)	67.4
Desk audits (19 jurisdictions)	51.5
Corporate income tax audits (27 jurisdictions)	54.1
Personal income tax audits (27 jurisdictions)	63.5
Value added tax audits (30 jurisdictions)	54.7

Source: OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.16, https://doi.org/10.1787/tax_admin-2017-en.

The importance of audits can be seen when looking at the additional assessments raised. Between 2018 and 2023, the additional assessments raised from audits were on average between 3% and 4.2% of total revenue collections. However, while this has been relatively flat over the years 2018 to 2021, it declined noticeably in 2022 and 2023 (see Table 6.9.). Looking at the jurisdiction level data, it can be seen that there are significant differences across the 54 administrations that were able to provide data (see Figure 6.4.).

Figure 6.4. Additional assessments raised through audit as percentage of tax collections, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.46 Audit ratios: Hit rate and additional assessments raised, <http://isoraadata.org> (accessed on 1 October 2025).

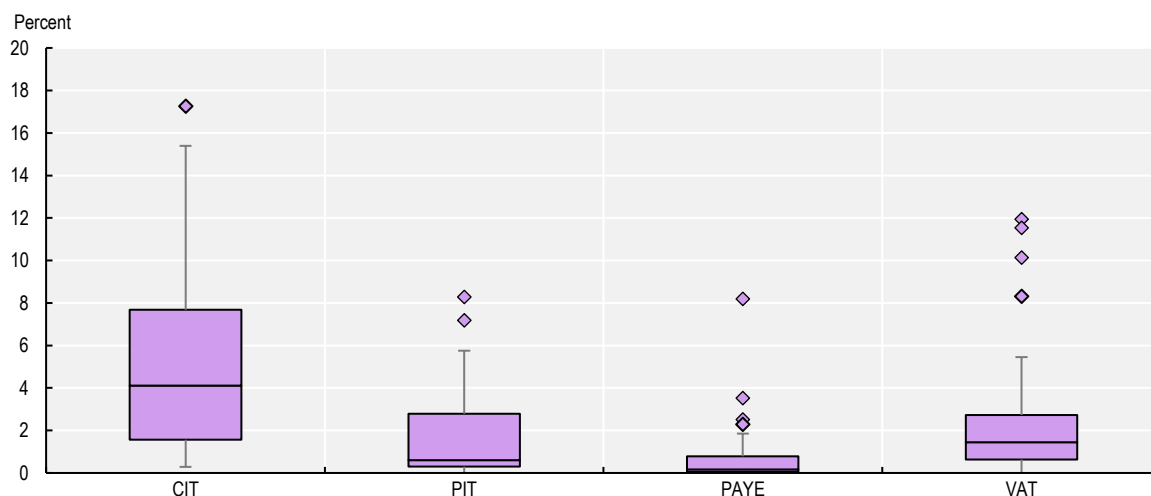
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Figure 6.5. looks at the distribution of the ratio of additional assessments raised to tax collected across jurisdictions for the main tax types. The boxes depict the 2nd and 3rd quartile (i.e. the central 50% of jurisdictions) with the middle line indicating the median value. This shows that:

- The distribution of the values is the greatest for CIT with a median of around 4%;
- For PIT and VAT, the values are very similar for the central 50% of jurisdictions: for PIT between 0.3% and 2.8% and for VAT between 0.6% and 2.7%;
- The values are the lowest for PAYE, between 0.05% and 0.8% for the central 50% of jurisdictions;
- There are some significant outliers, and it should be noted that for CIT the figure does not show two outliers that are above 20%.

In many jurisdictions, the additional assessments raised through LTO/PS make-up a significant share of the total additional assessments raised from audits (see Figure 6.6.). On average, LTO/PS contribute around one-third of the total additional assessments raised from audits (see Table 6.5.).

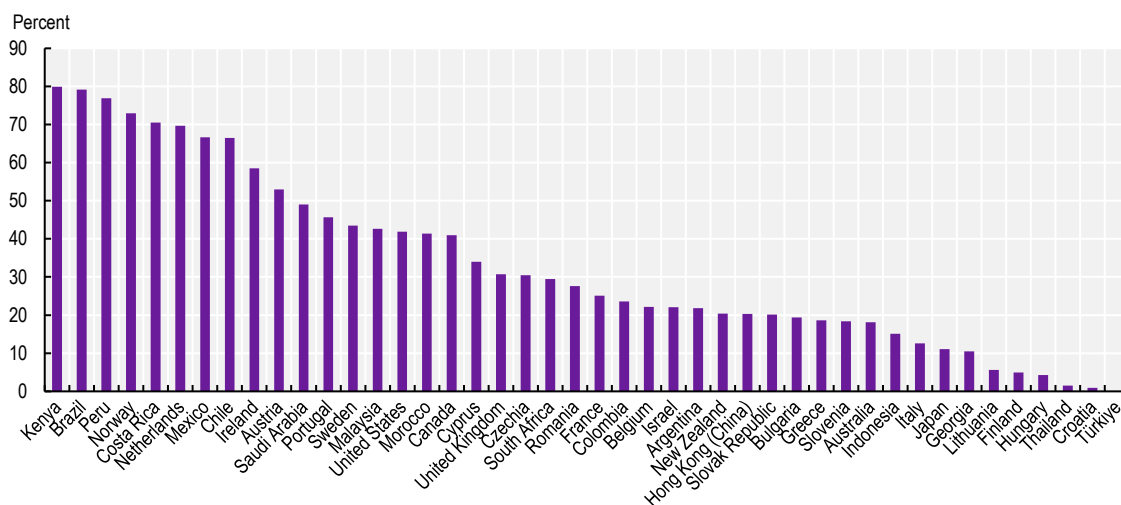
Figure 6.5. Range of additional assessments raised through audit as percentage of tax collected by tax type, 2023



Note: As regards CIT, the figure does not show the outliers above 20% even though those data points were used for the underlying calculations. Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.47 Audit ratios: Additional assessments raised by tax type - CIT and PIT, and D.48 Audit ratios: Additional assessments raised by tax type - PAYE and VAT, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/giyhlu>

Figure 6.6. Additional assessments raised from audits undertaken by large taxpayer offices/ programmes as a percentage of additional assessments raised from all audits, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.18 Large taxpayer office / program ratios: Corporate taxpayers, additional assessments raised, and net revenue administered, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/hx19wk>

The ISORA data provides insight into the change in the additional assessments raised from audits by tax type for the 10-year period from 2014 to 2023. As can be seen in Table 4.2., the average values decreased significantly for PIT, CIT and VAT, which could hint at effective up-front compliance programmes and improved compliance behaviour, potentially a result of better services and taxpayer education programmes, and a deterrent effect with taxpayers understanding that tax administrations hold an increasing amount of data.

Table 6.11. Average of additional assessments raised through audit as percentage of tax collected by tax type, 2014 and 2023

Tax type	2014	2023	Difference in percentage points
Personal income tax (24 jurisdictions)	2.3	1.3	-1.0
Corporate income tax (25 jurisdictions)	12.2	5.5	-6.7
Employer withholding (18 jurisdictions)	0.7	1.2	+0.5
Value added tax (26 jurisdictions)	6.5	2.4	-4.1

Note: The table shows the average of additional assessments raised through audit as percentage of tax collected for those jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parentheses.

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.47 Audit ratios: Additional assessments raised by tax type - CIT and PIT, and D.48 Audit ratios: Additional assessments raised by tax type - PAYE and VAT, <http://isoradata.org> (accessed on 1 October 2025), and calculations based on OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Tables A.17, A.28, A.29, A.161 and A.162, https://doi.org/10.1787/tax_admin-2017-en.

Tax crime investigations

As mentioned in Chapter 2, close to two-thirds of the tax administrations covered in this publication are involved in conducting tax crime investigations, and the ISORA survey asked them to provide information regarding the number of cases referred for prosecution.

Table 6.12. shows the total number of cases referred for prosecution during the fiscal year for the 30 administrations that have responsibility for conducting tax crime investigations and that were able to provide the data for the years 2018 to 2023. The annual reduction of the total number of cases referred for prosecution that is visible between 2018 and 2022 has come to an end in 2023 when the total number of cases referred for prosecution increased by 15% compared to 2022. However, the 2023 value is still well below the values reported for 2018 to 2021.

Table 6.12. Evolution of tax crime investigation cases referred for prosecution between 2018 and 2022

Year	No. of cases referred for prosecution during the fiscal year	Change in percent (compared to previous year)
2018	41 081	
2019	39 768	-3.2
2020	33 210	-16.5
2021	29 918	-9.9
2022	23 523	-21.4
2023	27 106	+15.2

Note: Only includes data for administrations that have responsibility for tax crime investigation and were able to provide the information for the years 2018 to 2022.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.88 Tax crime investigations: Number of cases, <http://isoradata.org> (accessed on 1 October 2025).

This is also reflected in the jurisdiction level data, which shows that 60% of administrations with responsibility for conducting tax crime investigations reported an increase in the number of cases referred for prosecution between 2022 and 2023 (see Table A.88).

Looking at the 10-year period between 2014 and 2023, data for 23 jurisdictions shows that in almost three-quarters of administrations the number of cases referred for prosecution decreased. (Calculation based on Table A.135 in the 2017 edition (OECD, 2017^[10]) and Table A.88 in the ISORA database.)

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7

Collection

This chapter comments on tax administration performance in managing the collection of outstanding taxes, and describes the features of a modern tax debt collection function and the approaches applied by administrations to prevent debt being incurred.

Introduction

The collection function involves engaging with, and potentially taking enforcement action, against those who do not file a return on time and/ or do not make a payment when it is due. Even with the growth in pre-filled or no-return approaches over past years (see Chapter 4), the filing of a tax return or declaration is still required in many jurisdictions participating in this publication. Although 2023 on-time filing rates (based on returns received) averaged between 85% and 93%, more than 130 million returns were not filed on time that year (see Tables 4.7. as well as A.47, A.51, A.55, and A.60). It is important therefore that administrations continue to focus efforts on improving the timely collection of late and outstanding returns.

Looking at the collection of late payments, all but one administration participating in the survey report that staff resources are being devoted to taking action to secure the payment of overdue tax payments (the Chilean tax administration reported not being responsible for debt collection; see Table A.19). Information provided by administrations attribute on average around 10% of total staff numbers to the collection function (see Chapter 9).

This chapter:

- Takes a brief look at the features of a modern tax debt collection function, including the elements of a successful tax debt management strategy and the preventive approaches to debt that are being taken; and
- Comments on tax administration performance in managing the collection of outstanding debt.

It should be noted that a detailed overview of debt collection powers and their usage by tax administrations can be found in the 2024 edition of this series (OECD, 2024^[1]).

Features of a debt collection function

To maintain high levels of voluntary compliance and confidence in the tax system, administrations must ensure that their debt collection approaches are both “fit for purpose” and meet taxpayer’s expectations of how the system will be administered. This means not only taking firm action against taxpayers that knowingly do not comply, but also using more customer service style approaches where taxpayers want to meet their obligations, but for reasons such as short-term cash-flow issues, are not able to do so.

Increasingly, tax administrations are taking an end-to-end or systems view of their processes and researching the reasons why returns may not be filed or payments made. They are also using information about the taxpayer’s previous history, to identify patterns and/or anomalies. Box 7.1. highlights some developments in this area.

Box 7.1. Examples – Improving debt collection

Belgium – Project ARGUS

Belgium’s General Administration of Taxes has embarked on a major digital transformation process. This has included creating a state-of-the-art debt database (FIRST), a taxpayer interaction platform – “MyFinaccount”, and a set of advanced, datamining-based, predictive analytics tools.

However, to manage the recovery process more efficiently, the ARGUS initiative was developed. It consists of 4 phases:

- In Phase 1 a visual dashboard was built, presenting the solvency (overview of assets) of a debtor.
- In Phase 2, the system was set-up to automatically complete all forms and documents related to asset seizures and garnishments.
- Phase 3 will see the full integration of the existing predictive models into ARGUS, allowing it to propose recovery actions based on specific business rules. These models analyse large datasets at regular intervals in order to present the end-user with a multi-criteria and rule-based classification of debtors. For each class of debtors, a set of recommended recovery actions will be proposed. This is due to be completed by December 2025.
- Finally, in a future Phase 4, Artificial Intelligence will be integrated in ARGUS to analyse all available data and identify payment evasion patterns, and to improve the prioritisation of the recovery action with the highest possibility of success.

Lithuania – New debt management strategy – targeted recovery

The State Tax Inspectorate of Lithuania (STI) has applied the OECD's Debt Management Maturity Model (OECD, 2019^[2]) to identify potential development for its debt recovery processes. This evaluation has influenced the STI's long-term debt management goals.

The STI's current approach focuses more on personalised, data-driven approaches, allowing the STI to adapt to constantly changing environments. An evaluation will be conducted to determine how debtors can be categorised based on their willingness/ capacity to pay. One potential approach is that categories could range from those who want to comply but lack the necessary knowledge or resources, to those who deliberately avoid paying tax despite having the means to do so. Different responses would then be considered for the different categories, ranging from educational outreach to strict enforcement measures.

Additionally, the STI will continue to leverage automation and advanced analytics to reduce the input from staff, ensuring efficient use of resources. A predictive model is in development to assess the likelihood of debt repayment. This will apply algorithms to analyse historical taxpayer data that identifies patterns which indicate which taxpayers are unlikely to repay their debts within the set timeframe. Beyond analysing an individual taxpayer's past behaviours, the model will also compare similar taxpayers to identify the shared characteristics associated with a higher risk of non-compliance. The goal is to promptly identify taxpayers who should be subject to additional debt recovery measures at an earlier stage. Based on the predictions, the recovery actions will be prioritised accordingly.

Sources: Belgium (2025) and Lithuania (2025).

Essential features of a tax debt collection function

The 2014 report *Working Smarter in Tax Debt Management* (OECD, 2014^[3]) provided an overview of the modern tax debt collection function, describing the essential features as:

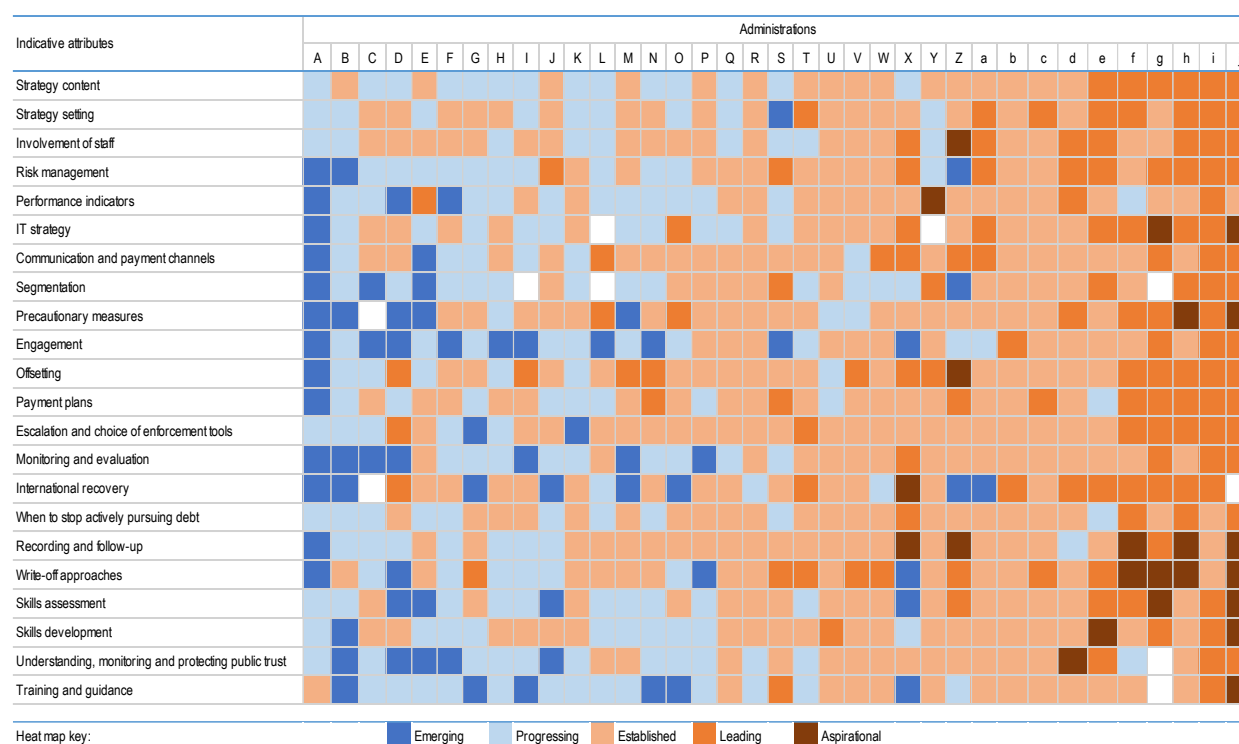
- **Advanced analytics** – that make it possible to use all the information tax administrations have about taxpayers to accurately target debtors with the right intervention at the right time.
- **Treatment strategies** – the collection function needs a range of interventions, from those designed to minimise the risk of people becoming indebted, to support taxpayers to make payments and to take appropriate enforcement measures where appropriate.
- **Outbound call centres** – which make it possible to efficiently pursue a large number of debts.

- **Organisation** – debt collection is a specialist function and is usually organised as such. The right performance measures and a continuous improvement approach help drive desired outcomes.
- **Cross border debts** – the proper and timely use of international assistance is crucial, particularly the “Assistance in Collection Articles” in agreements between jurisdictions.

The 2019 report *Successful Tax Debt Management: Measuring Maturity and Supporting Change* (OECD, 2019^[4]) provides further insights into the elements of a successful tax debt management strategy, setting out four strategic principles that tax administrations may wish to consider when setting their strategy for tax debt management. These principles focus on the timing of interventions in the tax debt cycle, from consideration of measures to prevent tax debt arising in the first place, via early and continuous engagement with taxpayers before enforcement measures, to effective and proportionate enforcement and realistic write-off strategies. The underlying premise for these principles is that focusing on tackling debt early, and ideally before it has arisen, is the best means to minimise outstanding tax debt. The report also contains a compendium of successful tax debt management initiatives and an overview of a comprehensive *Tax Debt Management Maturity Model* which was subsequently published as a self-standing document (OECD, 2019^[2]).

To make the maturity model easier to use and help to create a better global picture of maturity in tax debt management, the OECD published a new edition of the *Tax Debt Management Maturity Model* (OECD, 2025^[5]). The 2025 edition is shorter and focuses more on the core elements of successful tax debt management. As Figure 7.1. shows the new edition has already been completed by 36 tax administrations, presenting a global picture that can be useful to administrations in examining their own future reforms and also in identifying where future collaborative work, such as capacity building, might be of the most value.

Figure 7.1. Results of the Tax Debt Management Maturity Model self-assessments



Source: OECD (2025), Tax Debt Management Maturity Model, OECD Tax Administration Maturity Model Series, 2025 Edition, <https://www.oecd.org/content/dam/oecd/en/topics/policy-issues/tax-administration/tax-debt-management-maturity-model-2025-edition.pdf> (accessed on 1 October 2025).

Preventive approaches

A key area of focus for tax administrations is to take actions that prevent debt from arising, as this offers efficiency opportunities over collecting outstanding arrears.

Box 7.2. illustrates the approaches taken by some administrations. Advances in predictive modelling and experimental techniques as reported in the OECD report *Advanced Analytics for Better Tax Administration* (OECD, 2016^[6]), in the compendium of successful tax debt management practices contained in the OECD report *Successful Tax Debt Management: Measuring Maturity and Supporting Change* (OECD, 2019^[4]), or in Annex B of the 2025 version of the *Tax Debt Management Maturity Model* (OECD, 2025^[5]) are helping many administrations better match interventions with taxpayer specific risk. The approaches used fall into one of the following categories:

- **Predictive analytics**, which tries to understand the likelihood of certain outcomes and, as regards debt collection, includes modelling the risk that an individual or company will fail to pay as well as models that attempt to assess the likelihood of insolvency or other payment problems; and
- **Prescriptive analytics**, which is about predicting the likely impact of actions on taxpayer behaviour, so that tax administrations can select the right course of action for any chosen taxpayer or group of taxpayers. (OECD, 2016^[6])

Many administrations are blending both practices and have trialled a variety of approaches aimed at changing “taxpayer behaviour”. As noted in Chapter 6, around half of the administrations report employing behavioural researchers, and the use of behavioural insight practices has the potential to transform the approach to tax debt as administrations move away from the ‘one-size-fits-all’ approaches (where it is cost-effective to do so) and instead try to identify:

- Which cases should be subject to an intervention;
- When to intervene (for example, even before a return or payment might be due); and
- Which type of action would achieve the best cost-benefit outcome.

Box 7.2. Spain – Risk analysis strategies for recovery investigation

A new approach has been put in place that leverages data analysis techniques and IT tools alongside improved processes to improve efficiency in debt recovery. Under this approach, data analytic tools provide enhanced insights on the risk that a debt is not paid. Using this insight specialised teams can then apply specific strategies to triage risks, and conduct recovery actions on a large scale as well being able to take action to prevent debts occurring. An evaluation loop then analyses the outcomes of these actions to improve the service further.

Source: Spain (2025).

Performance in collecting outstanding debt

The total amount of outstanding arrears at fiscal year-end remains very large, in the region of EUR 2.7 trillion. For survey and comparative analysis purposes, “total arrears at year-end” is defined as the total amount of tax debt and debt on other revenue for which the tax administration is responsible that is overdue for payment at the end of the fiscal year. This includes any interest and penalties. The term also includes arrears whose collection has been deferred (for example, as a result of payment arrangements).

The total amount of “collectable arrears” at fiscal year-end was around EUR 990 billion. Collectable arrears is defined as the total arrears figure less (i) any disputed amounts for which collection action has been

suspended pending the outcome, (ii) amounts that are not legally recoverable, and (iii) arrears which are unable to be collected, for example, where the debtor has no funds or other assets.

As a result, and despite efforts to make data comparable, care needs to be taken when comparing specific data points as the administration of taxation systems and administrative practices differ between jurisdictions.

In 2023, the average ratio for total year-end arrears to net revenue collected was 29.3% (see Table D.41). As in past years, it remains heavily influenced by the very large ratios of a small number of jurisdictions that show ratios above 50%. If these jurisdictions are removed, the average reduces to 11.5% of net revenue (see Figure 7.2. and Figure 7.3. as well as Table D.41). (It should be noted that the percentages mentioned in this paragraph are different from those in Table 7.1. as the table shows average arrears ratios only for those jurisdictions that were able to provide the information for the years 2018 to 2023.)

Table 7.1. Average arrears ratios (in percent), 2018-23

Arrears ratio	2018	2019	2020	2021	2022	2023	Difference in percentage points between 2018-23
Total year-end arrears as percentage of net revenue collected (48 jurisdictions)	28.1	27.6	32.4	28.5	27.0	26.6	-1.5
Total year-end collectable arrears as percentage of total year-end arrears (39 jurisdictions)	49.8	50.5	53.7	54.3	54.7	55.0	+5.2

Note: The table shows average arrears ratios for those jurisdictions that were able to provide the information for the years 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses. Data for Bulgaria was excluded from the calculation as its data is not comparable across the period. Data for Kenya was excluded as the significant fluctuations would distort the averages.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.41 Arrears ratios: Closing stock and collectable arrears, <http://isoraadata.org> (accessed on 1 October 2025).

When looking at the data over the period from 2018 to 2023, a small decrease of 1.5 percentage points in the average ratio of total year-end arrears to net revenue collected is visible, see Table 7.1. The noticeable increase of the ratio during 2020 was the result of the pandemic when many governments took action to support individuals and businesses by extending payment terms, or by suspending collection of outstanding debt (CIAT/IOTA/OECD, 2020^[7]).

Table 7.2. shows the 10-year evolution of the ratio for total year-end arrears to net revenue collected. On average, the ratio has decreased by around 10% or 2.7 percentage points. The jurisdiction level data confirms this, with two-thirds of the jurisdictions showing decreasing ratios. (It should be noted that the table only takes into account information from jurisdictions that were able to provide data for both years 2014 and 2023, which explains the differences in 2023 averages shown in Table 7.1. and Table 7.2.)

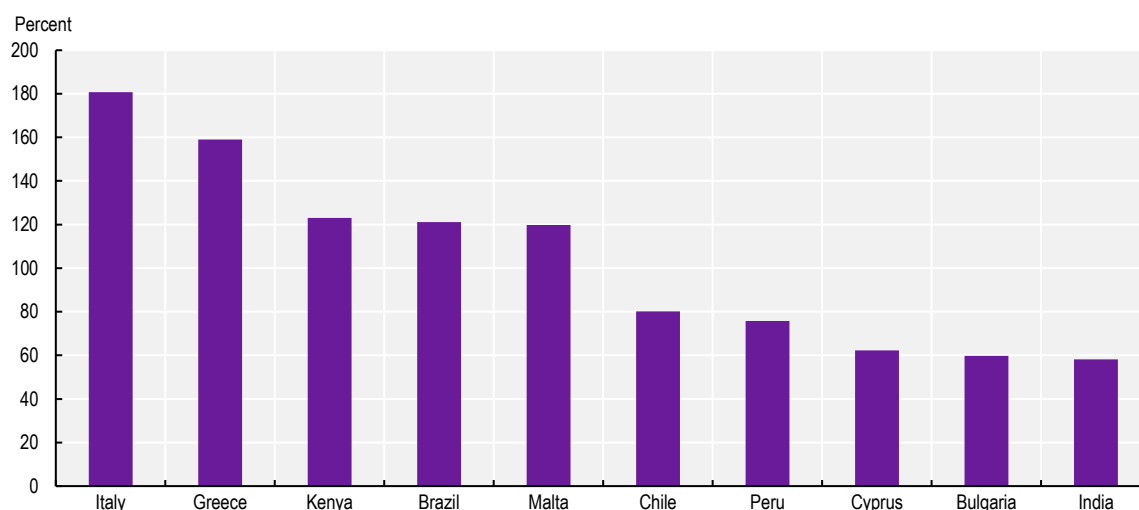
Table 7.2. Average arrears ratios (in percent), 2014 and 2023

Arrears ratio	2014	2023	Difference in percentage points	No. of jurisdictions with a decreasing arrears ratio	No. of jurisdictions with an increasing arrears ratio
Total year-end arrears as percentage of net revenue collected (44 jurisdictions)	28.4	25.7	-2.7	29	15

Note: The table shows average arrears ratios for those jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parentheses. Data for Bulgaria and India was excluded from the calculation as their data is not comparable across the period.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.41 Arrears ratios: Closing stock and collectable arrears, <http://isoradata.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.11, https://doi.org/10.1787/tax_admin-2017-en.

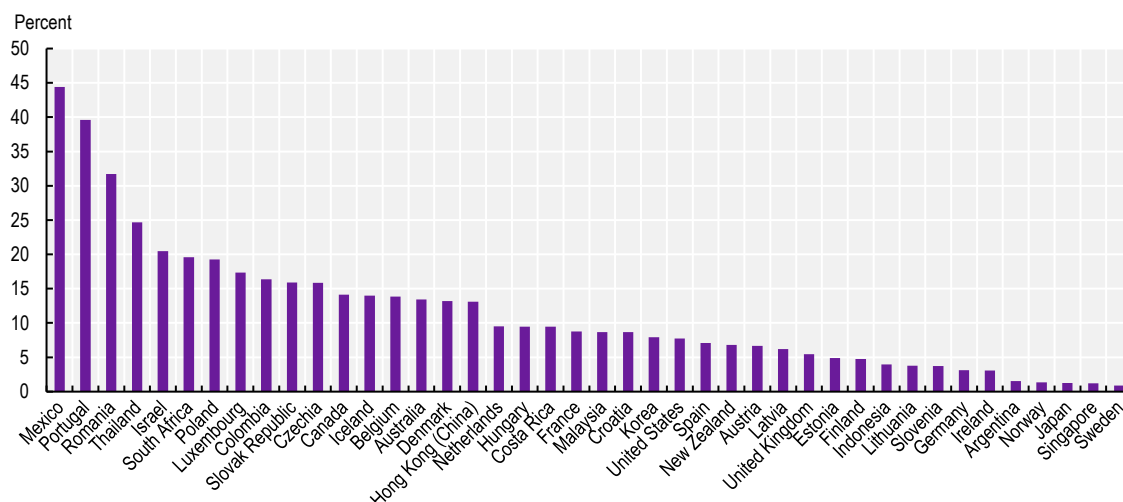
Figure 7.2. Total year-end arrears as a percentage of total net revenue (for administrations with a ratio above 50%), 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.41 Arrears ratios: Closing stock and collectable arrears, <http://isoradata.org> (accessed on 1 October 2025).

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Figure 7.3. Total year-end arrears as a percentage of total net revenue (for administrations with a ratio below 50%), 2023

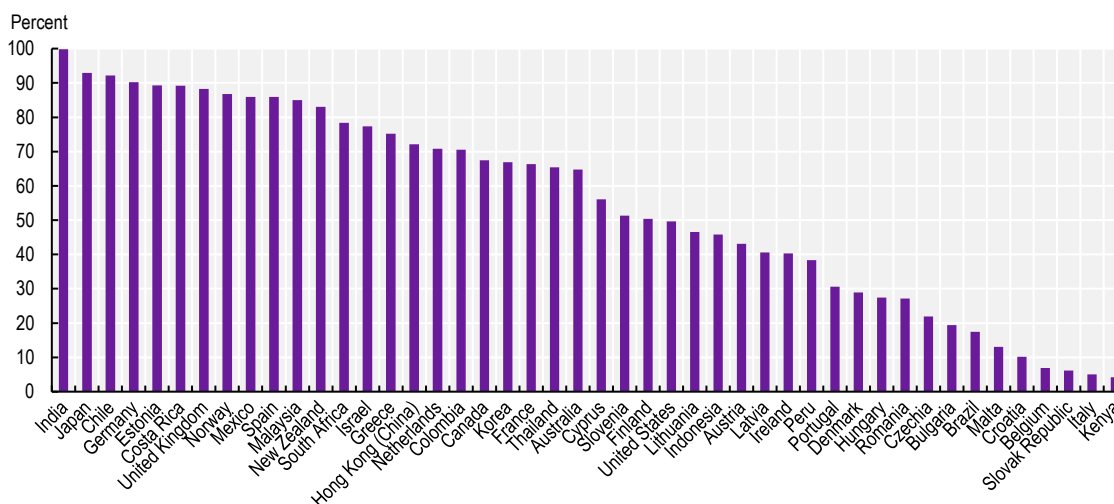


Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.41 Arrears ratios: Closing stock and collectable arrears, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/p690ck>

Looking at collectable tax arrears, the 2023 data shows that on average 55% of the total arrears are considered collectable. That is an increase of 10% or 5.2 percentage points to 2018. (See Table 7.1.) However, Figure 7.4. illustrates well the differences between jurisdictions: in some jurisdictions almost all arrears are considered collectable, while in others almost all arrears are considered not collectable.

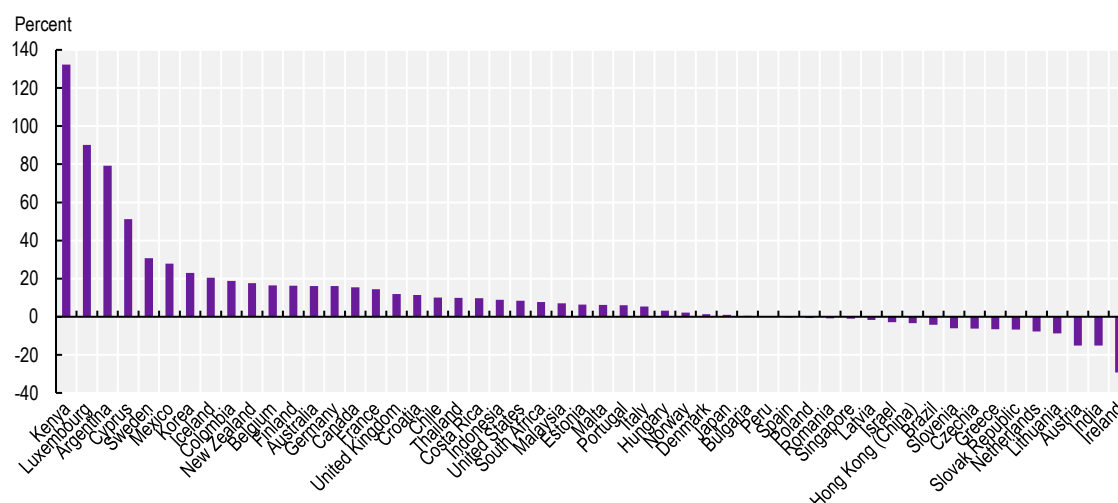
Figure 7.4. Total year-end collectible arrears as percentage of total year-end arrears, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.41 Arrears ratios: Closing stock and collectable arrears, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/fk47x8>

Figure 7.5. shows the change of total year-end arrears between 2022 and 2023. In absolute numbers, the total year-end arrears increased in 35 out of 52 jurisdictions that were able to provide the information. (Note: This does not contradict the above observation that arrears ratios are decreasing. While in absolute numbers, arrears are going up in many jurisdictions, the ‘total arrears to net revenue collected’ ratio is decreasing as total revenue collections have increased even more.)

Figure 7.5. Movement of total arrears between 2022 and 2023

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.42 Arrears ratios: Year-on-year change, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/te7vb2>

Table 7.3. looks at the amount of arrears for the main tax types. In 2023, the average ratio of CIT arrears to CIT net revenue collected and the ratio for VAT are around 20% and 23%, respectively. Over the years, they have followed a similar pattern, including a significant increase in 2020 confirming the difficulties that businesses encountered during the pandemic. Since then, they are back to pre-pandemic levels.

At the same time, the ratio for PIT is noticeably lower. At 15% it remained steady over the 2018 to 2023 period. At around 7%, the ratio is the lowest for PAYE. However, this is expected, as employers are responsible for forwarding those taxes to the administration on behalf of their employees and have no right over the amounts.

Table 7.3. Evolution of average ratio of year-end arrears to net revenue collected by tax type between 2018 and 2023

Tax type	2018	2019	2020	2021	2022	2023
CIT arrears as percentage of CIT collected (39 jurisdictions)	22.5	25.4	28.2	22.8	18.9	20.1
PIT arrears as percentage of PIT collected (40 jurisdictions)	16.1	14.0	15.4	15.0	14.9	15.1
PAYE arrears as percentage of PIT collected (35 jurisdictions)	7.1	6.5	7.1	6.8	6.1	6.6
VAT arrears as percentage of VAT collected (39 jurisdictions)	23.6	23.3	29.8	24.8	23.2	23.0

Note: The table shows the average ratios for jurisdictions that were able to provide the information for the years 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses. Data for Bulgaria was excluded from the calculation of the average for the total year-end arrears as a percentage of net revenue collected as its data is not comparable across the period. Further, because they would distort the averages, data for Brazil and Greece was excluded in the calculation of the average for CIT and data for Malta was excluded in the calculation of the average for VAT.

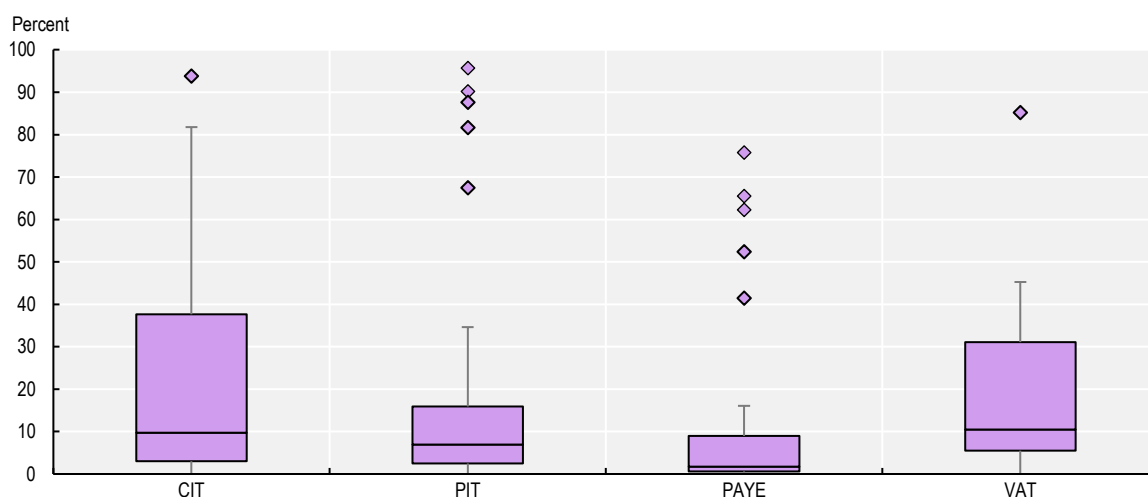
Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.44 Arrears in relation to collection by tax type: CIT and PIT, and D.45 Arrears in relation to collection by tax type: PAYE and VAT, <http://isoradata.org> (accessed on 1 October 2025).

Figure 7.6. takes a different look at year-end arrears to net revenue collected by illustrating the distribution of individual jurisdiction data for the main tax types. The boxes depict the 2nd and 3rd quartile (i.e. the central 50% of jurisdictions) with the middle line indicating the median value. This shows that:

- For all tax types, the median values are significantly lower (around half) than the averages shown in Table 7.3; around, 7% for PIT and 2% for PAYE;
- The ratios for CIT and VAT are similar with a median of around 10% and a greater distribution than the ratios for PIT and PAYE.

(It should be noted that the figure does not show the outliers that are above 100%.)

Figure 7.6. Range of year-end arrears to net revenue collected by tax type, 2023



Note: The figure does not show the outliers above 100% even though those data points were used for the underlying calculations.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.44 Arrears in relation to collection by tax type: CIT and PIT, and D.45 Arrears in relation to collection by tax type: PAYE and VAT, <http://isoraodata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/qc1h5i>

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<https://doi.org/10.1787/9789264223257-en>.

8

Disputes

Dispute prevention and resolution are essential to help preserve trust in the tax systems. This chapter explores the strategies put in place by tax administrations to resolve and prevent disputes fairly and efficiently, and looks at tax administration performance in dispute resolution.

Introduction

Taxpayer rights and obligations are frequently set out in law or taxpayer charters. Table 8.1. sets out some of the most commonly reported rights and obligations. Underpinning these rights and obligations is access to processes that allow taxpayers to effectively challenge assessments and decisions, which helps safeguard taxpayer rights and ensures that appropriate checks and balances exist on the exercising of tax powers by administrations. At the same time, tax administrations and taxpayers should also strive to work together to prevent disputes from arising in the first place, thus reducing burdens and uncertainty for both parties.

Table 8.1. Taxpayer's rights and obligations

Right	Obligation
To be informed, assisted, and heard	To be honest
Of appeal	To be co-operative
To pay no more than the correct amount of tax	To provide accurate information and documents on time
Certainty	To keep records
Privacy	To pay taxes on time
Confidentiality and secrecy	

This chapter examines the dispute resolution and review strategies in the jurisdictions covered by this report, as well as their performance in this area. This is an important function of tax administrations, and on average close to 6% of total staff numbers are dedicated to the management of disputes, including litigation, dispute resolution, appeals, objections and rulings (see Chapter 9).

Dispute resolution review mechanisms

All 58 jurisdictions covered in this report provide taxpayers with the right to challenge assessments. Almost all administrations report having an internal review mechanism in place, and most provide taxpayers with the option to seek an independent review by an external body, which can help improve legal certainty for taxpayers while avoiding potentially lengthy and costly legal proceedings. For those administrations that offer both review mechanisms, 75% require taxpayers to seek an internal review before their case can be reviewed by an external body. (See Table 8.2.)

Table 8.2. Dispute resolution: Available review mechanisms, 2023

Percentage of administrations

Mechanisms available for taxpayers to challenge assessments			Taxpayers must first pursue internal review where an internal review is permissible
Internal review by tax administration	Independent review by external body	Independent review by a higher appellate court	
98.3	94.8	100.0	75.4

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.89 Dispute resolution: Review mechanisms, and A.90 Dispute resolution: Review procedure, <http://isoraadata.org> (accessed on 1 October 2025).

Performance in dispute resolution

While tax administrations cannot generally control the timing of judicial processes, many of them are working on improving dispute resolution processes to make them quicker. These might include mediation

or other non-judicial routes, as well as improvements to case management systems as shown in the example in Box 8.1.

Box 8.1. United Kingdom – Strategic litigation pipeline

HMRC have built and implemented a bespoke litigation case management system, available on a platform shared with other HMRC systems. This gives the capability to connect data and systems across the administration, enabling HMRC to track the life cycle of compliance activity from initiation through to dispute resolution. Cases can be tracked using different identifiers to support the identification of patterns and trends, and the information is available to users across HMRC.

The model was developed by a cross-HMRC virtual team drawn from the litigation, project management, tax professional and data communities, to bring together all relevant expertise.

As the model continues to develop and data quality continues to improve, it will sit alongside other initiatives to enable a data-led approach to the management of the disputes and tax litigation pipeline. This is part of meeting HMRC's priority to close the tax gap. The model allows insight to be drawn that supports the identification of opportunities for building operational capability and improving the customer experience, including more upstream resolution, as part of an end-to-end dispute management approach.

Source: The United Kingdom (2025).

Table 8.3. and Table 8.4. compare the change between 2018 and 2023 in the number of review cases initiated and on hand at fiscal year-end, for both internal and external reviews. The reductions in the number of cases initiated, see Table 8.3., that were reported by the majority of administrations during the COVID-19 pandemic cannot be observed anymore. Over the past three years, around half of the administrations saw an increase in the number of cases initiated, while the other half saw decreasing numbers.

In relation to the number of cases on hand at fiscal year-end, see Table 8.4., the majority of administrations continues to report decreasing numbers in between 2022 and 2023, particularly in relation to cases under internal review.

Looking at the 10-year period between 2014 and 2023, data for 34 jurisdictions shows that in two-thirds of administrations the number of cases on hand at year-end decreased, in some cases significantly. (Calculation based on Table A.170 in the 2017 edition (OECD, 2017^[1]) and Table A.91 in the ISORA database.)

Table 8.3. Dispute resolution: Change in number of cases initiated during the year, 2018-23

Percentage of administrations that reported an increase or decrease in the number of cases initiated

Movement	Tax cases initiated under internal review procedure					Tax cases initiated under independent review by external bodies				
	Change between					Change between				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
Increase	51.0	39.2	56.9	51.0	49.1	44.4	27.3	44.4	53.2	45.8
Decrease	49.0	60.8	43.1	49.0	50.9	55.6	72.7	55.6	46.8	54.2

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.91 Dispute resolution: Number of cases - Tax cases under internal procedures, and A.92 Dispute resolution: Number of cases - Tax cases under independent review by external bodies, <http://isoradata.org> (accessed on 1 October 2025).

Table 8.4. Dispute resolution: Change in number of cases on hand at fiscal year-end, 2018-23

Percentage of administrations that reported an increase or decrease in the number of cases on hand

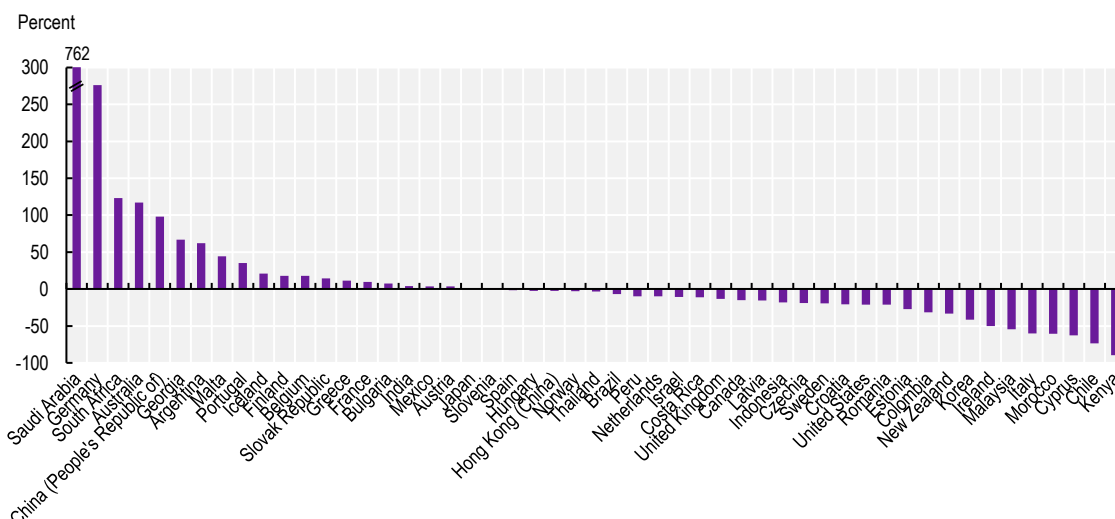
Movement	Tax cases on hand under internal review procedure					Tax cases on hand under independent review by external bodies				
	Change between					Change between				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
Increase	63.3	44.9	54.0	42.0	39.2	51.2	33.3	35.7	37.2	47.7
Decrease	36.7	55.1	46.0	58.0	60.8	48.8	66.7	64.3	62.8	52.3

Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables A.91 Dispute resolution: Number of cases - Tax cases under internal procedures, and A.92 Dispute resolution: Number of cases - Tax cases under independent review by external bodies, <http://isoraadata.org> (accessed on 1 October 2025).

Figure 8.1. and Figure 8.2. take a more detailed look at the jurisdiction level data and show the change between 2022 and 2023 in the number of review cases on hand at fiscal year-end, for both internal and external reviews. What is interesting to note are the significant increases in the number of internal review cases reported by a few jurisdictions.

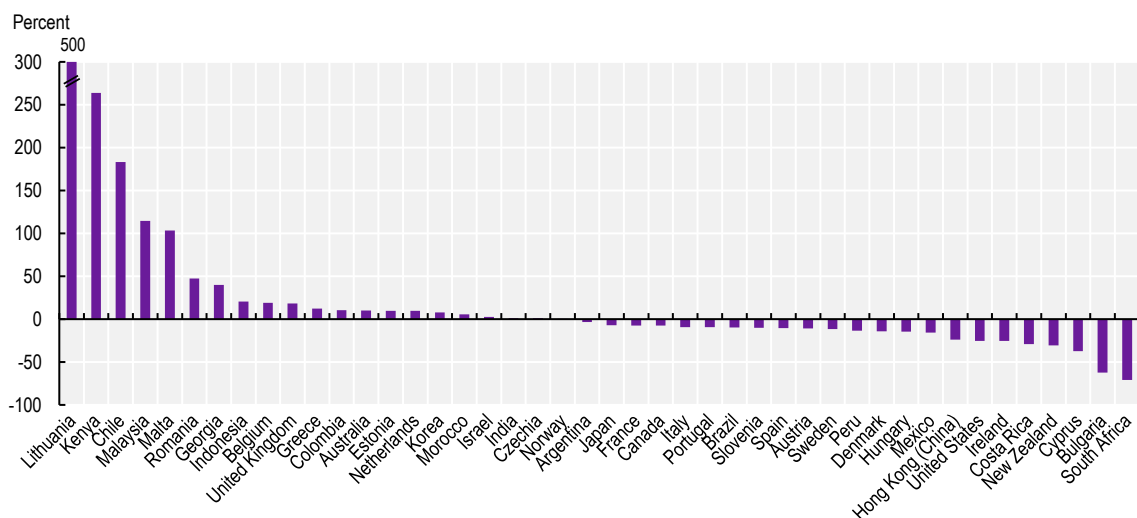
At the same time, it should be pointed out that the volume of cases per jurisdiction varies significantly and where the number of cases is very low there can be significant fluctuations between years. This becomes more evident when looking at Figure 8.3., which highlights the wide differences between jurisdictions in the use of internal review procedures.

Looking at Table 8.5., which shows the average number of internal review cases initiated over the period 2018 to 2023, it can be observed that the average has been stable over the years.

Figure 8.1. Internal review procedures: Change between 2022 and 2023 in the number of cases on hand at fiscal year-end

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.91 Dispute resolution: Number of cases - Tax cases under internal procedures, <http://isoraadata.org> (accessed on 1 October 2025).

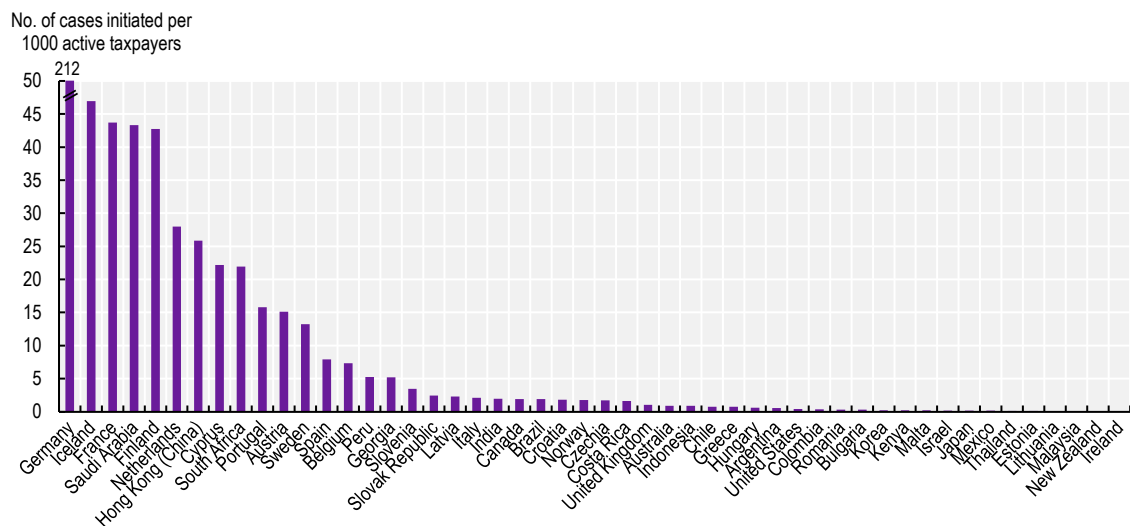
Figure 8.2. Independent review by external bodies: Change between 2022 and 2023 in the number of cases on hand at fiscal year-end



Sources: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.92 Dispute resolution: Number of cases - Tax cases under independent review by external bodies. <http://isora.data.org> (accessed on 1 October 2025).

StatLink <https://stat.link/1kpdbi>

Figure 8.3. Number of internal review cases initiated per 1 000 active PIT and CIT taxpayers, 2023



Note: For Saudi Arabia, the “No. of internal cases initiated during the FY per 1 000 active taxpayers” was put in relation to active VAT taxpayers. Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.49 Administrative review cases and litigation, <http://isora.data.org> (accessed on 1 October 2025).

StatLink <https://stat.link/w3gche>

Table 8.5. Average number of internal review cases initiated per 1 000 active PIT and CIT taxpayers, 2018-23

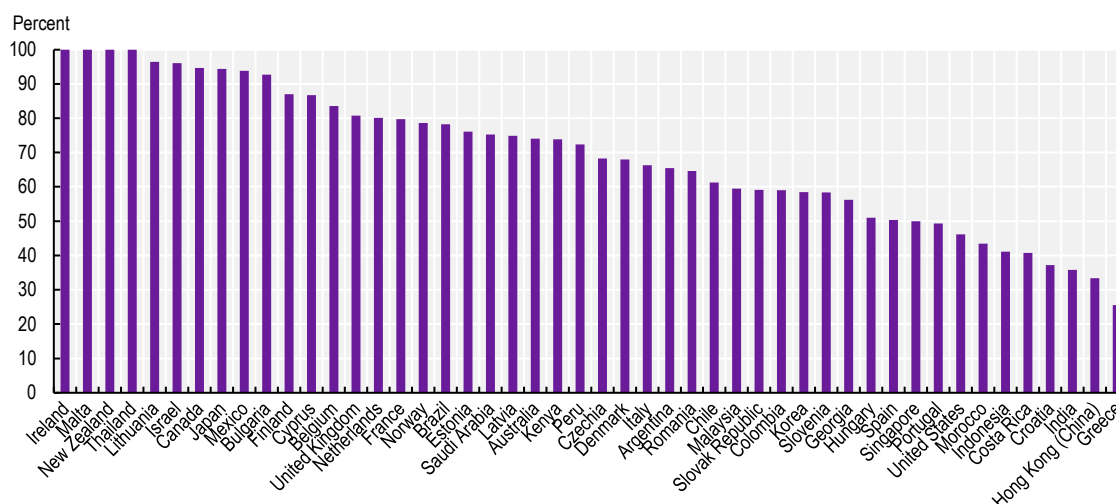
	2018	2019	2020	2021	2022	2023
Average number of internal review cases initiated per 1 000 active PIT and CIT taxpayers (40 jurisdictions)	5.9	6.3	5.5	6.7	5.9	6.3

Note: The table shows the averages for those jurisdictions that were able to provide the information for the years 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses. Data for Germany was not included as it would distort the results.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.49 Administrative review cases and litigation, <http://isoradata.org> (accessed on 1 October 2025).

Different interpretations of tax law by taxpayers and the tax administration are a normal part of tax administration, and it is not uncommon for these differences to become subject to litigation, once the internal and external review procedures have been exhausted. Whilst tax administrations report that disputes are usually resolved without the need for litigation, Figure 8.4. reports the performance of administrations for cases decided upon by the courts. It shows significant differences in the success rate of administrations, although for some jurisdictions the number of cases decided is very low, meaning results can fluctuate significantly between years.

Figure 8.4. Percentage of cases resolved in favour of the administration, 2023



Note: Cases resolved in favour of the administration means those cases where the administration has been successful in more than 50% of the issues contested in each case. For Argentina and Italy see the note in Table A.93.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.49 Administrative review cases and litigation, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/lod4yb>

Box 8.2. Resolving international tax disputes

Cross-border business and international labour mobility are increasingly common. This inevitably leads to disputes over which jurisdictions have the right to tax certain types of income. Tax treaties between jurisdictions, also known as double taxation agreements, aim to remove double taxation by setting out mutually agreed rules on the allocation of taxing rights. To address situations where parties involved disagree on the application or interpretation of those rules, many tax treaties include a provision for a Mutual Agreement Procedure (“MAP”) to resolve such disputes, separate from the standard legal remedies available under domestic law.

MAP is crucial for the correct application and interpretation of tax treaties. It ensures that taxpayers who are entitled to treaty benefits are not subjected to taxation that is not in line with the treaty’s terms. It is therefore important to ensure that access to the MAP is readily available and that MAP cases are resolved and implemented promptly and within a reasonable timeframe.

Following the publication of the report *Making Dispute Resolution Mechanisms More Effective, Action 14 - 2015 Final Report* (OECD, 2015^[2]), which contains a BEPS minimum standard on the resolution of treaty-related disputes, OECD/G20 BEPS Inclusive Framework members agreed to:

- a peer review process to evaluate the implementation of this standard;
- to publish the MAP profile for each jurisdiction; and
- to report and publish MAP statistics under the MAP Statistics Reporting Framework.

In addition, since 2023, the OECD has annually released the Consolidated Information on MAPs (CIM), which provides a glimpse into each Inclusive Framework member jurisdiction’s MAP programmes, including the MAP provisions in their tax treaties, links to their MAP guidance and MAP profile, the structure of as well as key contacts in their competent authority function and the evolution of their MAP Statistics over the years. This work, including the MAP profiles and statistics, the peer review reports and the CIM, can be found on the OECD website on *Dispute resolution in cross-border taxation* (OECD, 2025^[3]).

In addition to this, the OECD with the Forum on Tax Administration, has developed tools to assist jurisdictions and taxpayers in navigating the MAP process:

- the *Manual on Effective Mutual Agreement Procedures* (OECD, 2007^[4]); and
- the *Manual on the Handling of Multilateral Mutual Agreement Procedures and Advance Pricing Arrangements: Enhancing Tax Certainty* (OECD, 2023^[5]).

Dispute prevention

As disputes can be resource intensive processes, preventing them is the most effective strategy, and a key element in the dispute prevention framework is the provision of guidance and advice to taxpayers. Tax administrations often do this as part of their wider service strategy. This can include putting information and interactive tools on their website, publishing guidelines and taxpayer information briefs, and carrying out educational and business support initiatives (see also Chapter 5). In addition, many administrations offer specific dispute prevention mechanisms and some of those approaches are described in this section.

Rulings

As part of tax administrations’ commitment to give taxpayers certainty of treatment, it is common practice for administrations to set out how they will interpret the laws they administer, and how they will interpret the tax law in particular situations. This takes place through rulings:

- A **public ruling** is a published statement of how an administration will interpret provisions of the tax law in particular situations. They are generally published to clarify application of the law, especially where a large number of taxpayers may be impacted by particular provisions and/or where a provision has caused confusion or uncertainty. Typically, a public ruling is binding on the tax administration if the ruling applies to the taxpayer and the taxpayer relies upon it.
- A **private ruling** relates to a specific request from a taxpayer (or their tax representative) seeking greater certainty as to how the law would be applied by the tax administration in relation to a proposed or completed transaction(s). The objective of private rulings is to provide additional support and certainty to taxpayers on the tax consequences of more complex transactions.

To learn more about which administrations provide rulings, see Table 8.5. of the 2024 edition of this series (OECD, 2024^[6]).

Box 8.3. Poland – Digitalising tax ruling processes

In 2024, the Polish tax system underwent a significant change in the handling of its tax rulings to allow for faster processing and response times. Now, documents related to tax rulings can only be submitted electronically through the National Revenue Administration's secure online systems. Decisions in these matters are also delivered electronically via the same systems.

The transition to handling tax rulings online enables a quicker resolution – taxpayers do not need to physically travel into the office as they can log in and do everything from home, and the service is available 24/7.

This change is aimed at streamlining administrative processes, increasing efficiency and reducing bureaucracy. Submitting applications electronically brings numerous benefits for both the tax administration and taxpayers.

Source: Poland (2025).

Advanced pricing arrangements

Bilateral and Multilateral Advance Pricing Arrangements (“APAs”) are binding arrangements between two or more tax administrations and the taxpayers in relation to a specific issue for a prescribed period. In a growing number of cases, these collaborative APAs have successfully contributed to providing advance tax certainty to both taxpayers and tax administrations, ensuring predictability in the tax treatment of international transactions and reducing potential tax disputes.

To support administrations and taxpayers, the FTA MAP Forum has developed the *Bilateral Advance Pricing Arrangement Manual* (OECD, 2022^[7]) which is intended as a guide for streamlining the Bilateral APA process to facilitate a cooperative and collaborative process. In addition, the *Manual on the Handling of Multilateral Mutual Agreement Procedures and Advance Pricing Arrangements: Enhancing Tax Certainty* (OECD, 2023^[5]) offers guidance to tax administrations and taxpayers on Multilateral APAs from both legal and procedural perspectives.

Co-operative compliance programmes

Over the last few years, there has been an increasing focus on the use of co-operative arrangements to manage compliance and enhance tax certainty. These programmes often involve a more transparent relationship between tax administrations and taxpayers, and can involve more proactive approaches to resolving material tax risks. The concept of co-operative compliance has been the subject of several OECD

reports, most recently *Co-operative Tax Compliance: Building Better Tax Control Frameworks* (OECD, 2016^[8]).

As the operation of a co-operative compliance programme is resource intensive due to the high level of engagement between tax administration officials and taxpayers, traditionally those programmes were reserved for large companies, and close to three-quarters of administrations reported having such programmes for large taxpayers. However, technological advances in risk assessment processes have led to a number of administrations reporting the application of this concept to other taxpayer groups, such as HNWI taxpayers (see Table 8.6.).

Table 8.6. Existence of formal co-operative compliance approaches for different taxpayer segments, 2023

Percentage of administrations that have such approaches

Large taxpayers	High net wealth individual taxpayers	Other taxpayers
72.4	22.4	41.4

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.107 Cooperative compliance approaches, <http://isoradata.org> (accessed on 1 October 2025).

Box 8.4. Japan – Co-operative compliance for large enterprises

The NTA Japan has introduced initiatives to maintain and improve tax compliance for large enterprises, focusing on co-operative compliance approaches.

One of the main initiatives is that the NTA checks the status of large corporations' corporate governance related to tax matters. Senior officials from Regional Taxation Bureaus of the NTA then discuss with the corporate executives and present them with effective case examples to help them improve tax corporate governance in their own organisations.

With this action, the NTA will be able to take large corporations' tax corporate governance status into account when evaluating their tax risks. This enables the NTA to more effectively utilise its limited human resources to address high risk areas. From a business perspective, they will be able to reduce risks such as the risk of an inaccurate or incorrect tax processing, and eventually, the risk of errors being identified during tax examinations.

In addition, on its website the NTA provides two types of check sheets: "Check sheet for tax returns," and "Check sheet for tax items requiring special attention at large enterprises." The former is expected to be used as a voluntary self-inspection by taxpayers of their tax return ahead of submission, and the latter is expected to be used to check if there is any failure/ omission in the account settlement adjustments or tax declaration adjustments before creating a tax return. Through this process, errors in final returns can be prevented, which ultimately reduces the risk of errors being detected during tax examinations.

Source: Japan (2025).

International Compliance Assurance Programme

The International Compliance Assurance Programme (ICAP) is a voluntary programme for a multilateral co-operative risk assessment and assurance process. It is designed to provide multinational enterprise groups (MNE groups) with increased tax certainty with respect to certain of their activities and transactions

as long as they are willing to engage actively, openly and in a fully transparent manner. ICAP does not provide an MNE group with the legal certainty that may be achieved, for example, through an APA. However, it does give assurance when tax administrations participating in an MNE group's risk assessment consider covered risks to be low risk.¹ (OECD, 2021^[9])

Joint audits

Another tool that can assist in preventing disputes is a joint audit where officials from two or more administrations join to form a single audit team which will examine issues or transactions of taxpayer(s) with cross-border business activities and in which the jurisdictions have a common or complementary interest. By collaborating it may be possible for the participating tax administrations to detect and address differences or potential disputes at an early stage. (OECD, 2019^[10])

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- OECD (2025), *Dispute resolution in cross-border taxation*, [3]
<https://www.oecd.org/en/topics/dispute-resolution-in-cross-border-taxation.html> (accessed on 1 October 2025).
- OECD (2024), *Tax Administration 2024: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://doi.org/10.1787/2d5fba9c-en>. [6]
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- OECD (2007), *Manual on Effective Mutual Agreement Procedures (MEMAP)*, OECD, Paris, <https://doi.org/10.1787/2bb3ab55-en>. [4]

Note

¹ See <https://www.oecd.org/en/about/programmes/icap.html> for more information (accessed on 1 October 2025).

9

Budget and workforce

This chapter looks at the resources devoted to tax administrations and provides information on their workforce. It also sets out how administrations are responding to new challenges and maintaining their capability while managing a workforce that has to adapt to a changing work environment.

Introduction

Central to a tax administration meeting its role in collecting revenue and providing services to citizens and businesses, is sufficient financial resources and a skilled workforce that can deliver quality outputs efficiently and effectively. This chapter examines the financial resources available to tax administrations, and how they are spent. It also provides information on tax administrations' workforce, and how working practices are changing.

Budget

Operating expenditures

The overall level of resources devoted to tax administration is an important and topical issue for most governments, external stakeholders, and of course tax administrations themselves. While the budgetary approaches differ, in most jurisdictions the budget allocated is tied to the delivery of performance outputs which are outlined in an annual business plan.

When looking at the budget figures, around 80% of tax administrations report an increase in their operational expenditure between the years 2022 and 2023. This is similar to the two previous periods (see Table 9.1.).

Table 9.1. Changes in operating expenditures, 2018-23

Percentage of administrations

Change	Change between				
	2018-19	2019-20	2020-21	2021-22	2022-23
Increase in operating expenditure	75.5	71.7	77.4	83.0	79.2
Decrease in operating expenditure	24.5	28.3	22.6	17.0	20.8

Note: The table is based on the data from 53 jurisdictions that were able to provide the information for the years 2018 to 2023. Data for India, Israel and Türkiye have been excluded, see notes in Table A.16.

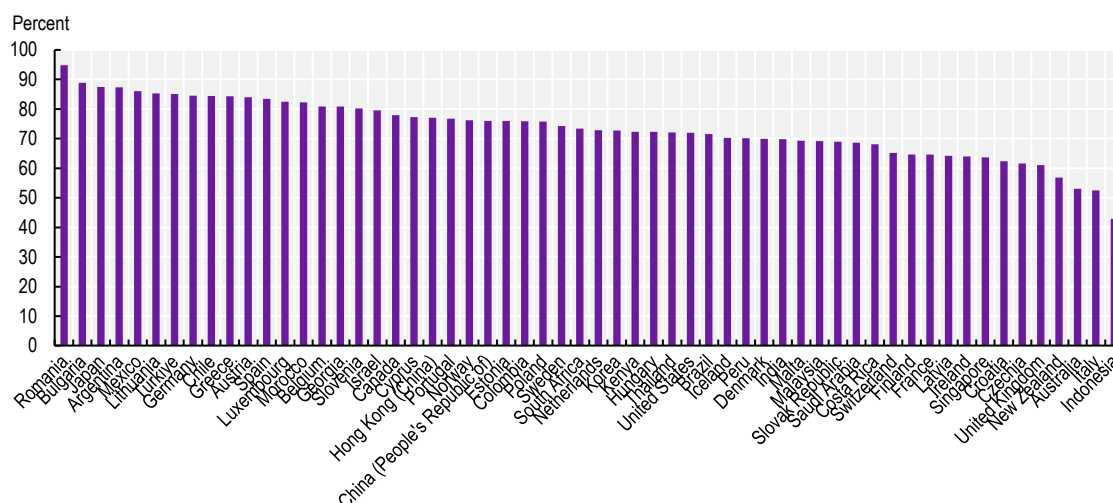
Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.16 Tax administration expenditures: Operating and salary expenditure, <http://isoraadata.org> (accessed on 1 October 2025).

However, this data should be treated with caution. While on paper a significant number of administrations saw increases in their budget, this may be a result of added responsibilities that come with additional budget as well as additional funding for investments in technology and new services to respond to taxpayer demands. It also does not take into account increases as a result of inflation, and that a significant part of the budget is needed for salary costs, accounting for on average nearly three-quarters of operating budgets annually (see also Table D.6). Any increases in budgets can be rapidly consumed by salary increases, which may be a contractual obligation.

Components of tax administration operating expenditure

As stated above, the largest reported component of tax administration operating budgets is staff costs, with salary alone accounting for on average 73.5% of operating budgets annually, even though there are some differences among jurisdictions (see Figure 9.1.).

Figure 9.1. Salary cost as a percentage of total operating expenditure, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.6 Resource ratios: Cost, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/7sfqj4>

Another important component is the operating cost for information and communication technology (ICT). On average ICT expenditure accounts for about 12% of operating expenditure. However, reported levels of ICT expenditure vary enormously between administrations. For those administrations able to provide ICT-related cost, 50% reported an annual operating ICT expenditure exceeding 10% of the administration's total operating expenditure in 2023 (an increase of 10 percentage points compared to 2022) and another 23% reported figures between 5% and 10%. (See Table D.6)

Although the introduction of new technologies can be costly, it can bring significant benefits in efficiency and productivity. The examples in Box 9.1. set out some of the initiatives being adopted by tax administrations.

Box 9.1. Examples – Initiatives to improve efficiency and productivity

Finland – Real-time economy project

The Real-Time Economy project (2021–2024) was introduced by the Finnish Tax Administration to advance Finland's digital economy. It focused on automating the transfer of financial information between companies, reducing manual input from officials and achieving significant cost savings.

The key objectives and results were as follows:

- **Infrastructure:** Conditions were established for financial data sharing and digital wallet services. The Finnish Peppol authority was created to promote international Peppol infrastructure (a secure network for exchanging electronic invoices). Central government capabilities for processing digital procurement messages and receiving digital financial statements were developed.

- **Cost savings:** Digital documents were projected to save nearly EUR 6 billion annually by 2030, with centralised exchanges of data producing EUR 430 million in annual benefits. The project increased the use of e-invoices by 93% and e-receipts by 20%.
- **Digital solutions:** Structured business documents, digital wallets, and data sharing were tested in trials. Significant benefits were found for businesses and the tax administration. As a result, these were implemented and guidelines were produced, training organised, and marketing campaigns ran.
- **Interoperability:** Solutions were designed that are compatible with international and EU standards, to enhance competitiveness and increase interoperability.
- **Ecosystem development:** Developed a joint management model for continuous real-time economy development, defining roles for participants and cooperation principles. Legislative and information security studies were conducted.

Vision 2030 envisions a fully digitalised business economy ecosystem in Finland, enhancing predictability, risk management, and competitiveness for businesses, and improving efficiency and services for the administration. A roadmap for 2025–2030 has been set out, outlining steps for expanding the real-time economy.

Ireland – Streamlining tax and duty manuals

Revenue has introduced a new project, RevAssist, to streamline the management of its Tax and Duty Manuals (TDMs). There are approximately 1 500 Tax & Duty Manuals (TDMs) which summarise legislation and operating procedures, as well as providing guidance covering all the taxes and duties that Revenue is responsible for administering. These are publicly available to the tax practitioner community, and are complex to write in terms of the breadth of legislation covered. A high level of effort is required to ensure the accuracy of these manuals, and they need to be regularly updated to keep them up to date when legislation changes.

Therefore, actions were taken to streamline this process, including:

- The use of emerging GenAI technology to improve the TDM process.
- The provision of a simplified user interface to allow staff to easily search their queries across the TDMs and get a summarised response to the query, including references and page numbers of the full TDM documents.
- Generate drafts of TDMs using uploaded guidance notes, new legislation, and other TDMs for reference.

RevAssist has delivered significant results. The query tool handles approximately 2 500 queries per week from the roughly 300 officials working across the Legislative and Operational Divisions, with an accuracy rate of 97%. It has enhanced the capability of Revenue's teams by broadening their technical knowledge, and given officials quicker access to information, which in turn boosts customer service response times.

Japan – Centre-based system for internal administrative tasks

The NTA Japan has launched an initiative to concentrate its internal operations in specialised operation centres, to streamline operations and increase accuracy. It aims to complete this process for all 524 of its tax offices by 2026, and examples of the internal operations involved include entry processing for tax returns and refund processing.

With the extra time and resource for new tasks secured through the streamlining of operational and administrative tasks, the NTA intends to improve and enhance external operations. This includes taxpayer services, tax examinations and effective use of data.

Singapore – Leveraging geospatial technology for enhanced property valuation

IRAS has leveraged GIS technology to advance property valuation processes. In collaboration with the Singapore Land Authority's Centre for Geospatial & Geomatics, three collaboration projects were completed:

- A workflow was developed to overlay rental data and accessibility indices on building shape files, generating relevant comparables based on property and locational attributes.
- An evaluation was conducted on how accessibility factors, such as driving time to transport hubs and expressways, influenced industrial property rental rates.
- A tool was created to identify comparables using proximity buffers, along with property criteria filters. It also integrated map-pinning functionality and street view imagery for a comprehensive assessment.

Collectively, these efforts harnessed data-driven spatial analysis and visualisation of property geospatial attributes, incorporating network analysis where relevant, to select comparables faster and further enhance valuation robustness. IRAS enjoys efficiency gains from workflow automation of data processing and overlaying relevant information for assessment.

In tandem, IRAS is strengthening internal GIS capabilities to ensure its workforce is future-ready. IRAS is growing a community of GIS enthusiasts that drive use-case development and foster continuous innovation in property tax administration. By combining structured training with hands-on projects supported by experienced GIS users, IRAS is accelerating skills development and enhancing the application of geospatial technology in its work.

Switzerland – Digitalisation and automation of the anticipatory Tax and Stamp Duty processes

Switzerland's Federal Tax Administration has digitalised its administrative processes for its Anticipatory Tax (withholding tax) and Stamp Duty. The digitalisation of administrative processes requires more than just the conversion of existing paper forms into digital formats. Rather, it involves a comprehensive digital transformation in which new technological possibilities are exploited, processes are optimised, and automation potential is fully utilised.

The focus of this process has been on the digitalisation and automation of mass forms – i.e. forms that are received by the tax administration in large quantities – in order to achieve efficiency gains. The automation of large volumes of incoming forms has freed up resources to focus more on the examination of special cases.

Another key element has been the optimisation of the filing process. Previously, several forms had to be filled out manually and submitted in the correct order, whereas now, an integrated service has been created which enables a single submission. In addition, a comprehensive monitoring system has been implemented that ensures seamless tracking of all business transactions – from submission to deposit, or payment – and facilitates the support process.

In the area of technical support, the system provides a direct view of the 'taxpayer perspective', and on the other hand, a ticketing tool was implemented to automate the processing of requests as far as possible. These measures have resulted in a sustainable increase in efficiency, which relieves the burden on both the administration and taxpayers.

Thailand – Using a large language model to classify businesses

As part of efforts to modernise its tax administration, Thailand has introduced a pilot project to employ an LLM for the classification of businesses. The transition from a cumbersome manual to a digital solution aims to improve the accuracy and efficiency of industry classification. This initiative replaces traditional methods with an intuitive system that significantly reduces potential errors, thereby enhancing the precision of industry-level risk analyses and revenue forecasts.

The adoption of LLM technology enables better identification of emerging growth industries, allowing tax administrations to effectively prioritise resources. By automating the classification process, the Thai tax administration anticipates not only reducing administrative burdens, but also achieving more dynamic and responsive tax governance.

The pilot demonstrates the potential of LLMs to transform traditional administrative tasks into agile and adaptable data-driven operations. This strategic move towards digital transformation prepares the administration to anticipate future challenges, ensuring robust industry oversight and better-informed decision-making processes in the tax administration.

United Kingdom - Microfiche and microfilm digitisation

HMRC's Microfiche and Microfilm Digitisation team were set the task of digitising 1.5 million records and 2 billion microfiche/microfilm images, dating back to the 1960s. By doing this, HMRC significantly accelerated its capability to retrieve data to support customer information requests while ensuring compliance with data protection legislation. The majority (70%) of these requests were to provide employment evidence supporting claims for industrial injuries. Other requests were to establish the right to reside/work in the UK, pension calculations and for a range of fraud investigations.

HMRC achieved this working with three separate suppliers under one multi-functional team. Due to their age, the original format of these records was deteriorating and the technology needed to read them was obsolete and in constant need of repair. The project team worked at pace through commercial negotiations to secure a supplier to outsource this work, enabling the records to be digitalised.

One billion images were successfully digitised in just six months and by January 2024, 1.7 billion unique National Insurance contribution records dating from 1961 to 1996 had been digitally archived. This work reduced HMRC's processing times from 239 days to just 43 days and has enabled thousands of vulnerable customers to access their records quickly and efficiently.

Sources: Finland (2025), Ireland (2025), Japan (2025), Singapore (2025), Switzerland (2025), Thailand (2025) and the United Kingdom (2025).

Comparing the averages for both salary and ICT expenditures for the 10-year period between 2014 and 2023, Table 9.2. shows small increases of 1-2 percentage points. (It should be noted that the table only takes into account information from jurisdictions for which data was available for both years 2014 and 2023, which explains the differences in 2023 averages mentioned in the previous paragraphs.)

Table 9.2. Average salary and ICT cost as percentage of operating expenditure, 2014 and 2023

Cost components	2014	2023	Difference in percentage points
Salary cost as percentage of operating expenditure (50 jurisdictions)	71.4	73.0	+1.6
ICT operating cost as percentage of operating expenditure (32 jurisdictions)	12.3	13.5	+1.2

Note: The table is based on the data from jurisdictions that were able to provide the information for the years 2014 and 2023. The number of jurisdictions for which data was available is shown in parentheses.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.6 Resource ratios: Cost, <http://isoradata.org> (accessed on 1 October 2025), and *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.25, https://doi.org/10.1787/tax_admin-2017-en.

Cost of collection

It has become a fairly common practice for tax administrations to compute and publish (for example, in their annual reports) a “cost of collection” ratio as a surrogate measure of their efficiency / effectiveness. The ratio is computed by comparing the annual expenditure of a tax administration, with the net revenue collected over the course of a fiscal year. Given the many similarities in the taxes administered by tax administrations, there has been a natural tendency by observers to make comparisons of “cost of collection” ratios across jurisdictions. Such comparisons have to be treated with a high degree of caution, for reasons explained in Box 9.2.

In practice there are a number of factors that may influence the cost/revenue relationship, but which have nothing to do with relative efficiency or effectiveness. Examples of such factors and variables include macroeconomic changes as well as differences in revenue types administered. These factors are further elaborated in Box 9.2.

Despite those factors, the “cost of collection” ratio is included in this report and the ISORA database for two reasons:

1. The “cost of collection” ratio is useful for administrations to track as a domestic measure as it allows them to see the trend over time of their work to collect revenue and, as pointed out in Box 9.2., they may be able to account for the main factors that can influence the ratio; and
2. The inclusion of the “cost of collection” ratio and the accompanying comments set out in Box 9.2. can serve as a prominent reminder to stakeholders of the difficulties and challenges in using the easily calculated “cost of collection” ratio for international comparison.

Table 9.3. illustrates the change in the average cost of collection ratio between 2014 and 2023. For the 46 administrations covered by the table, the ratio steadily declined since 2014, except in 2020 which was most likely a result of declining revenue collections during the COVID-19 pandemic.

Table 9.3. Average cost of collection ratio, 2014 to 2023

Ratio	2014	2018	2019	2020	2021	2022	2023	Difference in percentage points (2014 - 2023)
Cost of collection	0.877	0.750	0.742	0.803	0.740	0.683	0.646	-0.231

Note: The table shows the average cost of collection ratio for 46 jurisdictions that were able to provide the information for the years 2014 and 2018 to 2023. Data for India, Israel and Türkiye have been excluded, see notes in Table A.16.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.6 Resource ratios: Cost, <http://isoradata.org> (accessed on 1 October 2025), and OECD (2017), and *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Tables A.27 and A.49, https://doi.org/10.1787/tax_admin-2017-en.

Box 9.2. Difficulties and challenges in using the “cost of collection” ratio as an indicator of efficiency and/or effectiveness

Observed over time, a downward trend in the “cost of collection” ratio can appear to constitute evidence of a reduction in relative costs (i.e. improved efficiency) and/or improved tax compliance (i.e. improved effectiveness). However, experience has also shown that there are many factors that can influence the ratio which are **not** related to changes in a tax administrations’ efficiency and/or effectiveness and which render this statistic highly unreliable in the international context:

- **Changes in tax policy:** Tax policy changes are an important factor in determining the cost/revenue relationship. In theory, a policy decision to increase the overall tax burden should, all other things being equal, improve the ratio by a corresponding amount, but this has nothing to do with improved operational efficiency or effectiveness.
- **Macroeconomic changes:** Significant changes in rates of economic growth etc. or inflation over time are likely to impact on the overall revenue collected by the tax administration and the cost/revenue relationship.
- **Abnormal expenditure of the tax administration:** From time to time, a tax administration may be required to undertake an abnormal level of investment (for example, the building of a new information technology infrastructure or the acquisition of more expensive new accommodation). Such investments are likely to increase overall operating costs over the medium term, and short of offsetting efficiencies which may take longer to realise, will impact on the cost/ revenue relationship.
- **Changes in the scope of revenues collected:** From time to time, governments decide to shift responsibility for the collection of particular revenues from one agency to another which may impact the cost/revenue relationship.

From a fully domestic perspective, an administration may be able to account for those factors by making corresponding adjustments to its cost or collected revenue. This can make tracking the “cost of collection” ratio a helpful measure to see the trend over time of the administration’s work to collect revenue. If it were gathered by tax type, it may also help inform policy choices around how particular taxes may be administered and collected.

However, its usefulness with respect to international comparison is very limited. While administrations may be able to account for the above factors from a domestic perspective, it will be difficult to do this at an international level as such analysis would have to consider:

- **Differences in tax rates and structure:** Rates of tax and the actual structure of taxes will all have a bearing on aggregate revenue and, to a lesser extent, cost considerations. For example, comparisons of the ratio involving high-tax jurisdictions and low-tax jurisdictions are hardly realistic given their widely varying tax burdens.
- **Differences in the range and nature of revenues administered:** There are a number of differences that can arise here. In some jurisdictions, more than one major tax authority may operate at the national level, or taxes at the federal level may be predominantly of a direct tax nature, while indirect taxes may be administered largely by separate regional/state authorities. In other jurisdictions, one national authority will collect taxes for all levels of government, i.e. federal, regional and local governments. Similar issues arise in relation to the collection of social insurance contributions.

- **Differences in the range of functions undertaken:** The range of functions undertaken by tax administrations can vary from jurisdiction to jurisdiction. For example, in some jurisdictions the tax administration is also responsible for carrying out activities not directly related to tax administration (for example, the administration of certain welfare benefits or national population registers), while in others some tax-related functions are not carried out by the tax administration (for example, the enforcement of debt collections). Further, differences in societal views may influence what an administration does, how it can operate and what services it has to offer. The latter may have a particularly significant impact on the cost/revenue relationship.

Finally, it should be pointed out that the “cost of collection” ratio ignores the revenue potential of a tax system, i.e. the difference between the amount of tax actually collected and the maximum potential revenue. This is particularly relevant in the context of international comparisons – administrations with similar cost/revenue ratios can be some distance apart in terms of their relative effectiveness.

Workforce

In 2023, the administrations included in this report employed more than 1.7 million staff (see Table A.18) highlighting the importance of effective and efficient management of the workforce to tax administration. As a result of the size of the workforce, salary costs average more than 70% of operating expenditures, meaning any significant budget change invariably impacts staff numbers. The challenge is compounded for some administrations which, due to contract restrictions or government mandates, may find it difficult to strategically down-size their operations other than through the non-replacement of staff who leave of their own accord.

Box 9.3. Brazil – Human Resources planning

Investing in Human Resources (HR) has been a key focus of the strategic planning of the RFB. This priority is reflected in the HR coordination and operational plan, which monitors and evaluates the progress of projects and initiatives monthly. This plan features:

- The implementation of a user-oriented training system;
- The introduction of an impact assessment for educational initiatives;
- The enhancement of management and compliance reports;
- The execution of an internal competition for reallocating employees among RFB's units, facilitated by the automation of the corresponding working process;
- The automation of the employee selection process for Brazilian tax and customs attachés;
- The coordination of the open public competition for new employees, along with the automation of the work process;
- The automation of controls on HR management, the issuance of administrative acts, and employee data querying.

These initiatives highlight the RFB's commitment to improving its HR processes through innovation and automation.

Source: Brazil (2025).

Over the 10-year period 2014 to 2023, around 60% of administrations reported decreasing numbers of full-time equivalents (FTEs). However, this down-sizing trend seems to have halted in a number of jurisdictions as 60% of administrations reported increasing staff numbers between 2022 and 2023. (See Table 9.4.)

Table 9.4. Evolution of number of full-time equivalents, 2014-23

Period	Percent of administrations reporting a decreasing number of full-time equivalents	Percent of administrations reporting an increasing number of full-time equivalents
2014-23	59.2	40.8
2022-23	42.2	57.8

Note: Calculations based on information from 49 jurisdictions that were able to provide the data for the years 2014, 2022 and 2023.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table A.18 Total FTEs of the tax administration and FTEs of the tax administration by function: Registration and services, <http://isoraadata.org> (accessed on 1 October 2025), and OECD (2017), and *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Tables A.46 and A.47, https://doi.org/10.1787/tax_admin-2017-en.

With most jurisdictions covered by this publication having an increasing population and labour force (see Table E.1.) and the long-term trend being declining staff numbers, FTEs have to serve more people. As can be seen in Table 9.5., on average the population and labour force per FTE increased by around 15% between 2014 and 2023. Digital transformation, technological advancements and the new applications and tools that come with this will help tax administrations not only support taxpayers in better ways but also allow them to support their staff (see also Box 9.6. and the surrounding text).

Table 9.5. Average ratios of population and labour force per full time equivalents (FTE), 2014 to 2023

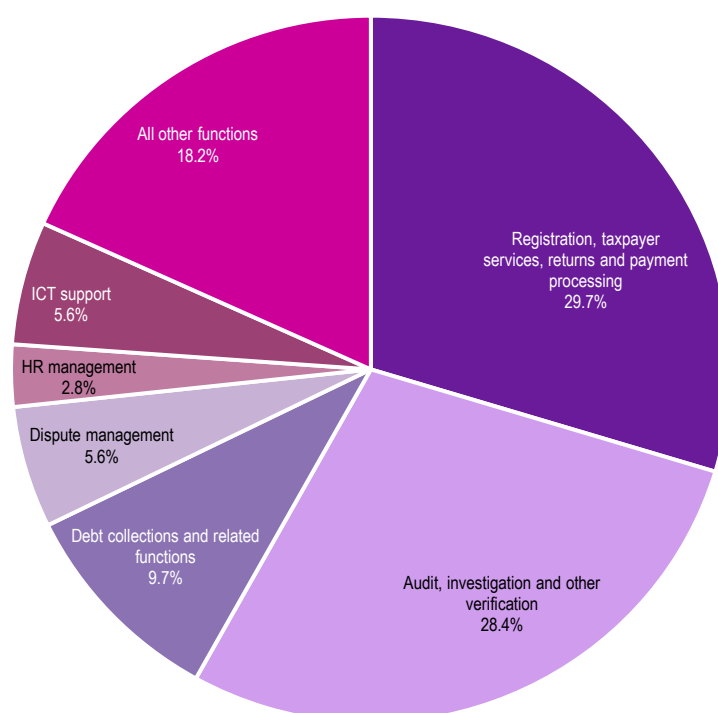
Resource ratio	2014	2018	2019	2020	2021	2022	2023	Difference in percent (2014 - 2023)
Population per FTE (50 jurisdictions)	2282	2506	2592	2536	2566	2584	2591	+13.6
Labour force per FTE (50 jurisdictions)	1126	1251	1298	1213	1244	1285	1298	+15.3

Note: The table shows the average resource ratios for those jurisdictions that were able to provide the information for the years 2014 and 2018 to 2023. The number of jurisdictions for which data was available is shown in parentheses.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.5 Resource ratios: Full-time equivalent (FTE), <http://isoraadata.org> (accessed on 1 October 2025), and OECD (2017), and *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.21, https://doi.org/10.1787/tax_admin-2017-en.

Staff usage by function

Figure 9.2. provides average allocation of staff resources (expressed in FTEs) across seven functional groupings used to categorise tax administration operations. It should be noted that since the ISORA 2023 survey, the functional groupings were revised splitting the category “All other functions” into four: (i) Dispute management; (ii) HR management; (iii) ICT support; and (iv) All other functions. This allows obtaining a better picture of staff usage by tax administrations.

Figure 9.2. Staff usage by function, 2023

Note: Excluding administrations that were unable to provide the break-down for all functions.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.7 Staff allocation by location and function: Registration, services, processing, and audit and verification, D.8 Staff allocation by function: Debt collection, dispute management, and HR management, and D.9 Staff allocation by function: ICT support and all other functions, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/7fprq1>

While the detailed data for each administration in Tables D.7. to D.9. shows a significant spread of values and a number of outliers for each function, on average the “Audit, investigation and other verification” function and the “Registration, services, returns and payment processing” function are equally resource intensive, each employing on average close to 30% of staff.

Table 9.6. Average staff usage by function, 2014 and 2023

Tax administration function	2014	2023	Difference in percentage points
Registration, taxpayer services, returns and payment processing	31.5	30.5	-1.0
Audit, investigation and other verification	31.5	28.8	-2.7
Debt collections and related functions	10.1	10.0	-0.1
Dispute management	4.2	5.4	+1.2
All other functions	22.7	25.3	+2.6

Note: The table shows the average staff usage by function for 37 jurisdictions that were able to provide the information for the years 2014 and 2023.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.7 Staff allocation by location and function: Registration, services, processing, and audit and verification, D.8 Staff allocation by function: Debt collection, dispute management, and HR management, and D.9 Staff allocation by function: ICT support and all other functions, <http://isoraadata.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.20., https://doi.org/10.1787/tax_admin-2017-en.

As can be seen in Table 9.6., the average staff usage by function has remained relatively stable over the period 2014 to 2023. There has only been a small shift from “Registration, services, returns and payment processing” and “Audit, investigation and other verification” to “Dispute management” and “Other functions”.

Staff metrics

The ISORA survey also gathers key data concerning the age profiles, length of service, gender distribution and educational qualifications of tax administration staff: see Tables D.10. to D.16. and A.22. to A.33. While interpreting this data it should be noted that combined tax and customs administrations were allowed to use their total workforce for answering the underlying survey questions as it may be difficult for them to separate the characteristics of the tax and customs workforce.

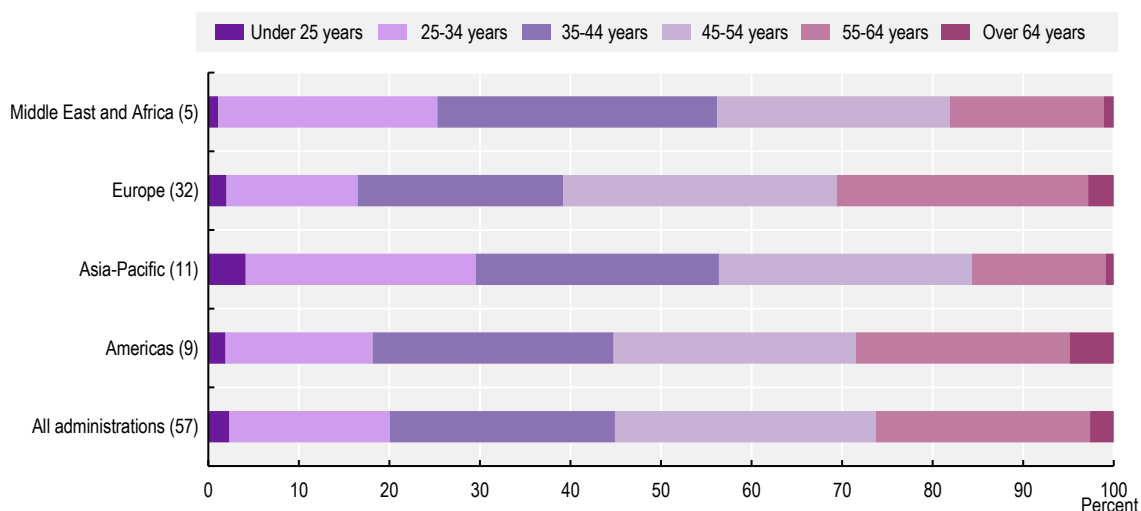
Age profiles

While there are significant variations between the age profiles of tax administration staff (see Tables D.12. and D.13.), it is interesting to see that there are also differences when viewed across different regional groupings. This may be the result of a complex mix of cultural, economic, and sociological factors (for example, economic maturity, recruitment, remuneration, and retirement policies).

Figure 9.3. illustrates that staff are generally younger in administrations in the regional groupings of “Middle East and Africa” and “Asia-Pacific” where, on average, 25% and 30% of staff are below 35 years of age, whereas in the “Americas” and “Europe” this percentage drops to below 20%. At the same time, administrations in the “Americas” and “Europe” have a large percentage of staff older than 54 years.

Figure 9.3. Average age profiles of tax administration staff, 2023

Percentage of staff by age bands for selected regional groupings

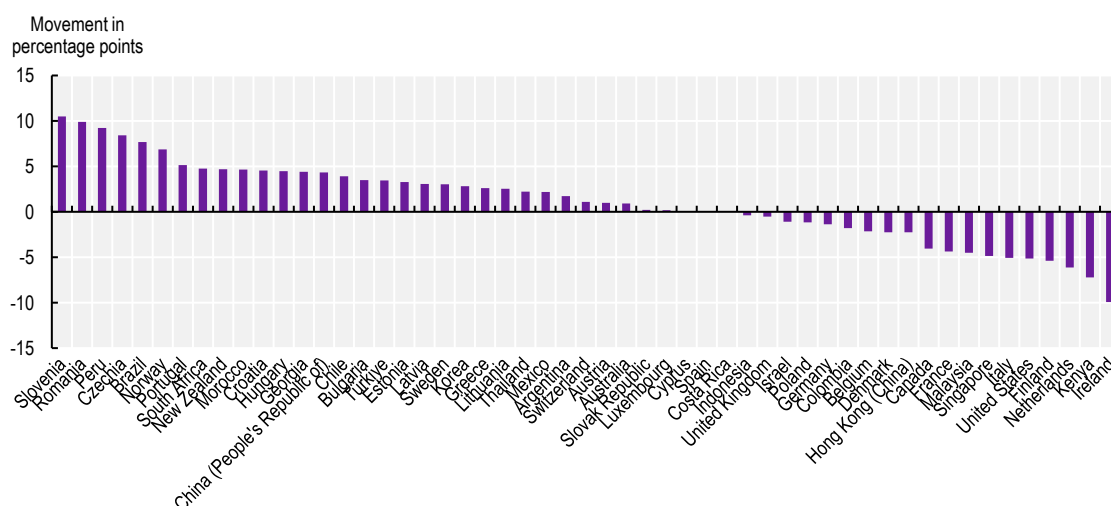


Note: The following administrations are included in the regional groupings: Americas (9) – Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Mexico, Peru and the United States; Asia-Pacific (11) – Australia, China (People’s Republic of), Hong Kong (China), India, Indonesia, Japan, Korea, Malaysia, New Zealand, Singapore and Thailand; Europe (32) – Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom; Middle East and Africa (5): Israel, Morocco, Saudi Arabia, South Africa and Türkiye.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.12 Staff age distribution: Staff below 45 years and D.13 Staff age distribution: Staff 45 years and above, <http://isoradata.org> (accessed on 1 October 2025).

Looking at the jurisdiction specific data, the percentage of staff older than 54 years grew in close to two-thirds of administrations over the period from 2018 to 2023 (see Figure 9.4).

Figure 9.4. Staff older than 54 years: Movement between 2018 and 2023



Note: The table shows the movement of the percentage of staff older than 54 years for those jurisdictions that were able to provide the information for the years 2018 and 2023. Data for Iceland, Malta and Saudi Arabia has been excluded due to the mergers of the tax administration with the customs administration.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.13 Staff age distribution: Staff 45 years and above, <http://isoraadata.org> (accessed on 1 October 2025).

Comparing the age profiles over the 10-year period between 2014 and 2023, Table 9.7. also confirms that tax administration staff is getting older. The percentage of staff older than 54 years increased by 4.1 percentage points on average.

Table 9.7. Average age profiles of tax administration staff, 2014 and 2023

Percentage of staff by age bands

Age bands	2014	2023	Difference in percentage points
Staff younger than 25 years	1.9	2.2	+0.3
Staff from 25 to 34 years	15.9	16.3	+0.4
Staff from 35 to 44 years	25.7	24.6	-1.1
Staff from 45 to 54 years	32.8	29.1	-3.7
Staff from 55 to 64 years	22.2	25.0	+2.8
Staff 65 years and older	1.5	2.8	+1.3

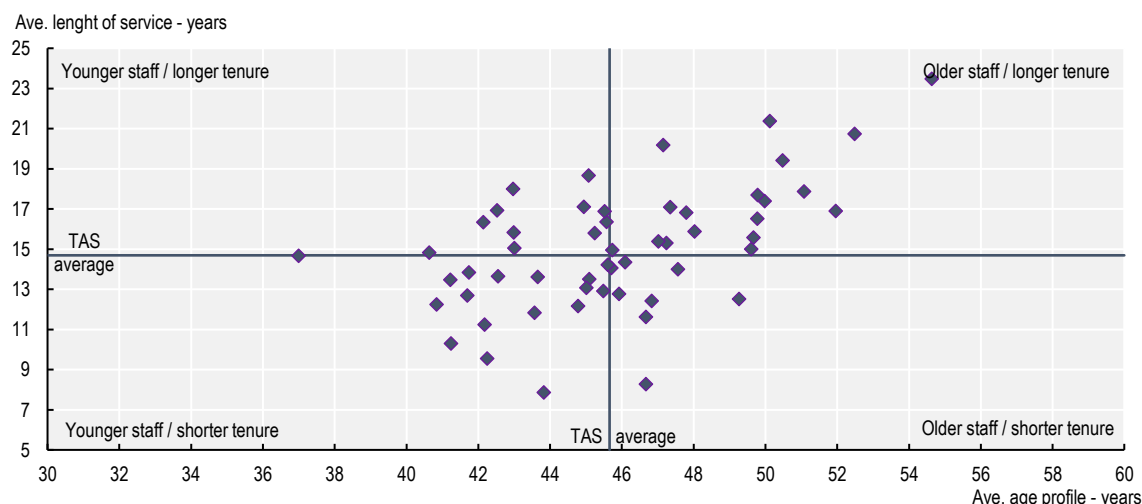
Note: The table shows the average staff age profiles for 47 jurisdictions that were able to provide the information for the years 2014 and 2023. Data for Iceland and Malta has been excluded due to the mergers of the tax administration with the customs administration.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.12 Staff age distribution: Staff below 45 years and D.13 Staff age distribution: Staff 45 years and above, <http://isoraadata.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.22., https://doi.org/10.1787/tax_admin-2017-en.

Length of service

Figure 9.5. indicates that a significant number of administrations will not only face a large number of staff retiring over the next years, but that many of these staff will be very experienced, thus raising issues about retention of key knowledge and experience. The trend of experienced staff leaving administrations is already visible when looking at Table 9.8., which shows that between 2014 and 2023 the percentage of staff with less than 5 years of service has increased by 7.4 percentage points on average.

Figure 9.5. Average length of service vs. average age profile, 2023



Source: OECD Secretariat calculations based on ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.12 Staff age distribution: Staff below 45 years, D.13 Staff age distribution: Staff 45 years and above, D.14 Length of service: Less than 10 years, and D.15 Length of service: 10 years or more, <http://isoraodata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/7oy4df>

Table 9.8. Average length of service of tax administration staff, 2014 and 2023

Percentage of staff by length of service bands

Length of service bands	2014	2023	Difference in percentage points
Staff with less than 5 years of service	14.4	21.8	+7.4
Staff with 5 to 9 years of service	16.2	15.1	-1.1
Staff with 10 to 19 years of service	27.0	24.0	-3.0
Staff with 20 or more years of service	42.4	39.1	-3.3

Note: The table shows the average length of staff service for 43 jurisdictions that were able to provide the information for the years 2014 and 2023. Data for Iceland and Malta has been excluded due to the mergers of the tax administration with the customs administration.

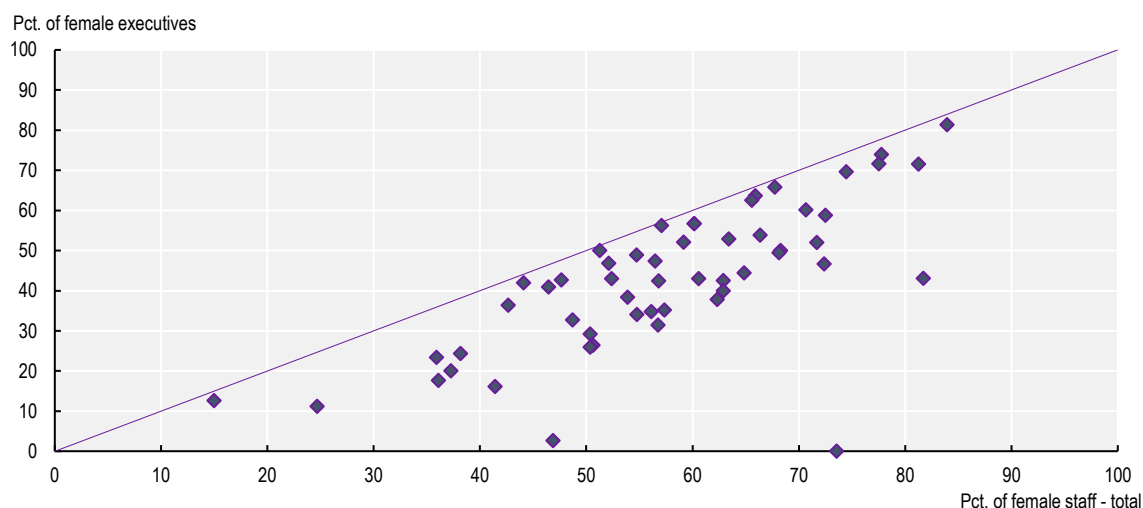
Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Tables D.14 Length of service: Less than 10 years, and D.15 Length of service: 10 years or more, <http://isoraodata.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.23., https://doi.org/10.1787/tax_admin-2017-en.

Gender distribution

Administrations were invited to report total staff and executive staff respectively by gender. As can be seen in Figure 9.6., while many administrations are close to the proportional line, typically female staff remains

proportionally underrepresented in executive positions and significantly underrepresented in a number of administrations, something that has remained unchanged since the 2017 edition of this report (OECD, 2017^[1]).

Figure 9.6. Percentage of female staff – total female staff vs. female executives, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.16 Gender distribution, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/zwd692>

Looking at the change over the 10-year period from 2014 to 2023, it can be noted that on average the share of female employees of total staff has increased by 2.7 percentage points, almost double the increase of the share of female executives (see Table 9.9.). The jurisdiction-level data shows that in about 60% of administrations the percentage of female executives has increased since 2014.

Table 9.9. Average share of female staff and female executives (in percent), 2014 and 23

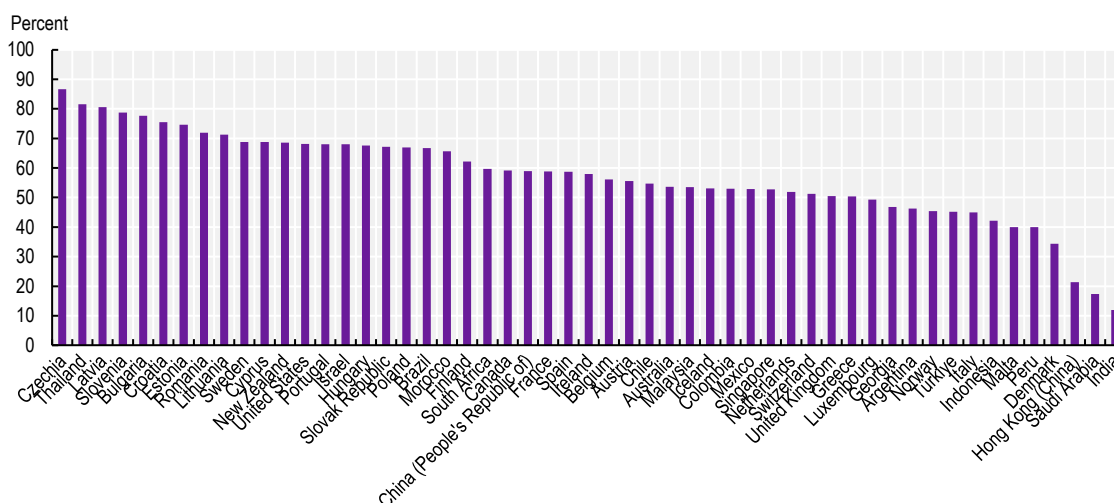
Staff category	2014	2023	Difference in percentage points
Female staff	57.4	60.1	+2.7
Female executives	43.5	45.0	+1.5

Note: The table shows the share of female employees of total staff and executive staff for 42 jurisdictions that were able to provide the information for the years 2014 and 2023.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.16 Gender distribution, <http://isoradata.org> (accessed on 1 October 2025), and OECD (2017), *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table A.24., https://doi.org/10.1787/tax_admin-2017-en.

To understand how the gender distribution might develop in the future, the ISORA survey asks tax administrations to report the percentage of recruits who are female. As can be seen in Figure 9.7., in three-quarters of administrations covered in this publication, females make up more than half of all staff that joined the administration during the fiscal year 2023.

Figure 9.7. Percentage of female recruits, 2023



Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.16 Gender distribution, <http://isoraadata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/1yb4ws>

Staff attrition

Staff attrition, also called staff turnover, refers to the rate at which employees leave an organisation during a defined period (normally a year). High attrition rates may result from a variety of factors, such as downsizing policies, demographics or changing staff preferences. The attrition rate should be considered together with other measures, such as the hire rate, which looks at the number of staff recruited during a defined period, when evaluating the human resource trends of an administration.

While a high attrition rate combined with a low hire rate is usually associated with a general downsizing policy, administrations should perhaps be concerned where both rates are high. Recruitment is costly, not only the recruitment process itself but also the cost and time for training and supporting new staff members.

Having attrition rates that are too low may also not be ideal. While an organisation is growing, a low attrition rate may be desirable. However, in situations where both the attrition rate and the hire rate are low, an organisation may not have the ability to recruit new skills as all positions are filled. This could be an issue particularly for administrations that are undergoing transformation and are therefore in need of staff with skills that are different from what is currently available within the administration.

While what is considered a “healthy” attrition rate differs between industry sectors or jurisdictions, the average attrition and hire rates for administrations participating in this publication of around 7-8% in 2023 would seem to point at a reasonable range for tax administrations of between 5% and 10%. This is also in-line with the average attrition and hire rates over the 10-year period from 2014 to 2023 as can be seen in Table 9.10.

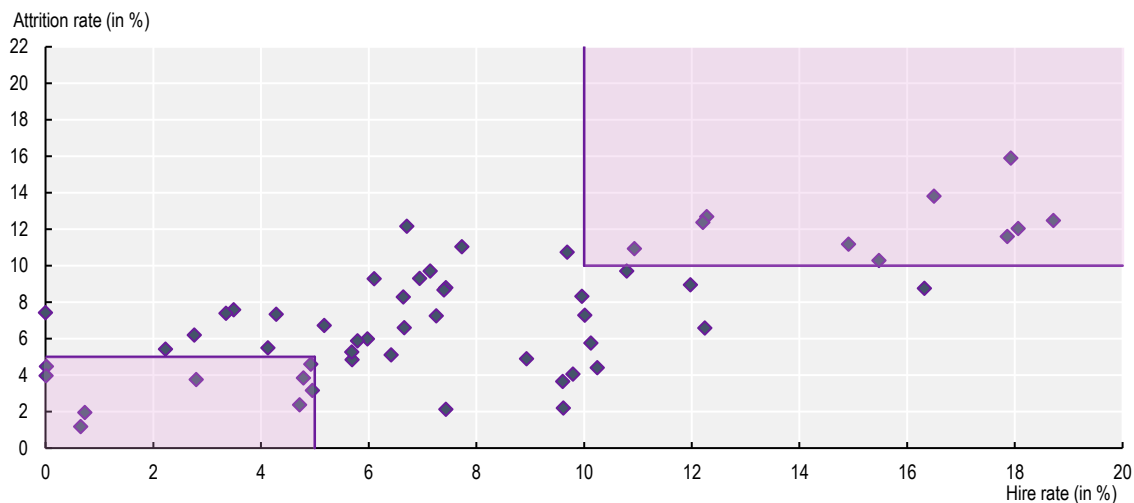
Table 9.10. Average attrition and hire rates (in percent), 2014 and 2023

Rates	2014	2023	Difference in percentage points
Hire rate	6.2	8.3	+2.1
Attrition rate	6.9	7.6	+0.7

Note: The table shows the average attrition and hire rates for 48 jurisdictions that were able to provide the information for the years 2014 and 2023.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.10 Staff dynamics, <http://isoradata.org> (accessed on 1 October 2025).

However, when looking at specific administration data, it becomes apparent that “attrition and hire” rates cover a very broad range. Figure 9.8. shows the relationship between tax administration attrition and hire rates. It illustrates that there are a number of administrations with attrition and hire rates well above 10% (upper-right box), while others show very low attrition and hire rates (lower-left box).

Figure 9.8. Attrition and hire rates, 2023

Note: Attrition rate = number of staff departures/average staffing level. Hire rate = number of staff recruitments/ average staffing level. The average staffing level equals opening staff numbers + end-of-year staff numbers/2.

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, Table D.10 Staff dynamics, <http://isoradata.org> (accessed on 1 October 2025).

StatLink  <https://stat.link/s0iyu9>

While recruitment rates may vary year on year, the challenge of training and knowledge transfer are consistent. Tax administrations are increasingly facing challenges to both recruit staff with the right skills and retain existing staff. Box 9.4. outlines innovative approaches being taken by France and Hungary to attract new candidates and motivate existing staff.

Box 9.4. Examples – Recruiting and retaining staff

France – Career development

DGFIP launched a significant project with the objective of constructing a more supportive environment for helping officials to develop their careers.

The project was carried out with the cooperation of tax administration managers, either through a survey (conducted among 30 000 officials) or through a large number of workshops (over 130) to identify areas for improvement.

From the responses, the following was implemented:

- A web application that asks users about their career paths and aspirations, and in response offers illustrations of possible career paths that match their profiles. It also provides access to a comprehensive library of 60 inspiring career paths within the administration, and offers a quiz to test knowledge of the HR rules to career pathways.
- An upgrade of the intranet dedicated to HR with access to career routes/mapping for officials.
- A newsletter sent to all managers, gathering job offers published every week and corresponding to their positions.
- Enhanced support to prepare officials for the recruitment process when applying for roles, including the appointment of mentors, access to specific intranet spaces with all the necessary documentation, and the recording of video conferences.
- Days dedicated to immersion in different areas of work to help discover other occupations.

Hungary – Internship programme for data scientists

The NTCA has launched a new internship programme for data scientists completing their studies, aimed at recruiting young talent for data-intensive roles. The programme also served as a pilot project to explore innovative recruitment approaches.

In addition to social media and short video messages, the NTCA disseminated information about the programme to targeted candidate groups through a network of university contacts, specifically tutors in relevant fields.

As past efforts indicated that prolonged recruitment processes significantly increase the likelihood of candidates opting for other opportunities, either midway or even after a successful application, the application process was simplified and sped up.

Undergraduate students are eligible to apply from their third semester onwards, regardless of their field of study. Candidate selection was based on an analytical exercise that tested practical skills. While offering positions across numerous NTCA field offices, the NTCA centralised candidate communication and streamlined evaluations. Consequently, applicants received feedback on their submissions within just a few days.

Initial findings suggest that “direct marketing” methods are effective in reaching the target group. Coupled with mentoring, interns can produce value very quickly. Although they start on temporary contracts, there is the possibility to apply for a permanent position. The advantage is that by this time they will have good understanding of organisational procedures, datasets, and have built strong working relationships with colleagues.

For further information, please see here: <https://www.youtube.com/watch?v=KZZNvfmWE8k> (accessed on 1 October 2025).

Sources: France (2025) and Hungary (2025).

Virtual training

During the COVID-19 pandemic, many tax administrations reported transitioning their training programmes from face-to-face contact to a virtual environment. Tax administrations report that these practices brought significant benefits to the administration and participants, and as a result they are becoming permanent features of training programmes. Previous editions of this report showcased examples of this, such as the use of live online training sessions or pre-recorded videos/webinars (OECD, 2021^[2]) or interactive applications that can also be used as part of recruitment efforts (OECD, 2023^[3]).

While moving to a virtual training environment may have some up-front costs, it may save costs in the longer term as once produced, pre-recorded training material can be viewed at any time, from anywhere. Remote training can reduce travel expenses and can allow staff to learn at their own pace and convenience as well as increasing the number of staff members that can follow a course. New technologies are also helping facilitate the collaborative learning aspects, increasing the quality of the training experience.

In addition to the virtual training programmes produced by tax administrations themselves, international organisations are also producing e-learning courses specifically designed for tax administrations. One of these programmes is the Virtual Training to Advance Revenue Administration (VITARA) initiative, a joint project of four organisations, which is described in more detail in Box 9.5.

Box 9.5. The VITARA initiative

VITARA is an online course specifically designed for tax administrations. The course consists of several short, structured online modules. It is a joint project of four organisations: CIAT, the IMF, IOTA and the OECD.

The VITARA course content is tailored to senior managers and executives of tax administrations of developing countries. Yet other tax officials, including from advanced economies, could also benefit from following the different course modules. All modules are free of charge and there are no prerequisites or qualification requirements.

The VITARA curriculum represents a comprehensive training package for tax administration management. It consists of two parts and includes the following topics:

- Part A. Institutional governance, management, and support
 - Institutional governance
 - Compliance risk management
 - Organization
 - Strategic management
 - Information technology and data management
 - Reform management: (i) Fundamentals and (ii) Specific Topics
 - Human resource management
 - Performance management
 - Enterprise risk management
- Part B. Core functions of tax administration
 - Introduction to tax administration
 - Taxpayer registration
 - Taxpayer services
 - Filing of declarations

- Payment and debt collection
- Audit program
- Dispute resolution
- Revenue management

By October 2025, twelve VITARA modules have been developed in English, and some are also available in Spanish, French and Arabic. New English modules as well as further translations will follow. The available modules (underlined above) can be accessed here: <https://www.imf.org/en/Capacity-Development/Training/ICDTC/Search?sortby=Relevancy&sortdir=Descending&keywords=VITARA> (accessed on 1 October 2025).

To support learners, and to provide easy and free access to the content of the VITARA online modules (particularly to those that have no stable internet access), the VITARA partners have started reproducing the module content in so called “Reference Guides”. By October 2025, seven Reference Guides have been published:

- Human Resource Management (CIAT, IMF, IOTA, OECD, 2024^[4])
- Institutional Governance (CIAT, IMF, IOTA, OECD, 2024^[5])
- Organisation (CIAT, IMF, IOTA, OECD, 2024^[6])
- Strategic management (CIAT, IMF, IOTA, OECD, 2023^[7])
- Reform Management Fundamentals: Setting Up a Reform Program (CIAT, IMF, IOTA, OECD, 2024^[8])
- Reform Management Specific Topics: Managing a Reform Program (CIAT, IMF, IOTA, OECD, 2024^[9])
- The Audit Program (CIAT, IMF, IOTA, OECD, 2025^[10])

Supporting staff

The changes tax administrations are managing, whether technology, policy or budget driven, are constant. In addition, the wider digital transformation of the economy is changing the service expectations of taxpayers. To maintain staff motivation and performance, tax administrations are considering the best way to support staff through these changes, as well as ensuring they have the right tools for the tasks.

Technology is playing a key role in this. This includes the use of artificial intelligence, machine learning and robotic process automation (RPA) to automate some of the core tasks within a tax administration. Table 6.4. in Chapter 6 highlights the rapid growth in the use of such services with, for example, 60% of administrations reporting that they now using RPA, an increase of close to 40 percentage points since 2018. This is helping tax administrations respond to budgetary and workforce pressures as it is freeing up resource for staff to be focussed on more complex tasks.

Box 9.6. illustrates the different ways tax administrations are assisting their staff, from automation to boosting productivity and upskilling technology skills. Some administrations, such as France, have even taken a proactive approach to prevent unwelcome behaviours.

Box 9.6. Examples – Supporting staff

Austria – Voice bot to automate telephone inquiries

The Austrian Ministry of Finance has developed a voice bot to automate telephone inquiries regarding the use of ID Austria authentication on the FinanzOnline platform. The high volume of repetitive inquiries placed a significant burden on the customer service team. The voice bot helps relieve staff by independently handling simple and standardized requests. Using modern AI technologies and speech processing, the bot provides precise answers and efficiently supports typical processes.

In addition to reducing wait times, the voice bot improves service quality and offers 24/7 support. Continuous learning processes allow the system to adapt to new requirements and remain up to date through regular updates. Experience from other organizations shows that such automation solutions can significantly reduce call volumes and shorten processing times.

A key advantage of the project is its scalability. The voice bot can easily be extended to other administrative areas, such as tax-related inquiries or document applications. Automating such processes contributes to a more efficient and user-friendly public administration. With its learning architecture and continuous optimization, the voice bot provides a sustainable solution that supports the long-term digitalisation and modernisation of the public sector.

Canada – Robotic process automation

To streamline repetitive and manual tasks, the CRA has implemented RPA. RPA is a software solution designed to automate routine business processes by mimicking employee actions, without utilising learning, judgment, or assumptions.

RPA is capable of handling complex tasks across multiple systems and applications, with great speed and precision. It can perform functions such as data entry and calculations, collecting, organising, and validating information, and documenting and filing results. Benefits of RPA include:

- Improved employee experience and satisfaction
- Reduced carbon footprint
- Optimised workloads
- Refocused employee efforts on higher-value work

Since its adoption, the CRA has automated over forty processes, saving the equivalent of more than 187 000 hours of labour and millions of dollars. One significant application of RPA is the automation of the triage process for one-way electronic Requirements for Information (eRFI) responses from financial institutions. This automation has reduced the manual effort required to handle the large volume of eRFI responses, enabling collectors to receive information faster, which helps accelerate payments and close accounts.

This RPA is expected to handle over 30 000 transactions, significantly accelerating file triage for collectors. The CRA continues to explore additional areas where RPA can be applied to further enhance programmes and deliver faster, more efficient services to its taxpayers.

Finland – Productivity management

The Finnish Tax Administration has taken steps to improve its productivity management through using operational management systems, which is related to how the administration ensures it meets its objectives. Several systems (both externally acquired and internally developed) are being used to facilitate planning, the scheduling of shift work, and monitoring. The goal is to automate as much as possible, and centralise control/ management. The main focus areas are:

- Resource planning: This includes allocating resources against goals and skills based on given priorities, managing employees' time, and calculating how much resource is needed for each task to allocate it efficiently.
- Task management: Using operational systems to prioritise tasks.
- Operational personnel planning: Ensuring staff are assigned to the correct task and staff skills are developed to meet the requirements of their role.

This brings numerous benefits, to both employees and managers. Employees can see their tasks on a weekly basis, which improves the accuracy of the work plan and increases work predictability. It also enables staff to see that they are doing tasks which suit their skillset.

For managers, it reduces the time they spend on planning and manually updates, freeing up time for other work such as coaching employees. It also increases the transparency of the group's work and makes it easier to agree on the division of tasks.

France – Addressing inappropriate or aggressive behaviours

DGFIP has adopted a policy of zero tolerance towards any form of inappropriate behaviour or aggression.

To achieve these objectives, a national action plan has been adopted, which includes measures to refresh and modernise the system for reporting, monitoring and dealing with incidents. This has led to the development of the Sign@IFiP application.

Launched in 2024, Sign@IFiP makes it easier to detect, report and follow up on any incident suffered by an official. The tool was developed based on feedback from a random sample of officials. The Sign@IFiP application is accessible to all staff via the staff portal. It enables them to report either an 'external' incident, i.e. one that has occurred in an interaction with an external user/person (for example, verbal altercations, insults, etc.), or an 'internal' incident, i.e. one that has occurred in their relationship with another staff member. This function also makes it possible to report any behaviour of a sexist or sexual harassment nature, combatting any form of discrimination or harassment by supporting the reporter and punishing the perpetrator.

Lastly, the tool includes a module designed to keep all those involved in employee protection (such as the head of department, the person in charge of legal protection, the line management chain and senior management) informed on the volume of alerts and, with the official's consent, also their individual content.

France – Generative artificial intelligence assistant for document searches

DGFIP has combined GenAI with powerful document search capabilities in its GenAI assistant called Caradoc, which enables officials to access critical information faster and focus on higher-value tasks, reducing administrative burdens.

Caradoc features a robust GenAI-supported document search engine that operates in two distinct modes:

- Single file upload: Officials can upload a document and submit specific questions or queries directly related to the document's content. Caradoc not only provides a response, but also highlights the exact excerpts from the document used to generate the answer.
- Collection mode: The collection mode expands Caradoc's capabilities by allowing users to create a personalised collection of documents (for example, policy guidelines, legal texts, internal procedures) and perform comprehensive, cross-document searches. Users can pose global or complex questions, which Caradoc answers by simultaneously extracting relevant information from multiple documents to formulate a comprehensive answer. The excerpts used to formulate the response are also highlighted, ensuring transparency and a deeper understanding of the results.

In both modes, the assistant retrieves the most relevant information while highlighting the specific documents excerpts used to generate responses, ensuring transparency and traceability.

This solution clearly underscores DGFIP's commitment to leveraging AI-driven innovation to modernise the tax administration and support its workforce.

Singapore – Technology-essentials training roadmap

IRAS has introduced the Technology-Essentials (Tech-E) training roadmap to advance the technology skills of officers who do not work in the information and communications technology or data areas. The aim is to improve technology proficiency and accelerate officers' data and digital skills, allowing them to effectively operate in the vast digital ecosystem to maintain long-term competitiveness and agility.

In developing the Tech-E training roadmap, IRAS identified the essential data and digital tools (tech tools) that officers need to perform their tasks effectively. These tech tools cover automation, analytics, design and user experience, and generative AI. The design of the roadmap also recognises that mature or mid-career officers may require more support in meeting proficiency levels in data and digital skills.

The tech tools are categorised into different levels:

- Level 1: Officers become proficient in technology relevant to their work, enabling them to perform functional tasks independently.
- Level 2: Officers identify value-adding opportunities using technology and facilitate innovation.
- Level 3: Officers use technology to solve complex problems and devise innovative solutions.

The training roadmap offers a blend of e-learning and classroom training, providing officers the flexibility to choose courses that best suit their individual needs and learning preferences. IRAS adopts a phased approach in implementing the training roadmap, which enables officers to progressively acquire relevant technological skills. This strategy allows officers to advance from baseline proficiency to in-depth technological skills over about four years, while balancing their day-to-day work responsibilities.

Sources: Austria (2025), Canada (2025), Finland (2025), France (2025) and Singapore (2025).

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Annex A. Overview of the ISORA data tables

Annex A contains an overview of the ISORA data tables that hold the latest available annual and periodic ISORA data for fiscal years 2018 to 2023, and that are published on the ISORA data portal (<https://isoradata.org>, accessed on 1 October 2025).

The data tables hold the data for the more than 175 jurisdictions that have completed at least one of the last five rounds of ISORA which were launched between September 2020 and September 2024. They are grouped into three sets:

- **Review tables** (see Table A A.1.) contain the ISORA data collected through the annual survey part. Those are the more than hundred tables starting with “A”:
- **Derived tables** (see Table A A.2.) contain indicators derived from the raw data submitted via the annual ISORA survey part. Those are 49 tables starting with “D”. The formulae and data points used for calculating the indicators are shown below each of these tables.
- **Periodic tables** (see Table A A.3.) hold the data from the periodic part of the 2023 ISORA survey. Those 52 tables start with “B”.

Using the ISORA data in those tables, the Tax Administration 2024 publication examines various aspects of tax systems and their administration in 58 OECD and non-OECD jurisdictions. (See Annex B for the list of tax administrations covered by this publication.)

Table A A.1. Overview of the ISORA data tables: Review tables

ISORA survey form	Table name
Form A: Tax types	Table A.0 Participation of tax administrations in ISORA
	Table A.1 Revenue types for which the administration has responsibility: Income tax and taxes on goods and services
	Table A.2 Revenue types for which the administration has responsibility: Other taxes
	Table A.3 Revenue types for which the administration has responsibility: Other taxes (continued), SSC and non-tax revenue
	Table A.4 Employer withholding taxes and combined tax and customs administrations
Form B: Revenue	Table A.5 Net revenue collected by the tax administration: Total
	Table A.6 Net revenue collected by the tax administration by tax type: Personal income tax
	Table A.7 Net revenue collected by the tax administration by tax type: Corporate income tax
	Table A.8 Net revenue collected by the tax administration by tax type: Value added taxes
	Table A.9 Net revenue collected by the tax administration by tax type: Excises (domestic)
	Table A.10 Net revenue collected by the tax administration by tax type: Other taxes
	Table A.11 Net revenue collected by the tax administration: Social security contributions
	Table A.12 Net revenue collected by the tax administration: Non-tax revenues
	Table A.13 Composition of value added taxes collected by the tax administration: Gross domestic
	Table A.14 Composition of value added taxes collected by the tax administration: Gross import, even where collected by customs
	Table A.15 Composition of value added tax collected by the tax administration: Refunds
Form C: Expenditure and FTE resources	Table A.16 Tax administration expenditures: Operating and salary expenditure
	Table A.17 Tax administration ICT expenditure and capital expenditure
	Table A.17A FTEs for joint tax and customs administrations
	Table A.17B Expenditures for joint tax and customs administrations
	Table A.18 Total FTEs of the tax administration and FTEs of the tax administration by function: Registration and services
	Table A.19 Number of FTEs by function: Audit and debt collection

ISORA survey form	Table name
	Table A.20 Number of FTEs by function: Disputes and HR
	Table A.21 Number of FTEs by function: ICT and all other functions; Percentage of FTEs working on headquarter functions
Form D: Human resource information	Table A.22 Staff metrics: Staff strength levels at start of FY and departures
	Table A.23 Staff metrics: Staff strength levels at end of FY and recruitments
	Table A.24 Staff metrics: Gender information
	Table A.25 Staff metrics: Gender distribution - Female
	Table A.26 Staff metrics: Gender distribution - Male
	Table A.27 Staff metrics: Gender distribution - Other gender
	Table A.28 Staff metrics: Academic qualifications
	Table A.29 Staff metrics: Age distribution below 35 years
	Table A.30 Staff metrics: Age distribution 35 to 54 years
	Table A.31 Staff metrics: Age distribution 55 years and above
	Table A.32 Staff metrics: Length of service below 10 years
	Table A.33 Staff metrics: Length of service 10 years and above
Form E: Taxpayer segments	Table A.34 Large taxpayer office / program: Existence and revenue collected
	Table A.35 Large taxpayer office / program: Functions - Registration, return and payment processing, and services
	Table A.36 Large taxpayer office / program: Functions - Audit, debt collection, dispute resolution
	Table A.37 Large taxpayer office / program: Staff
	Table A.38 Large taxpayer office / program: Taxpayers
	Table A.39 Large taxpayer office / program: Audits
	Table A.40 High net wealth individuals (HNWIs) office / program: Existence and revenue collected
Form F: Operational metrics	Table A.41 Number of taxpayers by tax type: Corporate income tax
	Table A.42 Number of taxpayers by tax type: Personal income tax
	Table A.43 Number of taxpayers by tax type: Employers that withhold tax from employees
	Table A.44 Number of taxpayers by tax type: Value added tax
	Table A.45 Number of taxpayers by tax type: Excise
	Table A.46 Return filing: Expected and received returns - Corporate income tax
	Table A.47 Return filing: Returns received on time - Corporate income tax
	Table A.48 Return receipt channels: Paper and electronic, not prefilled - Corporate income tax
	Table A.49A Return receipt channels: Electronic returns, prefilled - Corporate income tax
	Table A.49B Return receipt channels: Electronic returns, prefilled - Corporate income tax
	Table A.50 Return filing: Expected and received returns - Personal income tax
	Table A.51 Return filing: Returns received on time - Personal income tax
	Table A.52 Return receipt channels: Paper and electronic, not prefilled - Personal income tax
	Table A.53A Return receipt channels: Electronic returns, prefilled - Personal income tax
	Table A.53B Return receipt channels: Electronic returns, prefilled - Personal income tax
	Table A.54 Return filing: Expected and received returns - Employers that withhold tax from employees
	Table A.55 Return filing: Returns received on time - Employers that withhold tax from employees
	Table A.56 Return receipt channels: Paper and electronic, not prefilled - Employers that withhold tax from employees
	Table A.57A Return receipt channels: Electronic returns, prefilled - Employers that withhold tax from employees
	Table A.57B Return receipt channels: Electronic returns, prefilled - Employers that withhold tax from employees
	Table A.58 Personal income tax withholding: Requirements and total withholdings
	Table A.59 Return filing: Expected and received returns - Value added tax
	Table A.60 Return filing: Returns received on time - Value added tax
	Table A.61 Return receipt channels: Paper and electronic, not prefilled - Value added tax
	Table A.62A Return receipt channels: Electronic returns, prefilled - Value added tax
	Table A.62B Return receipt channels: Electronic returns, prefilled - Value added tax
	Table A.63 Payments due and received: Corporate income tax
	Table A.64 Payments received on time: Corporate income tax
	Table A.65 Payments due and received: Personal income tax

ISORA survey form	Table name
	Table A.66 Payments received on time: Personal income tax
	Table A.67 Payments due and received: Employers that withhold tax from employees
	Table A.68 Payments received on time: Employers that withhold tax from employees
	Table A.69 Payments due and received: Value added tax
	Table A.70 Payments received on time: Value added tax
	Table A.71 Electronic payments
	Table A.72 Treatment of most approved VAT refunds
	Table A.73 Value of all VAT 'credits'
	Table A.74 Closing stock of arrears: Total and non-collectable
	Table A.75 Closing stock of arrears relating to state owned enterprises: Total and non-collectable
	Table A.76 Closing stock of arrears by tax type: Corporate income tax
	Table A.77 Closing stock of arrears by tax type: Personal income tax
	Table A.78 Closing stock of arrears by tax type: Tax withheld by employers from employees
	Table A.79 Closing stock of arrears by tax type: Value added tax
	Table A.80 Verification / audit activity: All audits (excluding electronic compliance checks)
	Table A.81 Verification / audit activity: Value of additional assessments raised - All audits (excluding electronic compliance checks)
	Table A.82 Verification / audit activity: Value of additional assessments raised - Corporate income tax
	Table A.83 Verification / audit activity: Value of additional assessments raised - Personal income tax
	Table A.84 Verification / audit activity: Value of additional assessments raised - Tax withheld by employers from employees
	Table A.85 Verification / audit activity: Value of additional assessments raised - Value added tax
	Table A.86 Verification / audit activity: Electronic compliance checks
	Table A.87 Tax crime investigations: Role of the administration
	Table A.88 Tax crime investigations: Number of cases
	Table A.89 Dispute resolution: Review mechanisms
	Table A.90 Dispute resolution: Review procedure
	Table A.91 Dispute resolution: Number of cases - Tax cases under internal procedures
	Table A.92 Dispute resolution: Number of cases - Tax cases under independent review by external bodies
	Table A.93 Dispute resolution: Number of cases - Tax cases under independent review by a higher appellate court
Form G: Taxpayer and other stakeholder interactions	Table A.94 Registration channels: Online, Telephone, Email
	Table A.95 Registration channels: Mail / post, In-person, other
	Table A.96 Incoming service contacts: Track keeping and number of contacts by channel - Online and digital assistance
	Table A.97 Incoming service contacts: Number of contacts by channel - Telephone call and e-mail
	Table A.98 Incoming service contacts: Number of contacts by channel - Mail / post and in-person
	Table A.99 Pre-fill of PIT returns: Income information - Personal information, and wage and salary
	Table A.100 Pre-fill of PIT returns: Income information - Pension, interest, and dividends
	Table A.101 Pre-fill of PIT returns: Income information - Capital gains / losses, and other income
	Table A.102 Pre-fill of PIT returns: Expense information - Donations, school and university fees, and childcare expenses
	Table A.103 Pre-fill of PIT returns: Expense information - Insurance premiums, health and medical expenses, and retirement contributions
	Table A.104 Pre-fill of PIT returns: Expense information - Interest, and other expenses
	Table A.105 Compliance approaches: Electronic invoicing
	Table A.106 Compliance approaches: Devices that register transactions
	Table A.107 Cooperative compliance approaches
	Table A.108 Innovative technologies: Implementation and usage - Blockchain, artificial intelligence, and cloud computing
	Table A.109 Innovative technologies: Implementation and usage - Data science, robotic process automation, and APIs
	Table A.110 Innovative technologies: Implementation and usage - Whole-of-government identification, digital authentication technology, and virtual assistants

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, <https://data.imf.org/-/media/Data/External-Storage/Documents/4909A00B31A446CCBF1ABF16D53B0487/en/ISORA-2024-Review-Tables-FY2018-2023.xlsm> (accessed on 1 October 2025).

Table A A.2. Overview of the ISORA data tables: Derived tables

Indicator grouping	Table name
Revenue	Table D.1 Revenue related ratios: Revenue to total government revenue and GDP
	Table D.2 Revenue related ratios: Tax to GDP and non-tax revenue to total revenue
	Table D.3 Tax structure and SSC proportions: PIT, CIT and VAT
	Table D.4 Tax structure and SSC proportions: Excises, Other taxes and SSC
Resources	Table D.5 Resource ratios: Full-time equivalent (FTE)
	Table D.6 Resource ratios: Cost
Staff	Table D.7 Staff allocation by location and function: Registration, services, processing, and audit and verification
	Table D.8 Staff allocation by function: Debt collection, dispute management, and HR management
	Table D.9 Staff allocation by function: ICT support and all other functions
	Table D.10 Staff dynamics
	Table D.11 Academic qualifications
	Table D.12 Staff age distribution: Staff below 45 years
	Table D.13 Staff age distribution: Staff 45 years and above
	Table D.14 Length of service: Less than 10 years
	Table D.15 Length of service: 10 years or more
	Table D.16 Gender distribution
Segmentation	Table D.17 Large taxpayer office / program ratios: Full-time equivalents (FTEs)
	Table D.18 Large taxpayer office / program ratios: Corporate taxpayers, additional assessments raised, and net revenue administered
Registration	Table D.19 Registration of personal income taxpayers
	Table D.20 Percentage inactive taxpayers on registers: CIT, PIT and PAYE
	Table D.21 Percentage inactive taxpayers on registers: VAT and Excise
Return filing	Table D.22 Rate of returns received on-time: CIT
	Table D.23 Rate of returns received on-time: PIT
	Table D.24 Rate of returns received on-time: PAYE
	Table D.25 Rate of returns received on-time: VAT
	Table D.26 Electronic filing: CIT and PIT
	Table D.27 Electronic filing: PAYE and VAT
	Table D.28 Proportion of returns by channel: CIT - Paper and electronic, not prefilled
	Table D.29 Proportion of returns by channel: CIT - Electronic, prefilled
	Table D.30 Proportion of returns by channel: PIT - Paper and electronic, not prefilled
	Table D.31 Proportion of returns by channel: PIT - Electronic, prefilled
	Table D.32 Proportion of returns by channel: PAYE - Paper and electronic, not prefilled
	Table D.33 Proportion of returns by channel: PAYE - Electronic, prefilled
	Table D.34 Proportion of returns by channel: VAT - Paper and electronic, not prefilled
	Table D.35 Proportion of returns by channel: VAT - Electronic, prefilled
Payment	Table D.36 Rate of payments received on-time: CIT
	Table D.37 Rate of payments received on-time: PIT
	Table D.38 Rate of payments received on-time: PAYE
	Table D.39 Rate of payments received on-time: VAT
	Table D.40 Electronic payment proportions and third party withholding
Arrears	Table D.41 Arrears ratios: Closing stock and collectable arrears
	Table D.42 Arrears ratios: Year-on-year change
	Table D.43 Arrears ratios relating to state owned enterprises: Closing stock and collectable arrears
	Table D.44 Arrears in relation to collection by tax type: CIT and PIT
	Table D.45 Arrears in relation to collection by tax type: PAYE and VAT
Audit	Table D.46 Audit ratios: Hit rate and additional assessments raised
	Table D.47 Audit ratios: Additional assessments raised by tax type - CIT and PIT
	Table D.48 Audit ratios: Additional assessments raised by tax type - PAYE and VAT

Indicator grouping	Table name
Disputes	Table D.49 Administrative review cases and litigation

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, <https://data.imf.org/-/media/Data/External-Storage/Documents/A5265B1B25CC438283ED26CF2E0F8FA4/en/ISORA-2024-Derived-Tables-FY2018-2023.xlsm> (accessed on 1 October 2025).

Table A A.3. Overview of the ISORA data tables: Periodic tables

ISORA survey form	Table name
Form C-P: Institutional arrangements, governance and management practices	Table B.1 Institutional framework and management autonomy
	Table B.2 Roles in addition to revenue collection
	Table B.3 Selected governance practices: Audit, code of conduct and integrity
	Table B.4 Selected governance practices: Plans, reports and standards; and organizational chart
	Table B.5 Structural reforms: Implementation and nature
	Table B.6 Structural reforms: Main drivers
Form D-P: Human resource management	Table B.7 Human resource authority
	Table B.8 Remuneration and performance management
	Table B.9 HR management approach: Staff surveys
	Table B.10 HR management approach: Strategy / multi-year work force plan and training strategy
	Table B.11 HR management approach: Support for new staff and staffing plan
	Table B.12 HR management approach: staffing plan and flexible working arrangements
	Table B.13 HR management approach: Leadership development, time reporting, diversity policy
	Table B.14 Capability needs assessment
Form E-P: Segmentation and compliance risk management	Table B.15 Specialist skills
	Table B.16 Large taxpayer office / program: Main criteria
	Table B.17 High net wealth individuals (HNWIs) office / program: Main criteria
	Table B.18 High net wealth individuals (HNWIs) office / program: Functions, staff and taxpayers
	Table B.19 Small taxpayers
	Table B.20 Compliance risk management: Strategy
	Table B.21 Compliance risk management: Gender-disaggregated data
	Table B.22 Compliance risk management: Characterization of challenges related to international tax issues
	Table B.23 Compliance risk management: Staff related to international tax issues
	Table B.24 Compliance risk management: Tax gap
	Table B.25 Compliance risk management: Compliance intervention framework
	Table B.26 Compliance risk management: Interventions before return filing
	Table B.27 Compliance risk management: Interventions after return filing, and measurement of intervention effectiveness
	Table B.28 Compliance risk management: Post-filing enforcement actions
Form F-P: Tax operations	Table B.29 Compliance risk management: Enforcement effectiveness indicators
	Table B.30 Taxpayer gender recorded; and mandatory electronic filing and payment
	Table B.31 Tax arrears collection powers and their usage - Part 1
	Table B.32 Tax arrears collection powers and their usage - Part 2
	Table B.33 Tax arrears collection powers and their usage - Part 3
	Table B.34 Tax arrears collection powers and their usage - Part 4
	Table B.35 Voluntary disclosures; and verification / audit activity: Automated compliance checks
	Table B.36 Verification / audit activity: Random audits
Form G-P: Engagement with stakeholders: taxpayers,	Table B.37 Verification / audit activity: Selection processes / criteria
	Table B.38 Administrative sanctions for taxpayer non-disclosure: Application and selected features
	Table B.39 Service channels: Statistics about service channel usage
	Table B.40 Service channels: Features of the service approach
	Table B.41 Service channels: Online services - Part 1
	Table B.42 Service channels: Online services - Part 2

ISORA survey form	Table name
information providers and others	Table B.43 Taxpayer rights: Documentation
	Table B.44 Taxpayer rights: Complaints mechanisms
	Table B.45 Satisfaction surveys
	Table B.46 Gender-based analysis of taxpayer satisfaction, and service and assistance strategy
	Table B.47 Taxpayer education
	Table B.48 Rulings on the application of tax laws
	Table B.49 Withholding at source
	Table B.50 Reporting of payment details
	Table B.51 Third-party data
	Table B.52 Taxpayer compliance burden

Source: ADB, CIAT, IOTA, IMF, OECD, International Survey on Revenue Administration, <https://data.imf.org/-/media/iData/External-Storage/Documents/AF9FEB8CB9C846379C9131E8289B1DF4/en/ISORA-2023-Periodic-tables.xlsx> (accessed on 1 October 2025).

Annex B. Participating tax administrations

Table A B.1. Overview of tax administrations included in this report

Jurisdiction	Tax administration	Website address	Currency code
Argentina	Tax Collection and Customs Control Agency	www.arca.gob.ar	ARS
Australia	Australian Taxation Office	www.ato.gov.au	AUD
Austria	Federal Ministry of Finance	www.bmf.gv.at	EUR
Belgium	Federal Public Service Finance	https://finances.belgium.be	EUR
Brazil	Federal Revenue Service of Brazil	www.rfb.gov.br	BRL
Bulgaria	National Revenue Agency	https://nap.bg/	BGN
Canada	Canada Revenue Agency	www.cra-arc.gc.ca	CAD
Chile	Servicio de Impuestos Internos	www.sii.cl	CLP
China (People's Republic of)	State Taxation Administration	www.chinatax.gov.cn	CNY
Colombia	National Tax and Customs Administration	www.dian.gov.co	COP
Costa Rica	Directorate of Taxation, Ministry of Finance	www.hacienda.go.cr	CRC
Croatia	Tax Administration, Ministry of Finance	www.porezna-uprava.hr	EUR
Cyprus	Cyprus Tax Department	www.mof.gov.cy/tax	EUR
Czechia	Financial Administration of the Czech Republic	www.financnisprava.cz	CZK
Denmark	Danish Tax Administration	www.skatteforvaltningen.dk	DKK
Estonia	Estonian Tax and Customs Board	www.emta.ee	EUR
Finland	Finnish Tax Administration	www.vero.fi	EUR
France	Direction Générale des Finances Publiques (General Directorate of Public Finances)	www.impots.gouv.fr	EUR
Georgia	Georgia Revenue Service	www.rs.ge	GEL
Germany	Federal Ministry of Finance, Federal Central Tax Office, and the State Tax Authorities	www.bundesfinanzministerium.de	EUR
Greece	Independent Authority for Public Revenue	www.aade.gr	EUR
Hong Kong (China)	Inland Revenue Department	www.ird.gov.hk	HKD
Hungary	National Tax and Customs Administration	https://nav.gov.hu	HUF
Iceland	Iceland Revenue and Customs	www.skatturinn.is	ISK
India	Income Tax Department Central Board of Indirect Taxes & Customs	www.incometaxindia.gov.in www.cbic.gov.in	INR
Indonesia	Directorate General of Taxes	www.pajak.go.id	IDR
Ireland	Office of the Revenue Commissioners	www.revenue.ie	EUR
Israel	Israel Tax Authority	www.taxes.gov.il	ILS

Jurisdiction	Tax administration	Website address	Currency code
Italy	Revenue Agency	www.agenziaentrate.gov.it	EUR
Japan	National Tax Agency	www.nta.go.jp	JPY
Kenya	Kenya Revenue Authority	www.kra.go.ke	KES
Korea	National Tax Service	www.nts.go.kr	KRW
Latvia	State Revenue Service	www.vid.gov.lv	EUR
Lithuania	State Tax Inspectorate under the Ministry of Finance	www.vmi.lt	EUR
Luxembourg	Administration des contributions directes (Direct Tax Administration) Administration de l'enregistrement, des domaines et de la TVA (Indirect Tax Administration)	www.impotsdirects.public.lu https://aed.gouvernement.lu/	EUR
Malaysia	Inland Revenue Board of Malaysia	www.hasil.gov.my	MYR
Malta	Office of the Commissioner for Revenue	https://cfr.gov.mt	EUR
Mexico	Tax Administration Service	www.sat.gob.mx	MXN
Morocco	General Administration of Taxes	www.tax.gov.ma	MAD
Netherlands	Netherlands Tax Administration	www.belastingdienst.nl	EUR
New Zealand	Inland Revenue Department – Te Tari Taake	www.ird.govt.nz	NZD
Norway	Norwegian Tax Administration	www.skatteetaten.no	NOK
Peru	Superintendencia Nacional de Administración Tributaria (SUNAT)	www.sunat.gob.pe	PEN
Poland	National Revenue Administration	www.podatki.gov.pl	PLN
Portugal	Portuguese Tax and Customs Authority	www.portaldasfinancas.gov.pt	EUR
Romania	National Agency for Fiscal Administration	www.anaf.ro	RON
Saudi Arabia	Zakat, Tax and Customs Authority	https://zatca.gov.sa	SAR
Singapore	Inland Revenue Authority of Singapore	www.iras.gov.sg	SGD
Slovak Republic	Financial Administration of the Slovak Republic	www.financnasprava.sk	EUR
Slovenia	Financial Administration of the Republic of Slovenia	www.fu.gov.si	EUR
South Africa	South African Revenue Service	www.sars.gov.za	ZAR
Spain	Spanish Tax Agency (AEAT)	https://sede.agenciatributaria.gob.es/	EUR
Sweden	Swedish Tax Agency	www.skatteverket.se	SEK
Switzerland	Federal Tax Administration	www.estv.admin.ch	CHF
Thailand	The Revenue Department	www.rd.go.th	THB
Türkiye	Turkish Revenue Administration	www.gib.gov.tr	TRY
United Kingdom	HM Revenue & Customs	www.hmrc.gov.uk	GBP
United States	Internal Revenue Service	www.irs.gov	USD

Tax Administration 2025

Comparative Information on OECD and other Advanced and Emerging Economies

This report is the thirteenth edition of the OECD's Tax Administration Series. Drawing on data and information from a broad set of national tax administrations across the globe, it is intended to help tax administrations understand global trends in the design and administration of tax systems and to facilitate cross-border comparisons. While primarily intended for analysts, the report can also be a useful tool for senior tax administration managers and officials in ministries of finance when considering changes in tax system administration. Based on the data from the International Survey on Revenue Administration (ISORA), the 2025 edition takes a closer look at national-level tax administrations across 58 jurisdictions. In addition to its traditional focus on performance-related data and ratios for the latest available fiscal year (2023), this edition places particular emphasis on how tax administration has evolved over the past decade.



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