



Tax Administration 2023

COMPARATIVE INFORMATION ON OECD AND OTHER
ADVANCED AND EMERGING ECONOMIES



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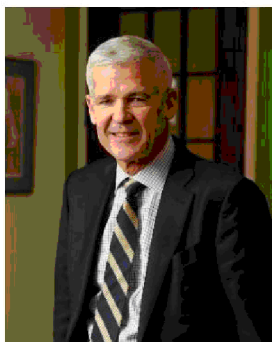
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Preface



The 2023 edition of the Tax Administration Series (TAS), like its predecessors, provides comparative information on the performance of advanced and emerging tax administrations globally and seeks to draw out the main underlying trends and challenges they face. The purpose and value of the TAS, first published in 2004, is to assist administrations, governments, taxpayers and other stakeholders towards identifying improvements in the effectiveness of tax administration.

Coming out of the COVID-19 pandemic, which affected the lives of so many people around the world, tax administrations remain focused on key questions resulting from the impacts of the crisis. Some of these impacts are temporary.

For example, we can see from the TAS data (which covers fiscal years from 2018 to 2021), that tax arrears are decreasing in many jurisdictions compared to the COVID-19 highs. This indicates the effectiveness of approaches taken by tax administrations to support citizens and businesses during this unprecedented period.

However, some impacts may be more permanent. This includes expectations taxpayers have for service delivery and burden reductions, as well as changes to the operating models of tax administrations, which includes leading our workforce in a modernized work environment.

The pandemic has also accelerated many new practices, creating lasting benefits for tax administrations and taxpayers. Many of the examples in this edition showcase the integration of digital transformation initiatives into the existing operating models of individual tax administrations, often using the learnings from the pandemic to further enhance compliance and reduce burdens.

TAS 2023 also explores the significant progress that has been made in relation to digital transformation as well as some of the challenges it presents. The substantial benefits of digitisation can be observed in taxpayer compliance and a reduction in taxpayer burden. This report highlights the considerable progress achieved by tax administrations in these areas.

Digital transformation will be of central importance for us to achieve our goals. Making it easy and seamless to meet tax obligations will be central to any tax administration's objective of raising vital public funds. Upgrading and providing new services and adopting new technologies will assist in creating positive attitudes to compliance which will yield substantial benefits for years to come.

I would like to express my appreciation to those involved in producing this engaging and informative report, and in particular Oliver Petzold and Paul Marsh of the OECD Secretariat. This edition of the TAS will continue to help us all understand more about the challenges that we face individually and collectively. Through this, not only can we consider what we might do in our own jurisdictions but also identify where tax administrations can collaborate to improve our services to taxpayers across the globe.

Bob Hamilton

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

Foreword

Tax Administration 2023 is the eleventh 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 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. It includes performance-related data, ratios and trends up to the end of the 2021 fiscal year and, thus, shows the impact of the COVID-19 pandemic on the work of tax administrations.

The publication also presents the results of the last three rounds of the International Survey on Revenue Administration (ISORA) that were launched between September 2020 and September 2022. The ISORA survey is a multi-organisation survey to collect information and data on tax administration. It is governed by four partner organisations: the Inter-American Center of Tax Administrations (CIAT), the International Monetary Fund (IMF), the Intra-European Organisation of Tax Administrations (IOTA) and the OECD. The Asian Development Bank (ADB) also participated in those ISORA surveys along with the four partner organisations.

To provide further insight into the ISORA data in certain places, TAS 2023 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 together with eight key partner organisations. The ITTI data was also used to prepare a special chapter on the digital transformation journey of tax administrations.

This report was approved by the Committee on Fiscal Affairs on 3 July 2023 and prepared for publication by the OECD Secretariat.

Acknowledgements

The OECD has produced the Tax Administration Series, 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 2023 Tax Administration publication presents the results of the third to fifth round of the International Survey on Revenue Administration (ISORA) which were launched in 2020, 2021 and 2022, respectively. 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 principal authors of the publication were Paul Marsh and Oliver Petzold both Advisors in the OECD's Forum on Tax Administration (FTA) Secretariat. Management and analysis of the ISORA data was undertaken by Oliver Petzold and Vegard Holmedahl, also an Advisor in the FTA Secretariat. Authoring support was provided by Peter Green, Head of the FTA Secretariat.

Finally, the authors would like to thank the work of the wider team at the OECD Secretariat, in particular Sonia Nicolas and José Puig Pimentel, and the OECD Centre for Tax Policy and Administration's Communications team, in particular Carrie Tyler, Hazel Healy and Karena Garnier.

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Reader's guide

Tax Administrations covered by the report

Tax Administration 2023 is the eleventh edition of the OECD Centre for Tax Policy and Administration's comparative Tax Administration Series (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 52 jurisdictions that are members of the OECD's Forum on Tax Administration (FTA). In addition, it includes information on the non-FTA jurisdictions that are members of the European Union (i.e. Bulgaria, Croatia, Cyprus, and Malta) as well as Morocco and Thailand (which increases the report's geographical coverage).

ISORA data gathering process and reporting

The publication presents the results of the third to fifth round of the International Survey on Revenue Administration (ISORA) which were launched in September 2020, September 2021 and September 2022, respectively. The ISORA survey is a multi-organisation international survey that collects national-level information and data on tax administration. It is governed by four partner organisations: the Inter-American Center of Tax Administrations (CIAT), the International Monetary Fund (IMF), the Intra-European Organisation of Tax Administrations (IOTA) and the OECD. Since the 2018 ISORA survey round, the Asian Development Bank (ADB) also participates in ISORA along with the four partner organisations.

2020 changes to the ISORA structure and process

Following the completion of the 2018 ISORA survey, the ISORA partners reviewed the data produced by the survey, and engaged with participating administrations to gather feedback on the survey process.

The review showed that some questions suffered from a low response rate, and that the quality of the responses was mixed in some areas. Administrations confirmed that the data was useful for international comparison, for preparation of missions to other jurisdictions and for briefing documents. They did note that the survey process was complex and time consuming, and that it was desirable for the data to be timelier.

Considering this, the ISORA partners agreed that there was a need for a major revision before launching ISORA 2020, in order to reduce burdens on tax administrations in completing the survey and to improve the quality of responses. The survey review determined that responses to many questions would remain unchanged between years, thus opening the opportunity for splitting the ISORA survey into two parts:

1. **Questions to be asked in an annual ISORA survey.** These questions mainly focus on the operational performance of tax administrations, allowing the annual survey to be significantly

reduced in size and making it easier to complete. This also allows data to be made available more quickly to participating administrations. The 2020, 2021 and 2022 ISORA surveys fall in this category.

2. **Questions to be asked every four-five years.** These are mainly questions where responses are less likely to change between survey iterations. A significant number of questions included in the 2016 and 2018 ISORA surveys would fall within this category. Understanding that responses to those questions are more likely to remain stable over a longer period, means they need to be asked less frequently, thus reducing administration's annual burden of completing the survey. The ISORA partners have finalised the work on those supplementary questions, which will be included in the 2023 ISORA survey.

Survey management

The last three iterations of the ISORA survey collected data for fiscal years 2018, 2019, 2020 and 2021. Survey information was gathered online using the IMF's Revenue Administration Fiscal Information Tool (RA-FIT). Participation was voluntary and 165 administrations completed the 2022 ISORA survey. Each partner organisation, and the ADB, 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.

Data available to the public

Historically, the OECD makes all ISORA data for TAS participants publicly available through the TAS and its data annex. Similarly, the ADB publishes jurisdiction-level ISORA data for its members. See, for example, its publication *A Comparative Analysis of Tax Administration in Asia and the Pacific: Sixth Edition* (Asian Development Bank, 2022^[1]). The other ISORA partners, do the following:

- IMF publishes in aggregated form. See, for example, the IMF publication *ISORA 2018: Understanding Revenue Administration* (Crandall, Gavin and Masters, 2021^[2]); and
- CIAT publishes selected data points. See, for example, the CIAT publication *Innovation, Digitalization and Technology Index (INDITEC): A tool for benchmarking Tax Administrations at the international level (Based on data from ISORA 2020 Survey)* (Díaz de Sarralde Miguez and Morán, 2022^[3]).

In addition, starting with the 2020 ISORA survey, all ISORA data is made available to the public on the RA-FIT data portal (<https://data.rafit.org/>).

Data comparability

TAS 2023 includes performance-related data, ratios and other information for the fiscal years 2018, 2019, 2020 and 2021. The data for the fiscal years 2018 to 2020 data was collected through the 2020 and 2021 ISORA surveys and already included in previous editions of the TAS. However, a number of administrations updated some of their previously supplied data during the process of producing the 2023 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 2020 data.

In certain areas, TAS 2023 also uses data from the 2016 and 2018 ISORA rounds to show trends for the period between 2014 and 2021. However, as noted above, the changes in the ISORA process meant that since ISORA 2020, the surveys have been reduced significantly in size when compared to the 2016 and

2018 version. In addition, following the review, a number of changes were made to 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 survey questions can be accessed on <https://data.rafit.org/> under “Forms and Guides” in the section “Publications/Links”.

As a result of the changes to the ISORA survey, TAS 2023 may not comment on certain data points that were covered in the 2019 edition of the TAS (OECD, 2019^[4]). For those data points, the 2019 edition remains the most recent source.

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 four 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 also draws on data from the Inventory of Tax Technology Initiatives (ITTI) 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 ADB, the African Tax Administration Forum, the Cercle de Reflexion et d'Echange des Dirigeants des Administrations Fiscale, the Commonwealth Association of Tax Administrators and the Study Group on Asia-Pacific Tax Administration and Research. (OECD, 2023^[5])

The inventory data is collected through a global survey on digitalisation, and can offer further insight into the ISORA data in certain places. Therefore, where available, this edition of the TAS uses the ITTI data from 52 out of the 58 tax administrations that are covered in this report and that have completed the global survey on digitalisation.

The ITTI data was also used to prepare the special chapter on the digital transformation journey of tax administrations.

Publication structure

The 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 ten chapters: (i) an introduction followed by chapters on (ii) responsibilities and revenue collections; (iii) registration and identification; (iv) assessment; (v) services; (vi) verification and compliance management; (vii) collection; (viii) disputes; (ix) budget and workforce; and (x) the digital transformation journey.

The publication also contains two annexes:

- Annex A contains the tables with the ISORA 2020, 2021 and 2022 survey responses provided by tax administrations¹ which form the basis of the analysis in this report:
 - The first set of tables contains a number of indicators derived from the data submitted via the ISORA survey (tables starting with “D”). The formulae and data points used for calculating the indicators are shown below each of these tables.
 - The second set of tables contains the raw ISORA 2020 and 2021 survey data. Those are the tables starting with “A”.
 - The last two tables holds external data points that were used to calculate some of the D-table indicators. Those tables start with “E”.
- Annex B has the details of the administrations that participated in this publication.

Tables and figures

The tables and figures in the publication are all 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.

Typically, the source notes below the figures in the main body of the publication refers readers to the underlying data that is contained in Annex A. In some cases, they may refer to previous editions of the TAS or, where ITTI data is used, to the relevant MS Excel spreadsheets on ITTI.

Symbols and abbreviations that are used in the 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 from over 50 advanced and emerging economies from across the globe. Readers wishing to find out more about the OECD’s work on tax administration should go to www.oecd.org/tax/forum-on-tax-administration/.

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.

References

- Asian Development Bank (2022), *A Comparative Analysis of Tax Administration in Asia and the Pacific: Sixth Edition*, Asian Development Bank, Manila, <https://doi.org/10.22617/TCS220571-2>. [1]
- Crandall, W., E. Gavin and A. Masters (2021), *ISORA 2018: Understanding Revenue Administration*, International Monetary Fund, Washington, DC, <http://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2021/11/03/Understanding-Revenue-Administration-464865> (accessed on 29 March 2022). [2]
- Díaz de Sarralde Miguez, S. and D. Morán (2022), *Innovation, Digitalization and Technology Index (INDITEC): A tool for benchmarking Tax Administrations at the international level (Based on data from ISORA 2020 Survey)*, Inter-American Center of Tax Administrations (CIAT), Panama City, <http://www.ciat.org/Biblioteca/DocumentosdeTrabajo/2022/WP-02-22-Sarralde-Moran.pdf> (accessed on 17 May 2023). [3]
- OECD (2023), *Inventory of Tax Technology Initiatives*, <https://www.oecd.org/tax/forum-on-tax-administration/tax-technology-tools-and-digital-solutions/> (accessed on 17 May 2023). [5]
- OECD (2019), *Tax Administration 2019: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/74d162b6-en>. [4]

Abbreviations and acronyms

ADB	Asian Development Bank
AEAT	Agencia Estatal de Administración Tributaria (Spain)
AEOI	Automatic Exchange of Information
AFIP	Administración Federal de Ingresos Públicos (Argentina)
AI	Artificial Intelligence
AIAA	Algorithmic Impact and Alignment Assessment
APA	Advance Pricing Agreement
API	Application Programming Interface
AT	Autoridade Tributária e Aduaneira (Portugal)
ATO	Australian Taxation Office
AUD	Australian Dollar
BEPS	Base Erosion and Profit Shifting
CFD	Comprobante Fiscal Digital (Digital Fiscal Receipt)
CFDI	Comprobante Fiscal Digital por Internet (Digital Fiscal Receipt by Internet)
CIAT	Inter-American Center of Tax Administrations
CIT	Corporate Income Tax
COTS	Commercial-Off-The-Shelf
CRA	Canada Revenue Agency
CRS	Common Reporting Standard
CS	Customer Satisfaction
CVITP	Community Volunteer Income Tax Program
DDMP	Digital Document Management Program
DFA	Digital Financial Asset
DGFIP	Directorate Générale des Finances Publique (France)
DI	Digital Identity
DPN	Director Penalty Notice
ECP	Enterprise Client Profile

EDS	Electronic Declaration System
eIDAS	Electronic Identification Authentication and Trust Services
EUR	Euro
FATCA	Foreign Account Tax Compliance Act
FRI	Financial Resilience Insights
FTA	Forum on Tax Administration
FTE	Full Time Equivalent
GBP	Great Britain Pound
GDP	Gross Domestic Product
GRS	Georgia Revenue Service
HMRC	Her 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
IR	Inland Revenue (New Zealand)
IRS	Internal Revenue Service (United States)
IRAS	Inland Revenue Authority of Singapore
IRIN	Inland Revenue Interactive Network
ISORA	International Survey on Revenue Administration
IT	Information Technology
ITA	Israel Tax Authority
ITDN	Intent to Disclose Notice
ITFA	Individual Tax Filing Assistance
ITTI	Inventory of Tax Technology Initiatives
KSeF	Krajowy System e-Faktur (National e-Invoice System)
LTO/P	Large Taxpayer Office/Programme
MAP	Mutual Agreement Procedure
MNE	Multinational Enterprise
MSP	Managed Service Provider
MTD	Making Tax Digital
NDID	National Digital Identity Platform (Thailand)
NTA	National Tax Agency (Japan)

NTA	Netherlands Tax Administration
NTCA	National Tax and Customs Administration (Hungary)
NZD	New Zealand Dollar
OECD	Organisation for Economic Co-operation and Development
PACO	Portal de Asistencia al Contribuyente (Portal for Integral Assistance to Taxpayers)
PAYE	Pay-As-You-Earn
PIT	Personal Income Tax
PMP	Platform for the Elderly and Pensioners
RA-FIT	Revenue Administration Fiscal Information Tool
RCT	Randomised Controlled Trials
RFB	Receita Federal do Brasil
RPA	Robotic Process Automation
RTR	Real-Time Risk
SAT	Servicio de Administración Tributaria (Mexico)
SEK	Swedish krona
SII	Servicio de Impuestos Internos (Chile)
SIG	Secure Internet Gateway
SME	Small and Medium-sized Enterprise
SMS	Short Message Service
SOC	Security Operation Centre
SRS	State Revenue Service (Latvia)
SSC	Social Security Contribution
SSTTP	Self-Serve Time to Pay
STA	State Taxation Administration (People's Republic of China)
STA	Swedish Tax Administration
STI	State Tax Inspectorate (Lithuania)
TAS	Tax Administration Series
TIWB-CI	Tax Inspectors Without Borders for Criminal Investigation
TFTC	Task Force on Tax Crimes and Other Crimes
TRD	Thailand Revenue Department
UK	United Kingdom
UNDP	United Nations Development Programme
US	United States
VAT	Value Added Tax
WHT	Withholding Tax

Executive summary

This 2023 edition of the OECD's Tax Administration Series (TAS 2023) continues to highlight the scale and complexity of tax administration. Figure 0.1 shows that together the tax administrations participating in TAS 2023 collect net revenues of EUR 13.4 trillion and employ around 1.7 million staff. They deal with the tax affairs of more than 900 million personal income tax and corporate taxpayers who together contact tax administrations in excess of 450 million times via telephone, in-person, e-mail or paper and generate more than 2.3 billion contacts through online channels. That tax administrations do this on a combined operating budget amounting to around EUR 95 billion, equivalent to 0.7% of total revenues collected, reflects their efficiency and effectiveness.

Table 0.1. Key figures related to the tax administrations covered in this publication

Staff employed	1 720 000
Audits/verifications	17 700 000
In-person enquiries	52 500 000
Telephone calls received	368 000 000
Number of active PIT and CIT taxpayers	912 000 000
Number of tax returns (PIT, CIT and VAT) received	1 450 000 000
Contacts via online taxpayer account	2 320 000 000
Operational budget (in EUR)	94 900 000 000
Collectable arrears at year-end (in EUR)	714 000 000 000
Total arrears at year-end (in EUR)	2 460 000 000 000
Net revenue collected (in EUR)	13 400 000 000 000

Note: The figures are based on data obtained through the 2022 ISORA survey. The data has been converted to EUR using the exchange rate of 31 March 2023. They are minimum figures as not all administrations were able to provide information for all data points. Figures relate to the fiscal year 2021.

A constant theme through previous editions of this series, as well as this edition, has been how tax administrations have increased and maintained their efficiency and effectiveness by looking at the opportunities to take more proactive approaches to influencing taxpayer compliance. This has frequently been driven through the increased use of technology, responding to the evolving expectations and needs of taxpayers. For example, tax administrations were rapid adopters of e-administration, enabling the online filing of tax returns as well as online payments and the full or partial prefilling of tax returns. These are now commonplace with more than 85% of individuals and 95% of businesses filing their returns electronically. As Figure 0.1 shows, digital contact channels dominate interactions with taxpayers and the number of administrations using or developing mobile applications continues to grow as illustrated in the examples in Chapter 5.

During the COVID-19 pandemic, tax administration's abilities to use technology to manage connections to citizens and businesses, their long experience of operating at scale and skills in handling extensive data sets led many governments to turn towards tax administrations to assist in the provision of wider government support measures. The pandemic also led to rapid changes in operating models, accelerating many new practices and developments, which has created lasting benefits for administrations and taxpayers. It is important to remember, though, that the primary purpose of a tax administration is to generate the revenue needed to fund public services. Previous editions of this series, have also noted the revenue impacts of the COVID-19 pandemic, and it is a sign of the resilience and adaptability of tax administrations that these impacts were temporary. For example, following the significant increase of the total year-end arrears to net revenue ratio in 2020 – the first year of the pandemic – this ratio decreased between 2020 and 2021 in almost 70% of the jurisdictions covered in this report.

With the participation of 58 jurisdictions that together account for around 90% of global GDP, TAS 2023 provides a comprehensive overview of the state of tax administration in 2021 in three ways. Firstly, comparative information covering a range of tax administration performance indicators and data is set out in 135 tables based on the information provided through the International Survey of Revenue Administrations (ISORA). Secondly, this edition draws on data from the Inventory of Tax Technology Initiatives (ITTI) (OECD et al., 2023^[1]) which contains information on technology tools and digitalisation solutions implemented by tax administrations globally. Thirdly, it contains more than 100 examples of innovations and leading practices received from 34 tax administrations. Combined, these data sources and examples highlight the wide range of issues that tax administrations are dealing with, and can help assist tax administrations in their consideration of where further improvements might be made, as well enhancing wider public understanding of the changing nature of global tax administration.

Tax Administration 3.0

As the sophisticated use of technology grows, tax administrations are now investigating how their operating models can be digitally transformed, often using the learnings from the pandemic, in order to further build-in compliance and reduce burdens. This digital transformation is described in the OECD's Tax Administration 3.0 vision (OECD, 2020^[2]), and many tax administrations are now taking the concepts and ideas of Tax Administration 3.0 and are using them to drive their digital transformation strategies.

The Tax Administration 3.0 vision identifies a series of core building blocks that are at the critical components of digital transformation. Using a combination of data and examples, TAS 2023 explores the significant progress that has been made against those building blocks as well as some of the challenges. Despite the challenges of digital transformation, the benefits to taxpayer compliance and reducing taxpayer burdens are significant, and this report highlights the significant progress that tax administrations have made to deliver these benefits.

Supporting taxpayer compliance

Creating positive attitudes to compliance, by making it as easy and as seamless as possible to meet tax obligations, are central to a tax administration's task of raising vital public funds. Among the initiatives being taken by tax administrations are:

- **Creating a 24/7 tax administration:** Tax administrations are continually looking to improve their reactive processes, be they online, in-person or by telephone, to make it easier for taxpayers to contact the tax administration. For example, more than 60% of administrations offer virtual or digital assistants to help respond to taxpayer enquiries and support self-service, a change of almost 30 percentage points compared to 2018. In turn, this helps taxpayers understand their obligations and how to meet them. This is increasingly being supplemented by proactive outreach through education campaigns, including through the use of a wide range of social media.

- **Leveraging digital identity and verification:** As tax administrations deliver more of their services digitally, the importance of digital verification and digital identity is growing. Tax administrations are leveraging their expertise and data sets to not only give taxpayers access to tax administration services, but also wider government systems.
- **Decentralising tax administration services:** Embedding services and processes in the natural systems used by taxpayers in their daily lives and businesses is a growing trend among tax administrations. While this helps to improve tax compliance, it also reduces administrative burdens and frees up taxpayers' time for other activities, including growing their businesses. As these forms of collaboration become more common and sophisticated, tax administrations are starting to take strategic approaches to managing and providing support to service providers, including allowing access to tax administration internal systems through application programming interfaces (APIs).

Reducing taxpayer burdens

Compliance-by-design approaches have been in place for many years for salaried personal income taxpayers through pay-as-you-earn withholding and reporting by employers, often built into payroll software. These systemic arrangements, adopted by almost all tax administrations, have helped maximise compliance for this significant part of the tax base. The increasing availability and sharing of data is now allowing such approaches to expand to cover other sources of income and other classes of taxpayers, including through the prefilling of corporate income tax and value-added tax returns in some cases.

Digital techniques are also allowing tax administrations to take a more preventative approach to risk management. By seeking to intervene at earlier stages in taxpayer processes, they can prevent non-compliance happening rather than having to uncover it after tax returns have been filed. This can be seen in:

- **The sophisticated use and manipulation of data:** This has fuelled a significant increase in the use of analytics tools and techniques to improve risk management and help design-in compliance. Close to 95% of tax administrations report using data science and analytical tools to manipulate electronic data from third parties, including other tax administrations, as well as internally generated electronic data to guide their compliance work. This is an increase of more than 20 percentage points compared to 2018.
- **Harnessing leading-edge technologies:** More than 80% of tax administrations report that they are using or that they are in the implementation phase for the future use of leading-edge techniques to exploit data in ways that reduces the need for human intervention. Although still at an early stage in general, artificial intelligence and machine learning are already creating efficiencies, freeing up resources to be deployed into other areas.
- **More personalised interactions:** The power of data analysis is allowing tax administrations to create more tailored approaches to their interactions with taxpayers. This may be through one-to-many channels or for managing specific groups of taxpayers such as large business taxpayers, or High Net Wealth Individuals (HNWIs). Examples provided by tax administrations now show increasing segmentation in other areas, helping to guide more focused compliance and service actions and interventions, including at the individual level.

Tax administration resources

The transformation of operating models requires consistent and long-term funding. The task of delivering digital transformation is made more challenging by budgetary constraints which continue to impact tax administrations. While most of the administrations report increasing operational expenditures in absolute terms, this may not show the whole picture as many administrations are dealing with increased responsibilities, the pressures of technology change and the changing structure of their workforce. Further,

a significant part of the budgets is needed for salary costs, accounting for on average 73% of operating expenditures annually. There is also significant variation in the amount of operational and capital expenditure on information and communication technology. While this may often be due to different sourcing and business approaches, it also raises the question as to whether expenditure levels in some cases may be somewhat low to support the demands for more sophisticated services and the ongoing digital transformation.

An additional challenge reported by tax administrations is the need to prepare existing staff for the challenges ahead as well as seeking to recruit highly skilled staff in a very competitive job market, something which has led to a number of innovations in staff recruitment and staff training.

International cooperation

Whilst much progress has been made domestically, this report demonstrates that international co-operation and the sharing of knowledge between tax administrations has never been more important as jurisdictions undergo significant changes and as the digitalisation of the economy increasingly transcends national borders.

Tax administrations have a long tradition of working together; for example, in effectively implementing key OECD/G20 agreements such as the BEPS actions and the Common Reporting Standard as well as in the development of the OECD's multilateral International Compliance Assurance Programme, where taxpayers and tax administrations work co-operatively and multilaterally in close to real-time to undertake risk assessment and assurance of key international tax risks.

This track record of effective collaboration will continue to be essential as tax administrations both share knowledge to accelerate their individual journeys, and also meet the challenges of cross border economic activity. This spirit of co-operation will also be essential as tax administrations ensure the effective implementation of new initiatives such as the 'Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy' (OECD, 2021^[3]).

References

- OECD (2021), *Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy, OECD/G20 Base Erosion and Profit Shifting Project, 8 October 2021*, <https://www.oecd.org/tax/beps/statement-on-a-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-october-2021.pdf> (accessed on 22 May 2023). [3]
- OECD (2020), *Tax Administration 3.0: The Digital Transformation of Tax Administration*, OECD, Paris, <https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/tax-administration-3-0-the-digital-transformation-of-tax-administration.htm> (accessed on 22 May 2023). [2]
- OECD et al. (2023), *Inventory of Tax Technology Initiatives*, <https://www.oecd.org/tax/forum-on-tax-administration/tax-technology-tools-and-digital-solutions/> (accessed on 22 May 2023). [1]

Note

¹ For Japan, given that it publishes its currency figures in millions the currency figures included in tables have had added a suffix of “000” in order to fit the survey requirements that currency figures needed to be provided in thousands.

1 Introduction

This chapter provides an overview of the content of the 2023 edition of the OECD's Tax Administration Series.

Over numerous editions, a recurring theme of the OECD's Tax Administration Series (TAS) has been the way tax administrations have evolved to respond to the relentlessly changing environment in which they operate. This 2023 edition is no different, and provides further insight into how tax administrations are:

- Adapting new working practices introduced during the pandemic for the post pandemic world;
- Investing in their staff as part of their wider drive to digital transformation;
- Transforming their operating models to deliver new services;
- Becoming more collaborative and integrated with wider government;
- Exploiting the opportunities that enhanced data sets bring to provide new services to taxpayers and address compliance issues; and
- Using advanced technology to drive efficiencies and improve taxpayer compliance.

The resilience and adaptability of tax administrations that allows them to adapt successfully to these changes have been facilitated and enabled by the wider technological changes taking place across the economy, including the expansion of social media, mobile platforms, cloud computing, big data technologies and advanced analytics techniques. These technologies helped tax administrations respond effectively to the COVID-19 pandemic, and are expected to have an ongoing impact on the operating models of tax administrations.

These impacts can be characterised by a more system-wide compliance management approach in which tax administrations try to closely engage with the evolving natural systems that taxpayers use to manage their business, undertake transactions and communicate in order to reduce errors, minimise burdens and increasingly build-in tax compliance.

This is starting to be reflected in the data collected through the 2022 version of the International Survey on Revenue Administration (ISORA). In particular, many tax administrations are making greater use of machine learning and artificial intelligence to deliver new services to taxpayers and 'embed' tax administration processes, traditionally carried out within the tax administration's own systems, into the services that third parties, such as software suppliers, provide to taxpayers. Partnerships and collaborations in this way can allow tax compliance to be increasingly moved upstream, closer to taxable transactions, helping to build in compliance and reduce burdens.

Alongside the ISORA survey, the tax administrations covered in 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 100 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, they do add more colour to the data, and tell a forward-looking story of the strategic direction of travel of tax administration.

Furthermore, this edition of the TAS also uses information from the Inventory of Tax Technology Initiatives (ITTI) (OECD et al., 2023^[1]). 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.

Something that does remain constant however is the core objective of a tax administration, 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 this 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, and tax administrations are increasingly involved in whole of government plans on digital identity.

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

Chapter 5 highlights how tax administrations are using sophisticated technological approaches to encourage 'self-service' by taxpayers. This is part of a more fundamental change whereby tax administration becomes a seamless process, with non-compliance and administrative burdens increasingly "designed out". **Chapter 6** explores this further and picks out how compliance approaches are changing, with the use of data and new technology tools to identify and take targeted enforcement action against those who fail to meet their obligations.

Chapter 7 explores how tax administrations manage the collection of outstanding debt, and examines the features of a modern tax debt collection function. These functions are essential to maintaining high levels of voluntary compliance and citizens' confidence in the overall tax system. This chapter also provides examples of approaches applied by administrations to minimise or even prevent debt being incurred.

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 of 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 picks out a number of trends that can be observed in the data over time.

Finally, **Chapter 10** of this edition of the TAS contains a special feature which explores the trends in digital transformation journeys that are being undertaken by tax administrations.

References

OECD et al. (2023), *Inventory of Tax Technology Initiatives*, <https://www.oecd.org/tax/forum-on-tax-administration/tax-technology-tools-and-digital-solutions/> (accessed on 22 May 2023). [1]

2 Responsibilities and collection

This chapter looks at the performance of tax administrations in their primary role of collecting taxes. It provides information on the aggregate net tax revenues collected as well as other key figures 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, but 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 net tax revenues collected as well as some other key figures related to tax administration performance, and looks at the wider role tax administrations are playing in driving change across the whole of government.

Learning from working practices during the COVID-19 pandemic

Confidence in the proven ability of tax administrations to deliver complex administrative processes on a large scale was undoubtedly a key driver behind many governments giving their tax administrations additional responsibilities during the COVID-19 pandemic. Chapter 2 of *Tax Administration 2021* (OECD, 2021^[1]) has a more detailed overview of the wider roles that tax administrations took on during the pandemic.

With many jurisdictions now considering the post-pandemic environment, they are reflecting and learning on the ways of working that were needed to deliver the rapid taxpayer support schemes that governments tasked them with. Many report that the pandemic working practices they adopted are now being used in business-as-usual practices, leading to longer-term shifts in the way they manage their business.

Box 2.1. Belgium – REACH-OUT campaign

Before the pandemic, on an annual basis nearly 200 000 tax debtors asked for a face-to-face meeting to discuss tax payment matters. With offices closing to the public during the pandemic, the tax authority needed to come up with a solution for these taxpayers that previously needed assistance.

The Belgian Tax Collection and Debt Recovery Administration, in charge of collecting and recovering Direct Taxes, VAT and a range of non-fiscal claims, launched a new initiative called REACH-OUT in spring 2020 to target a specific group by telephone to offer assistance and solve tax payment issues. The target group consisted of taxpayers with a history of late tax payment or having a low revenue.

A medium-sized outbound call centre was created to provide services to taxpayers during financially difficult moments, by gently reminding them of an upcoming personal income tax payment or offering the possibility of instalment arrangements and this in the period between 10 days before and 10 days after the due date of their annual personal income tax.

This initiative was very well received by the public and there was much appreciation for this pro-active and empathic service of the Belgian tax authority. On the taxpayers' side, it contributed to both a higher level of trust in the tax authority and a higher payment rate in the target group. Compared to a control group, there was an increase of 31% in resolved cases, leading to a reduced workload for the contact centre and recovery teams by intervening early in the collection process. After a positive evaluation, this pilot project was extended and is now used for other purposes, for example, during the need to support citizens with their energy costs.

Source: Belgium (2023).

Revenue collections recover from the impact of COVID-19

The information from the survey analysed for this chapter is showing how revenue collections recover from the impacts of the COVID-19 pandemic. Following declining revenue collections between 2019 and 2020 across a large majority of jurisdictions, revenue collections have increased between 2020 and 2021 in almost all jurisdictions covered in this edition (see Table 2.1.).

The data also shows that this increase in revenue collections is quite significant (+17.2% on average, see Table 2.1.), hinting at a substantial recovery of economic activity following the COVID-19 related lockdown measures introduced by many governments and the forced closure of many businesses which negatively affected their taxable income and sales.

Table 2.1. Change in total net revenue collections between 2018 and 2021

Change in total net revenue collections	Between 2018 and 2019	Between 2019 and 2020	Between 2020 and 2021
Increase (percent of administrations)	96	23	95
Decrease (percent of administrations)	4	77	5
Average change in percent	+6.2	-3.8	+17.2

Source: Table A.5.

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. More detail on institutional arrangements can be found in Chapter 4.2.1. in the 2019 edition of the Tax Administration Series (TAS). (OECD, 2019^[2])

Table 2.2. summarises for which revenue types the tax administrations participating in this publication have responsibility. In addition, as found in previous editions of the TAS (for example, Chapter 2.2. in TAS 2019), governments have given tax administrations other areas of responsibility (including shared responsibility in some areas) in addition to their traditional tax roles.

Typically, these may be to provide financial benefits to taxpayers (for example, welfare-type benefits) or to collect loans or debts owing to 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, 2019^[2])

Table 2.2. Revenue types for which the tax administration has responsibility, 2021

Percent 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	100	95	62	48	47	24	48	55	40	50

Sources: Tables A.1. to A.4.

Box 2.2. New Zealand – Cost of Living payments

Inland Revenue (IR) provided three payments totalling NZD 350, spread over August, September and October 2022, to an estimated 1.7 million low-and-middle income-earning New Zealanders to help with the rising cost of living. IR used its digital and analytical capabilities to rapidly design and deliver the payments, taking three months from design to executing the first payment. One of the design parameters was that customers would not be required to apply for the payments.

A key for IR was understanding the information it held to determine customers' eligibility, such as their eligibility for other payments or tax residency status. Over the course of the three payments, IR collaborated extensively, incrementally increasing its use of data matching to determine the eligibility of people who received the payments.

IR also worked with the New Zealand Government's banking partner to ensure the large number of eligible customers would receive payments on or close to the payment date. This was the first time that the organisation had released up to 1.6 million disbursements in one go, which meant IR needed to change how and when payment information was transferred electronically between agencies. This resulted in all customers being paid on the payment day, and provided them with certainty of payment as advised by the Government. Another result is that IR and other organisations now have the infrastructure and precedence of process in place to deliver large scale payments to customers.

Source: New Zealand (2023).

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.

Net collections by tax administrations averages 21% of jurisdiction GDP

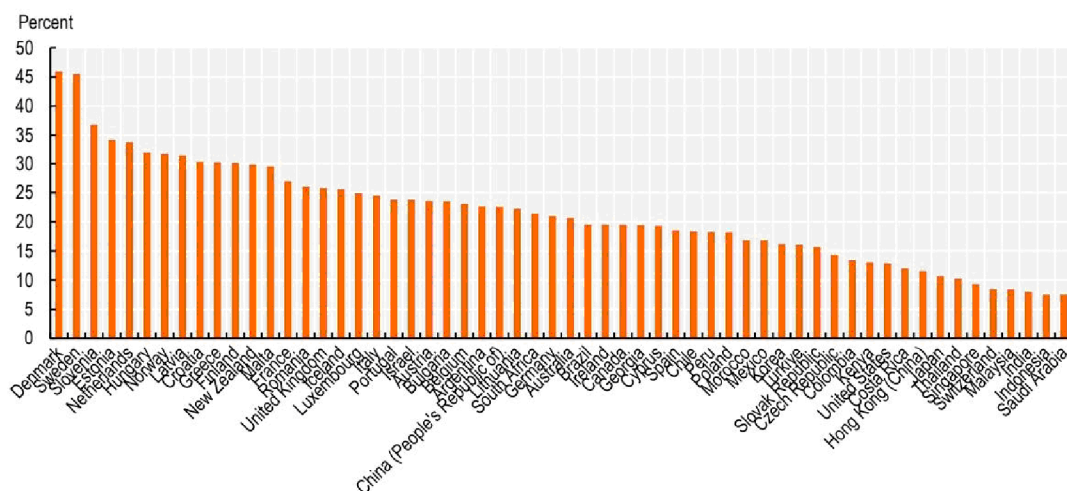
Through its Global Revenue Statistics Database (OECD, 2023^[3]) the OECD generally seeks to publish internationally comparable data on the tax revenues of its members as well as a number of other jurisdictions for all levels of government. As the information contained in the Global Revenue Statistics 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 ISORA participating tax administrations to the respective economies.

Net revenue collected by tax administrations participating in this report, as a percentage of gross domestic product (GDP) in 2021 ranges from less than 10% to reach more than 40% in the case of Denmark and Sweden. Average net revenue collected by administrations in this report is 21% of GDP (see Figure 2.1.).

Net collections by tax administrations averages 61% total jurisdiction revenue

Forty tax administrations report net revenue collections exceeding more than 50% of total government revenue in 2021, making tax administrations the principle government revenue collection agency in more than two-thirds of jurisdictions covered in this report. Average net revenue collected by administrations in this report is 61% of total jurisdiction revenue (see Figure 2.2.)

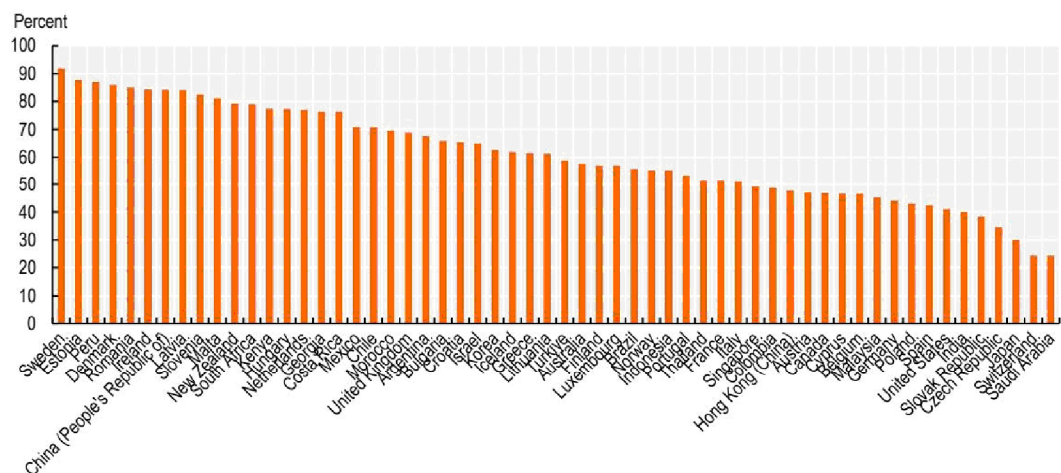
Figure 2.1. Net revenue collected as a percent of gross domestic product, 2021



Source: Table D.1.

StatLink <https://stat.link/cg4dti>

Figure 2.2. Net revenue collected as a percent of total government revenue, 2021

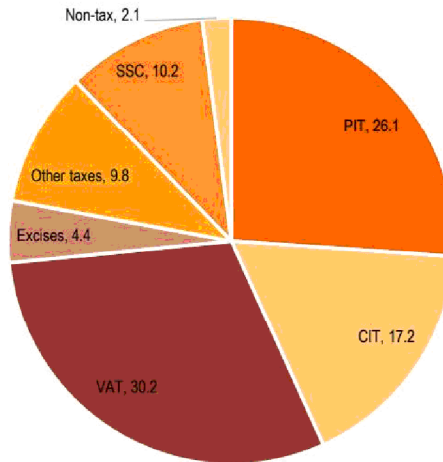


Source: Table D.1.

StatLink <https://stat.link/htmf2>

Value added tax and personal income tax account for 30% and 26% of net revenue collections, respectively, and are the two major tax types collected by around 40% of the tax administrations covered in this report. Corporate Income Tax (17%) and social security contributions (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 the predominant source of tax revenue collected by the tax administration (see Table D.4.).

Figure 2.3. Average net revenue collections (in percent) by major revenue type, 2021



Sources: Tables D.2. to D.4.

StatLink  <https://stat.link/0bmziv>

Given the importance of these major taxes to overall collection rates, tax administrations are investing in new and innovative approaches to promote tax compliance and streamlining tax collections. As well as establishing new teams to focus on tackling non-compliance, they are also:

- developing new taxpayer education initiatives (such as the innovative approaches from Brazil, Finland and India highlighted in Box 2.3.);
- digitally transforming collection approaches (the example from Singapore in Box 2.3. illustrates how this can reshape services);
- finding ways to reduce burdens for taxpayers; and
- using sophisticated analytics to identify and prevent non-compliance.

These are frequent themes throughout this edition of the series, and they are covered in more detail in later chapters.

Box 2.3. Examples – Supporting collection

Brazil – Fiscal Citizenship as part of university programmes

The *Receita Federal do Brasil* (RFB) has included fiscal citizenship as an integral part of the programme of mandatory activities for student training in educational institutions. This is helping build understanding of the importance of Fiscal Citizenship and the RFB Fiscal Citizenship programmes.

This is done by including RFB modules as an extension course of the Accounting Sciences courses where the RFB already has a partnership with the Accounting and Tax Support Nucleus (NAF) with about 520 educational institutions. As part of these partnerships, students offer free assistance on tax matters to citizens and micro-entrepreneurs who cannot afford it, which helps improve tax compliance in the wider society.

See Annex 2.A for supporting material.

Chile – Tax regulations implementation team

The Tax Regulations Implementation Team is part of the Audit and Compliance Directorate of the *Servicio de Impuestos Internos* (SII), and helps implement changes related to new or modified laws that have a fiscal impact within SII, and external organisations.

The team's main function is to identify early on the impacts of law changes that will affect both SII and taxpayers. Following this the team manages the implementation of the relevant measures, often using innovation and new technologies, so that systems, officials and taxpayers comply with the new regulations.

The team is made up of officials who are specialised in specific tax matters, and have experience in tax audits and training in tax. To deliver their objectives, the team is empowered to act autonomously and be pro-active in its work.

See Annex 2.A for supporting material.

Finland – Happy Taxpayer concept

Happy Taxpayer is a new kind of communication concept using social media, influencers, and creative videos to showcase the services and perks that people living in Finland are entitled to thanks to tax revenues.

The aim of the project is to cultivate a positive attitude towards paying taxes and to reduce the shadow economy. By emphasising that taxes provide the building blocks of a fair and sustainable society, it demonstrates that all parties are working together to make Finland a good place to live and work in.

Happy Taxpayer was created as part of the tax administration's three-year project relating to the Government's action programme to combat the shadow economy. The idea for the campaign was sparked by the results of a survey that was commissioned by the tax administration. The survey showed that the 18 to 29 year olds who felt that they were adequately informed of the use of tax revenues and who felt that they benefited from taxes had a more positive attitude towards paying taxes.

See Annex 2.A for supporting material.

India – Educating taxpayers of the future

Whereas taxpayer outreach towards school going children and young adults has always been a part of the Indian tax administrations' outreach strategy, a new government-wide initiative celebrating the 75th anniversary of India's independence, provided a platform for truly revolutionising the tax administrations' communication strategy to the taxpayers of the future. As a part of this campaign, the tax administration launched board games, a 3-D Puzzle, comic books, an animated video series and an Android Game, all aimed at enhancing the tax literacy of the future taxpayers of the country.

For more detail on the board games, 3-D Puzzle and the comic books, see Annex 2.A.

Romania – Taxpayer education project

Increasing voluntary tax compliance is one of the main objectives of the Romanian tax administration, and supporting taxpayers' willingness to pay taxes must take into consideration various factors such as trust in the tax authority, social and moral values, and personal experience.

The Romanian tax agency conducted a project dedicated to individuals who earn or intend to earn income from tutoring/private lessons, and personalised notifications were sent, using messages designed to stimulate voluntary compliance. The target groups were selected from two counties, and the scope of the project was to observe taxpayer behaviour in different regions and to analyse the effects of the nudging techniques. The project was sustained by a communication campaign in order to

increase taxpayer's awareness about voluntary compliance. The result of the campaign was an increase in fiscal registration for these category of taxpayers.

The lessons learned from this project include that the behaviour of the same category of taxpayers in different regions is different, meaning understanding of the target groups is a must and key messages must be adapted. Also just sending letters/notifications is not enough and communication campaigns must support all other actions. To track success data must be collected from internal and external sources and at a national level not only from the target group. Through continuous analysis the impact of nudge techniques influences across the same category of taxpayers can be considered at a national level.

Singapore – Digital transformation of enforcement processes

As part of its digital transformation, the Inland Revenue Authority of Singapore (IRAS) consolidated its frontline operations across several tax types for greater effectiveness, and further differentiated its approach in managing voluntarily compliant taxpayers (including those who could be compliant with assistance) and recalcitrant offenders.

Under Frontline 2.0, with the increased use of chatbots and other self-service tools, frontline officers have more bandwidth to take on a wider range of issues across multiple tax types. Work was redesigned such that staff specialising in a single tax type previously would now handle general queries across different tax types and service channels, as well as assist taxpayers who filed or paid their taxes late to nudge them towards compliance. Technology-related roles were also created or expanded, such as training of chatbots, experimenting with and scaling-up of automation initiatives, developing digital self-help solutions, etc.

Enforcement 2.0 complemented these efforts by focusing on recalcitrant taxpayers and handling them on an entity basis to deal with all tax compliance matters holistically across different tax types. To achieve this, the Integrated Enforcement Frontline was formed to handle recalcitrant taxpayers across different tax types and contact channels. Additionally, a Delinquent Taxpayer Taskforce to build deeper expertise in handling high risk and complex cases was successfully piloted and implemented. Using automation and analytics also allowed IRAS to take swift and effective tax recovery actions. For instance, an Entity Risk Profile model was developed to provide more precise assessments of filing and payment risks, and its predictive capabilities enabled more targeted actions to improve recovery outcomes.

As a result of these cross-training initiatives on multiple tax types and modes of contact, IRAS successfully developed a pool of future-skilled officers.

Sources: Brazil (2023), Chile (2023), Finland (2023), India (2023), Romania (2023) and Singapore (2023).

Streamlining collections: Withholding at source

Withholding regimes can form part of compliance-by-design approaches which support overall compliance while significantly reducing 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). 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.¹

In addition to minimising burdens, withholding regimes can also reduce misreporting and underpayment as 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 issues.

To understand the importance of withholding at source for personal income taxes, the survey underlying this publication asked participating administrations to estimate the percentage of total personal income tax withheld by third parties and subsequently paid to the administration. Administrations that were able to provide this information estimate that around 80% of total personal income tax collections were withheld at source in 2021 (see Table 2.3.).

Table 2.3. Average percentage of personal income tax withholding between 2018 and 2021

2018	2019	2020	2021	Difference in percentage points between 2018 and 2021
79.1	78.9	81.7	81.2	+2.6

Note: The table shows the average percentage of personal income tax withholding for 43 jurisdictions that were able to provide the information for the years 2018 to 2021.

Source: Table D.32.

Note

¹ For further information on the withholding regimes put in place in jurisdictions, please see *Tax Administration 2019* (OECD, 2019^[2]), Tables A.73. and A.74.

References

- OECD (2023), *Global Revenue Statistics Database*, <https://www.oecd.org/tax/tax-policy/global-revenue-statistics-database.htm> (accessed on 22 May 2023). [3]
- OECD (2021), *Tax Administration 2021: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://doi.org/10.1787/cef472b9-en>. [1]
- OECD (2019), *Tax Administration 2019: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/74d162b6-en>. [2]

Annex 2.A. Links to supporting material (accessed on 26 May 2023)

- Box 2.3. – Brazil: Link to a presentation on the fiscal citizenship course: <https://www.oecd.org/tax/forum-on-tax-administration/database/b.2.3-brazil-fiscal-citizenship-course.pdf>
- Box 2.3. – Chile: Link to an overview slide on the Tax Regulations Implementation Team: <https://www.oecd.org/tax/forum-on-tax-administration/database/b.2.3-chile-regulations-implementation-team.pdf>
- Box 2.3. – Finland: Link to a website with more detail on the Happy Taxpayer concept: <https://happytaxpayer.com/>
- Box 2.3. – India: Link to more detail on the educating taxpayers of the future campaign: <https://www.oecd.org/tax/forum-on-tax-administration/database/b.2.3-india-educating-taxpayers-of-the-future.pdf>

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 those processes.

Introduction

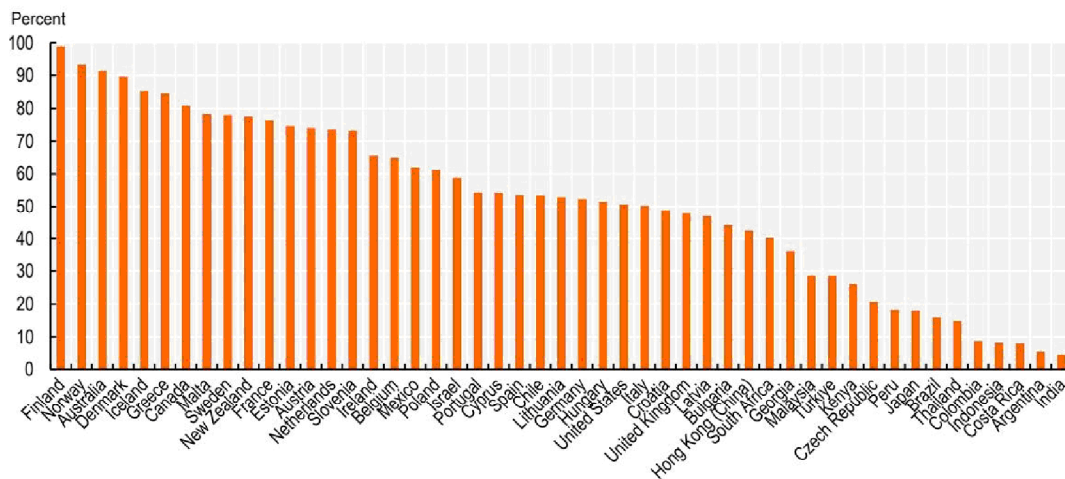
A comprehensive system of taxpayer registration and identification is at the foundation of an effective tax system. It is the basis for supporting a range of tax administration activities such as self-assessment, value-added tax and withholding tax regimes, as well as third party reporting and matching. This chapter comments on several issues of significance in taxpayer registration and identification, including levels of registration, registration channels and identity management, and how the 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.

Figure 3.1. Registration of active personal income taxpayers as percentage of population, 2021



Source: Table D.18.

StatLink  <https://stat.link/dov9gp>

Registration channels

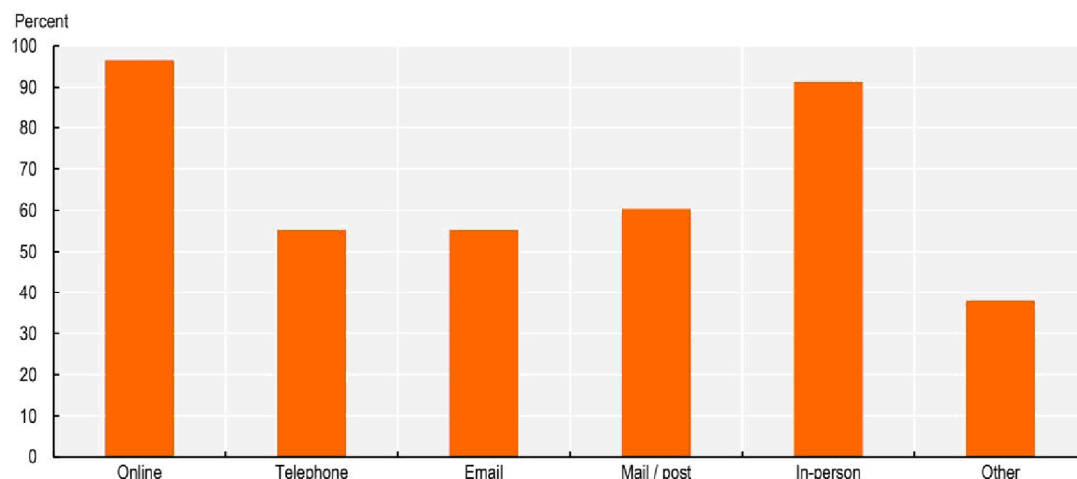
While the majority of administrations are solely responsible for the system of registration for tax purposes within their jurisdictions, previous editions of this series have shown that in many jurisdictions the registration processes can also be initiated outside of the tax administration through other government agencies (OECD, 2019^[1]).

In looking at how taxpayers can register, almost all administrations reported they provide more than one channel for taxpayers to use and 97% report that it is possible to register online (see Figure 3.2.).

Compared to data from the 2017 edition of this series (OECD, 2017^[2]) this is a 27-percentage point increase. 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, the dominance of online channels will grow.


Figure 3.2. Availability of registration channels for taxpayers, 2021

Percent of administrations that provide the respective registration channel



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

Sources: Tables A.74 and A.75

StatLink  <https://stat.link/np1cvd>

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 significant investment in digital identity programmes, including using artificial intelligence to improve efficiency and effectiveness. This is helping cement digital identity as the cornerstone of successful digital transformation activity, as the OECD Tax Administration 3.0 report (OECD, 2020^[3]) identified. Indeed, in one jurisdiction (Saudi Arabia), taxpayers can only register online (see Tables A.74. and A.75.).

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. The example from Canada in Box 3.1. illustrates some of the work taking place to address this.

Box 3.1. Examples – Impact of digital systems on identity systems

Canada – Community Volunteer Income Tax Program Authentication Team

The Community Volunteer Income Tax Program (CVITP) established a dedicated team of individuals to conduct client identification authentications for CVITP organisations and volunteers, so they can focus on providing services to clients. When a volunteer needs assistance confirming a client's identity, they can contact this dedicated Canada Revenue Agency (CRA) team who will call the client to assist in the verification. Volunteers request the identification authentication via email, and then a call is arranged between the client and the CRA representative. To pass confidentiality, an individual must provide basic client information such as their social insurance number, name, date of birth and current address. They then must also answer two additional questions, confirmed via the agent's access to "Taxpayer Services Agent Desktop", while referring to the Technical Help Guide for most up-to-date confidentiality measures. Once the identity authentication is completed, the volunteer is informed and can continue working on the client's return. The support this team provides increases the CVITP's overall capacity to provide tax filing assistance and improves client access to benefits and credits.

The authentication team also serves those who also struggle to authenticate in person. Some individuals may not possess regular government issued identification which can make it very difficult for them to access the service. The authentication team allows these individuals to work directly with CRA field employees to validate their identity and receive service from the CVITP.

Japan – Using a smartphone to authenticate identity

For online filing, as well as using the taxpayer ID and password, in Japan it is also possible since 2019 to authenticate identity using the national identification card 'My Number Card'. Recently, for certain online services, the use of 'My Number Card' became mandatory. For this purpose, taxpayers are required to use a smart card reader.

The use of a smart card reader can be a cumbersome process, and to make things easier for taxpayers, the 'My Number Card' authentication can now be completed via smartphone. To do this, taxpayers need to use the 'Mynportal' app, which is an online service managed by the Japanese government that allows users to complete various administrative procedures. This app reads a barcode displayed on their computer and completes the authentication process.

Mexico – Digital authentication systems

The Mexican Tax Administration Service (SAT) has established the Biometric Accreditation Service, enabling taxpayers to securely log in and validate their biometric data including fingerprints, iris scans, photos, and signatures. This ensures that the taxpayer's electronic signature holds legal validity.

The identity accreditation process involves the validating taxpayer data, such as the Federal Taxpayer Registry information and the Unique Population Registry Code, along with fingerprints and iris scans. Moreover, there is an offline contingency mode in place, allowing information to be submitted for validation even if communication with the central servers is disrupted.

All these essential components seamlessly interact to meet the needs of SAT's taxpayer services, guaranteeing that every electronically signed document is attributed to an individual with valid identification. The service operates through 370 enrolment units spread across the nation, supported by 11 central servers, and handles approximately 300 000 enrolments per month.

Sources: Canada (2023), Japan (2023) and Mexico (2023).

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]).

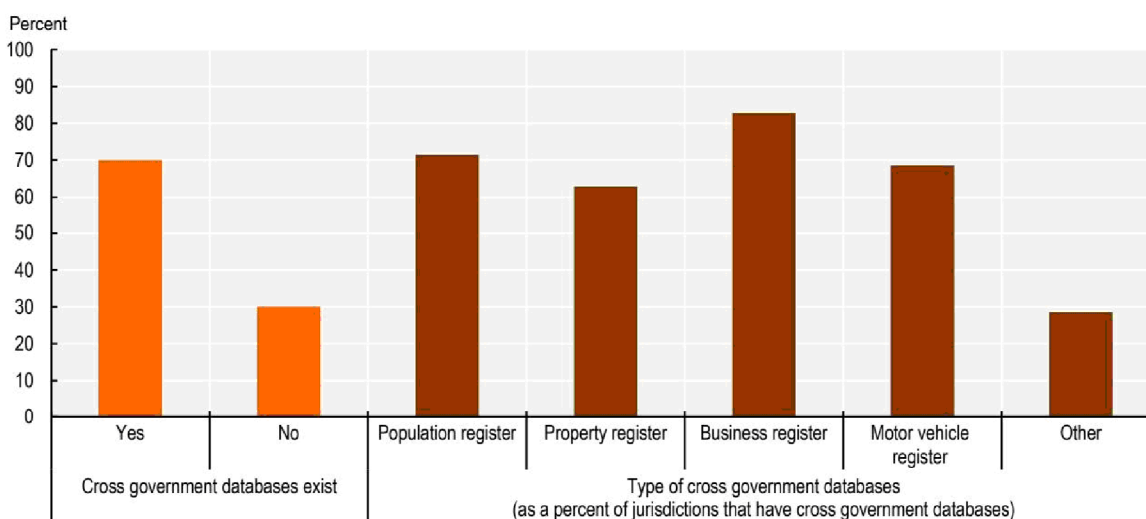
Therefore, it is unsurprising that other government bodies may wish to use the tax administration register for their own purposes to provide services to citizens or ensure compliance with laws and regulations. This is leading to the creation of cross government databases. As Figure 3.3. illustrates, 70% of administrations report the existence of a range of available databases.

Integration across government is 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]).

This is leading to closer collaboration between government agencies, and 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; and/or to use the same identifier to allow taxpayers to access other government services.

Figure 3.3. Cross government databases: Availability and database types, 2022

Percent of jurisdictions



Note: The figure is based on data from 52 jurisdictions that are covered in this report and that are included in the ITTI database.

Source: OECD et al (2023), Inventory of Tax Technology Initiatives, <https://www.oecd.org/tax/forum-on-tax-administration/tax-technology-tools-and-digital-solutions/>, Table DM3 (accessed on 22 May 2023).

StatLink  <https://stat.link/hp9rxl>

Box 3.2. Czech Republic – Data sharing between agencies

In the Czech Republic, companies are obliged to file financial statements and other data to the public register which is administered by the Ministry of Justice. However, companies also send financial statements as an attachment to the tax return. Since 2013, negotiations have been ongoing among the Ministry of Justice, Ministry of Finance and General Financial Directorate to allow the transfer of data obtained during the administration of taxes to the registry courts, which would eliminate duplication.

As a result and after solving legislative and technical issues, selected legal entities can ask the income tax administrator to pass on financial statements to the registry court, when they file their tax return and meet both filing requirements at the same time starting from 2022. The transfer of information is not done automatically but it is conditional on the decision of the company.

This new option has led to a decrease of administrative burden and a simplification of the processes for taxpayers. It is also increasing the reliability and trustworthiness of published financial statements as a result of the direct connection with the data given to the tax office. It is expected that approximately 300 000 companies could benefit from this new option.

Source: Czech Republic (2023).

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. Increasingly these approaches, which in many instances have now been extended to multi-step authentication, are making use of biometric information, unique to the taxpayer.

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 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 3.3. contains examples of the work tax administrations are doing in this respect.

Box 3.3. Examples – Identity management

Argentina – Dual Factor Authentication

All services and digital apps available in the Argentinian tax administration (AFIP) portal have different security levels and with the use of the mobile app “Token AFIP”, AFIP has implemented a dual authentication factor process for those taxpayers carrying out sensitive transactions or who wish to enhance the security of their digital procedures with AFIP.

Taxpayers using this service need to:

- Download the mobile app “Token AFIP” to their mobile phone;

- Go to an AFIP office to show proof of identity and activate the token or go to an ATM to show proof of identity to activate the token; and
- Login to the AFIP web site and then activate the app using the tax login code and the one-time password generated by the “Token AFIP”.

China (People’s Republic of) – Unified Identity Management Platform

The Unified Identity Management Platform is a digital identity centre covering all the stakeholders in the paying taxes/fees ecosystem, including taxpayers, intermediaries and tax officials. As the only portal of tax-related applications across all levels of tax services, the platform provides unified identity management, identity authentication, access control, password service and certificate service.

It utilises different combinations of authentication methods, including names, email account, mobile number, SMS, password, biometrics and so on, to offer five-level authentication, corresponding to different risk levels.

This hierarchical authentication process takes into account both security and convenience. It satisfies the differentiated needs of varied mobile applications in terms of security and privacy protection, and at the same time gives consideration to the taxpayers’ needs of easy operation when handling simple business, reducing the cost of verification for taxpayers.

For example, if a taxpayer only needs to make an enquiry they can choose the more convenient static password or dynamic password to complete the authentication. If they need to issue invoices, they can directly switch to the two-factor authentication with face recognition, or use static password and then provide face recognition authentication. The Platform also has the potential to support the State Taxation Administration of China’s internal control work as the digital identity of every player involved in a work stream, including those of tax officials, is traceable.

Sources: Argentina (2023) and China (People’s Republic of) (2023).

Common approaches to digital identity

Once the domain of multi-national businesses and those involved in international trade, small and medium-sized enterprises and individual taxpayers are now increasingly earning income sourced outside their jurisdiction of residence. As a result of the proliferation of online market-places and sharing and gig economy platforms, it is now easier than ever for example, to rent out holiday homes or sell goods abroad through online platforms.

Tax administrations are facing a raft of issues in supporting and responding to this growth in cross-border activity, including how they manage taxpayer information flows across borders. Previous editions of the tax administration series (OECD, 2019^[1]) highlighted two international measures aimed at helping administrations to address these issues:

- The European Union’s Electronic Identification Authentication and Trust Services (eIDAS) approach, which was introduced in 2014 and aims at increasing the confidence taxpayers and tax administrations can have in dealing with information flows and being able to manage identity and registration issues across borders.
- The global standard on Automatic Exchange of Information (AEOI) – the Common Reporting Standard (CRS), which together with the United States Foreign Account Tax Compliance Act (FATCA) provides for the exchange of non-resident financial account information with the tax authorities in the account holders’ jurisdiction of tax residence.