OECD SECRETARY-GENERAL REPORT TO G20 FINANCE MINISTERS

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G20

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BADEN-BADEN, GERMANY

MARCH 2017

This report consists of two parts. Part I is an update report by the OECD Secretary-General regarding the latest developments in the international tax agenda, including (Annex 1) the joint OECD/IMF Report on Tax Certainty. Part II is a Progress Report to the G20 by the Global Forum on Transparency and Exchange of Information for Tax Purposes.

Introduction

Under your leadership, the international tax system has become more transparent, efficient and inclusive over the past few years. With automatic exchange of information being implemented, bank secrecy is coming to an end and countries have already received close to 80 billion EUR in unplanned additional revenue as a result of voluntary disclosure programmes and other similar initiatives in the lead-up to the first exchanges. At the same time, efforts underway for the implementation of the Base Erosion and Profit Shifting (BEPS) package should see aggressive tax avoidance curtailed.

However, this is no time for complacency. 2017 should be the year of timely and coherent implementation, mobilising all countries through both the 139-member Global Forum on Transparency and Exchange of Information for Tax Purposes, and the G20/OECD Inclusive Framework on BEPS, which now has over 90 members.

Important challenges lie ahead of us in this regard:

- More efforts must be made to ensure that automatic exchange of financial account information be implemented by all relevant jurisdictions in a timely manner;
- Countries should consider signing the BEPS multilateral instrument at the ceremony to be held on 7 June, in order to put in place the tax treaty-related BEPS measures quickly; and
- The tax consequences of the digitalisation of the economy should be fully explored, and must be addressed in a way that avoids uncoordinated unilateral actions which would not be conducive to growth.

It is also time for tax systems to better promote growth and inclusivity. In line with your request in Chengdu, the OECD working with the IMF has undertaken further work to understand the sources and solutions to tax uncertainty, including a wide-reaching OECD survey of the business community. I am glad to report the findings of this survey and the recommendations for countries to ensure a more predictable environment for business, conducive to greater investment, more jobs and improved growth.

The first part of this report also includes an update on:

- The G20/OECD Inclusive Framework on BEPS implementation;
- Tax transparency, in particular on automatic exchange of information; and
- Tax and development.

The second part is a progress report by the Global Forum on Transparency and Exchange of Information for Tax Purposes.

Highly motivated by your strong support over the last 8 years, I look forward to continuing our work together to advance the G20 tax agenda.

PART I – INTERNATIONAL TAX AGENDA

a) Tax Certainty

> *We emphasize the effectiveness of tax policy tools in supply-side structural reform for promoting innovation-driven, inclusive growth, as well as the benefits of tax certainty to promote investment and trade and ask the OECD and IMF to continue working on the issues of pro-growth tax policies and tax certainty.*
>
> *G20 Leaders, Hangzhou Summit Communique, September 2016*

Based on an OECD survey of a large sample of businesses undertaken in 2016, and in consultation with tax administration and civil society, the OECD and the IMF have prepared a report on how to promote tax certainty.

The OECD/IMF *Report on Tax Certainty* (Annex 1) highlights in particular that:

- The tax system is an important factor influencing investment and location decisions, but it is not the only or most important factor.
- In particular, uncertainty around corporate income tax and VAT is considered very or extremely important in affecting investment and location decisions for more than 50% of survey respondents.
- The sources of uncertainty are varied, from tax policy and tax administration through to taxpayer behaviour.
- Issues in connection with tax administration (including inconsistent and unpredictable implementation and administration of the tax law) and international taxation (such as ineffective dispute resolution mechanisms to resolve issues of double taxation and inconsistent approaches to the application of international tax standards) in particular appear to be among the major drivers of uncertainty.

The Report also recommends some practical actions which would support greater tax certainty in OECD and G20 countries, namely:

- Reducing complexity and improving clarity through improved tax policy design.
- Improving tax dispute prevention and resolution, at the domestic and international level, through mechanisms which are fair and independent, accessible to taxpayers and provide timely resolution.
- At the international level specifically, improvements to dispute resolution mechanisms including both Mutual Agreement Procedures and arbitration.
- Application of other, innovative tools to enhance certainty in tax administration, including cooperative compliance programmes, advance pricing agreements, as well as simultaneous and joint audits.

Overall, the report recognises that effective and appropriate measures to enhance tax certainty will differ between countries. Further, the specific environments and challenges of developing countries with respect to tax certainty could be explored, and there is also an opportunity to undertake more detailed work to understand the impact of tax uncertainty on trade and investment.

b) BEPS Implementation

2017 is the year of implementation of the measures delivered under the G20/OECD BEPS Project. Since the adoption of the BEPS package in Antalya, the OECD has established the Inclusive Framework on BEPS implementation which now gathers more than 90 countries and jurisdictions working together on an equal footing.

The Inclusive Framework is now at work to peer review the implementation of the BEPS minimum standards, and to work on the remaining challenges. An overall update on the work of the Inclusive Framework will be presented to G20 Leaders in July.

For the time being, attention is drawn to the following elements:

- **Signing of the BEPS multilateral instrument**: In November 2016, more than 100 jurisdictions adopted the text of the BEPS multilateral instrument (BEPS Action 15), the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS. This instrument allows jurisdictions to update the global network of more than 3000 tax treaties in line with the tax treaty-related measures agreed under the BEPS package, including the minimum standards on preventing tax treaty abuse and improving tax dispute resolution. To support rapid implementation of these BEPS measures, all countries are invited to join the first signing ceremony of the Convention, which will take place on 7 June 2017 in Paris.
- **Tax challenges of the digital economy:** In October 2015 as part of the G20/OECD BEPS package, we delivered to you a report on the Tax Challenges of the Digital Economy. Given the ongoing and rapidly evolving nature of the digital economy, and its pervasive reach across all aspects of daily life and business, it was agreed that the work of the Task Force on the Digital Economy would continue under the new Inclusive Framework on BEPS. We will deliver an interim report in 2018 and a final report in 2020, updating the 2015 report to set-out the latest developments on this issue, highlight the key questions for tax policymakers and outline solutions to address them. This will include a consideration of the critical issue of value creation in a digital economy.

c) Tax Transparency

Significant work has taken place in recent months on tax transparency issues, including to provide support to jurisdictions as they move to enact their commitments to implement the Common Reporting Standard (CRS), as well as in the work of the OECD-hosted Global Forum on Transparency and Exchange of Information for Tax Purposes (Global Forum) to monitor implementation of commitments to the tax transparency standards (see further Part II of this report).

The first automatic exchanges under the CRS will take place in September 2017 and 2018, and as highlighted in Part II of this report, countries are getting ready. However, more work needs to be done, and with deadlines fast approaching, it is becoming urgent for the necessary domestic and international procedures to be completed quickly. Countries have already received close to 80 billion EUR in unplanned additional revenue as a result of voluntary disclosure programmes and other similar initiatives in the lead-up to the first exchanges.

As regards exchange of information on request (EOIR), the Global Forum completed its first round of peer reviews in 2016, and has also established a fast track review procedure so that the OECD can propose a list of uncooperative jurisdictions with respect to the tax transparency standards for the G20 Summit in July.

Finally, complementing the work of the Financial Action Task Force (FATF) and the Global Forum, as mandated by the G20, the OECD has initiated work designed to improve the effectiveness of beneficial ownership information in the tax area, based on the FATF standard, by focusing on:

- Mapping tax compliance needs for beneficial ownership information against the anti-money-laundering/countering the financing of terrorism standards.
- Consideration of the form or formats for maintaining beneficial ownership information.
- Exploring solutions to improve the sharing of beneficial ownership information at both the domestic inter-agency as well as international levels.

d) Tax and Development

Beyond the broad global engagement which has been fostered at the OECD and now sees more than 100 countries and jurisdictions participating actively in the international tax agenda, there are, in addition, ongoing targeted efforts aiming to address the specific needs of developing countries in tax matters.

The **Platform for Collaboration on Tax** was established in 2016 as a partnership between the IMF, the OECD, the World Bank Group and the United Nations, to enhance their existing cooperation on tax matters. This year the Platform is producing an update to their 2016 report on *Enhancing the Effectiveness of External Support in Building Tax Capacity in Developing Countries* indicating where progress has been made against the recommendations, and how the Platform intends to track further progress in the coming years.

The Platform is also delivering eight toolkits which take a practical approach to the top-priority BEPS-related issues identified by developing countries. The first toolkit focuses on effective tax incentives, and the first half of 2017 will see the Platform deliver the next two toolkits, on (i) undertaking transfer pricing assessments where there is a lack of comparables data, and (ii) policy options for taxation of indirect transfers of assets, and effective mechanisms for identifying such transactions and for the collection of tax in those cases. The remaining 5 toolkits (on tax treaty negotiation, transfer pricing documentation, BEPS risk assessment, base eroding payments, and supply chain restructuring) will be delivered over the remainder of 2017 and 2018.

In addition, **Tax Inspectors Without Borders (TIWB)** offers hands-on expert assistance to work with local audit teams to tackle complex international tax issues. A joint OECD-UNDP partnership, there are now 20 countries benefitting from TIWB-style projects and increased revenues attributable to assistance using the TIWB model are over USD 260 million. Recent months have witnessed the first South-South cooperation, with Kenya working with Botswana under a project which started at the end of 2016. With the support of the African Tax Administration Forum (ATAF), similar projects are expected to extend across Africa in the coming years.

PART II – PROGRESS REPORT BY THE GLOBAL FORUM ON TRANSPARENCY AND EXCHANGE OF INFORMATION FOR TAX PURPOSES

OECD SECRETARY-GENERAL REPORT TO G20 FINANCE MINISTERS

Executive Summary

2017 is a turning point in achieving greater tax transparency at the global scale.

Automatic exchange of information (AEOI) is entering a critical phase, as the first exchanges are scheduled to commence in September 2017. The Global Forum has been actively engaged in helping the jurisdictions which committed to 2017 and 2018 exchanges to set up the essential technical and legal infrastructure for this historic launch. This Global Forum input includes carrying out extensive monitoring of key milestones for delivery of the commitments, a review of confidentiality and data protection safeguards, domestic legislation and international legal framework, as well as providing associated technical assistance to the committed jurisdictions throughout this preparation phase. Although significant and swift progress has been achieved by the majority of the committed jurisdictions, a number of jurisdictions still do not have the complete legislative framework in place. Swift actions are required to safeguard timely delivery on their commitments.

The Global Forum passed an important milestone in relation to exchange of information on request (EOIR). It completed the first round of peer reviews (2010-2016) and began the second round of peer reviews (2016-2020) under a more challenging EOIR transparency standard. As a result of the first round, compliance ratings have been assigned to 116 jurisdictions. A vast majority of which have been rated as “Compliant” or “Largely Compliant”, providing robust evidence for consistent global progress in the effective implementation of the EOIR Standard. The remaining jurisdictions have been given an opportunity to demonstrate their progress through the fast-track review, which will allow them to provisionally improve their rating to a satisfactory level as requested by the G20 Leaders.

Finally, the fast-approaching kick-off of AEOI, as well as the launch of the second round of EOIR peer reviews – requiring the Global Forum members to measure up to the more demanding Terms of Reference, which take a closer look at beneficial ownership, group requests and the quality of requests – have generated an ever growing demand for technical assistance, in particular from developing countries. The Global Forum aims at providing as much help as necessary for ensuring the effective implementation of the AEOI and EOIR standards and facilitating a timely fulfilment of commitments undertaken by its members. Targeted assistance, such as the Pilot projects and the African Initiative, allows the Global Forum to direct resources towards those jurisdictions where it is most needed – enabling the delivery of a level playing field.

Introduction

In the past few years, the world has been witnessing unprecedented progress in tax transparency and exchange of information. The number of jurisdictions committed to the implementation of international transparency standards, the extent of global involvement in multilateral cooperation and peer reviews and the depth and breadth of changes triggered at the domestic level have been constantly expanding. This year marks a step change in achieving greater tax transparency at the global scale.

At the institutional level, the Global Forum continues to grow. Four new members have joined since the last G20 Leaders' meeting in September 2016 (Moldova, Thailand, The Faroe Islands and Togo), which brings the Global Forum membership to 139 jurisdictions, plus the European Union and 15 observer international organisations. Further, in response to the G20 call for close cooperation between the Financial Action Task Force (FATF) and the Global Forum to improve the implementation of the international standards on transparency, including on the availability of beneficial ownership information and its international exchange, the Global Forum has agreed to invite the FATF to become an observer to it.

A number of important milestones have been reached at the operational level. This report describes the progress in the following order. First, it focuses on the AEOI and EOIR reviews. The report identifies the core achievements and draws attention to the next steps which are becoming urgent in light of the fast-approaching targets. Then, the report provides an update of ongoing work on beneficial ownership, in particular in the context of cooperation between the Global Forum and the FATF. Finally, it outlines the major directions of technical assistance which has been provided by the Global Forum to its members to enable timely and effective delivery of their commitments.

Automatic Exchange of Information

The shift to a new era in tax transparency is well underway and the impact of the move to the new Standard in Automatic Exchange of Financial Account Information (the AEOI Standard) is being felt across the world. Most developed countries and financial centres have already changed their domestic laws to require financial institutions to report comprehensive information on the financial accounts and assets they hold for non-residents. Furthermore, in relation to the "early adopters", information with respect to 2016 has already been collected by financial institutions and will be reported to tax administrations and exchanged later this year.

a) The status of AEOI commitments

The total number of jurisdictions committed to implement the AEOI Standard in time to begin exchanging information automatically in 2017 or 2018 is 100, of which 53 are committed to commence exchanges this year, and 47 in 2018. Trinidad and Tobago had initially committed to 2017, but has since moved to 2018. Of the two developing countries that were not required to and voluntarily committed to AEOI, Ghana appears on track to meet its 2018 commitment. Albania however indicated that it would not be able to meet the 2018 deadline and would instead aim for a later date.

THE STATUS OF COMMITMENTS TO THE COMMON REPORTING STANDARD*

53 JURISDICTIONS UNDERTAKING FIRST EXCHANGES IN 2017
Anguilla, Argentina, Barbados, Belgium, Bermuda, British Virgin Islands, Bulgaria, Cayman Islands, Colombia, Croatia, Curaçao, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Guernsey, Hungary, Iceland, India, Ireland, Isle of Man, Italy, Jersey, Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, Montserrat, Netherlands, Niue, Norway, Poland, Portugal, Romania, San Marino, Seychelles, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Turks and Caicos Islands, United Kingdom

47 JURISDICTIONS UNDERTAKING FIRST EXCHANGES IN 2018
Andorra, Antigua and Barbuda, Aruba, Australia, Austria, The Bahamas, Bahrain, Belize, Brazil, Brunei Darussalam, Canada, Chile, China, Cook Islands, Costa Rica, Dominica, Ghana, Grenada, Hong Kong (China), Indonesia, Israel, Japan, Kuwait, Lebanon, Marshall Islands, Macao (China), Malaysia, Mauritius, Monaco, Nauru, New Zealand, Panama, Qatar, Russia, Saint Kitts and Nevis, Samoa, Saint Lucia, Saint Vincent and the Grenadines, Saudi Arabia, Singapore, Sint Maarten, Switzerland, Trinidad and Tobago, Turkey, United Arab Emirates, Uruguay, Vanuatu

* The United States has indicated that it is undertaking automatic information exchanges pursuant to FATCA from 2015 and has entered into intergovernmental agreements (IGAs) with other jurisdictions to do so. The Model 1A IGAs entered into by the United States acknowledge the need for the United States to achieve equivalent levels of reciprocal automatic information exchange with partner jurisdictions. They also include a political commitment to pursue the adoption of regulations and to advocate and support relevant legislation to achieve such equivalent levels of reciprocal automatic exchange.

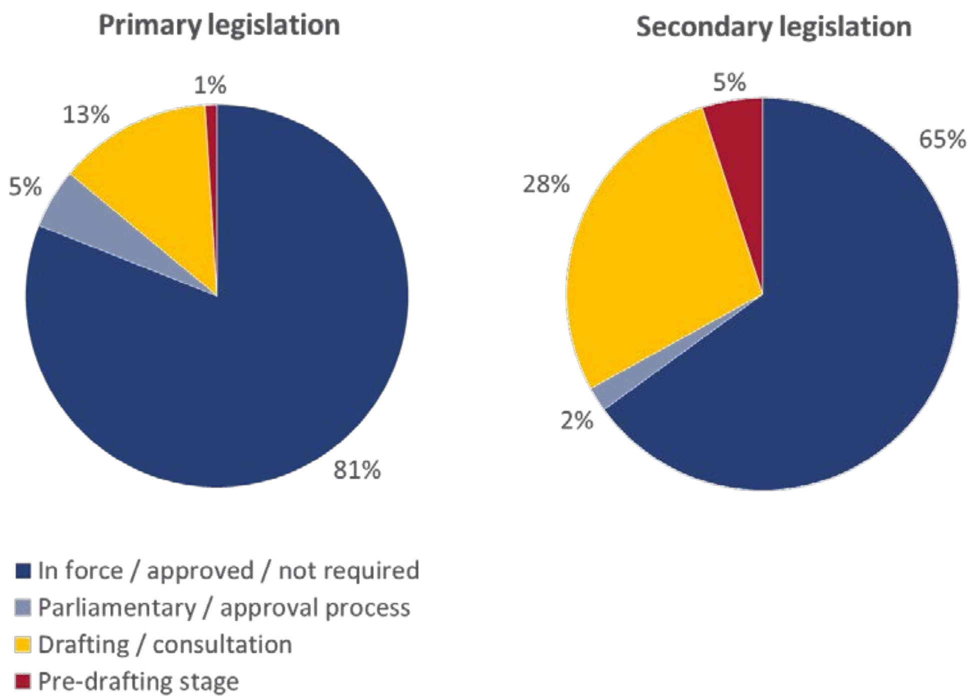
b) Urgent next steps needed to secure timely implementation

It is now critical to ensure that all those jurisdictions take the steps necessary to enable successful and timely delivery of the commitments made. This will ensure a level playing field and maximise the potential benefits of the AEOI Standard by eliminating hiding places for tax evaders. The Global Forum has been actively engaged in helping the jurisdictions which committed to 2017 and 2018 exchanges to set up the essential technical and legal infrastructure for this historic launch. This Global Forum input includes carrying out extensive monitoring of key milestones for delivery of the commitments, a review of confidentiality and data protection safeguards, domestic legislation and international legal framework, as well as providing associated technical assistance to the committed jurisdictions throughout this preparation phase.

Domestic data collection and reporting laws for financial institutions (comprising both primary and secondary legislation/regulations) are already in place in the majority of the committed jurisdictions. Virtually all jurisdictions committed to 2017 exchanges already have the complete legislative framework in effect. For a number of jurisdictions committed to 2018 exchanges, there is still work to do. The expectation would have been for the complete domestic legislative framework to have been in place by the end of 2016, so that financial institutions collect the information in 2017 ready for it to be reported and exchanged in 2018. Currently, around 30 of jurisdictions still do not have their complete legislative framework in place and are therefore at risk of not delivering on their commitments without swift action being taken. Recognising the challenges faced, the Global Forum has agreed that the complete domestic legislative framework should be in place in all committed jurisdictions by the end of June 2017 at the latest. The relevant jurisdictions therefore need to work to put in place the domestic legal requirements as a matter of urgency. The Global Forum will continue to closely monitor the progress made and provide assistance as necessary.

THE ADOPTION OF DOMESTIC LEGISLATIVE FRAMEWORK FOR AEOI

JURISDICTIONS COMMITTED TO COMMENCE EXCHANGES IN 2017 AND 2018



Attention must also be focused on ensuring the international legal framework is in place for the international exchanges to occur. All jurisdictions have committed to exchange information with all other “interested appropriate partners” (which are all those wishing to receive information and that meet the standards on confidentiality and the proper use of data). Over 1 300 relationships are already in effect for exchanges in 2017. Work must continue to ensure relationships are brought into effect in time for full exchanges in 2018, which will take more time for those adopting a bilateral rather than a multilateral approach to putting in place the international legal framework. A full list of jurisdictions participating in the multilateral Convention on Mutual Administrative Assistance in Tax Matters is available in *Appendix 1* to this report.

The Global Forum encourages the use of existing multilateral tools to support the swift and widespread implementation of the AEOI Standard in the most efficient way possible, including multilateral international legal frameworks and the Common Transmission System.

Exchange of Information on Request

The Global Forum is approaching a critical moment in its work as it has just completed the first round of peer reviews (2010-2016) and began the second round (2016-2020) under an improved and more challenging EOIR transparency standard. In parallel to this continuing work stream, the Global Forum has been asked by the G20 Leaders to facilitate the review of overall improvement made by jurisdictions to reach a satisfactory level of compliance with the EOIR standard in time for a reporting of this progress to the G20 Leaders by July 2017 (the fast-track review).

a) Final results from the first round of reviews

The Global Forum successfully completed its first round of EOIR reviews with a total of 125 assessed jurisdictions. An overall rating has been assigned to a total of 116 jurisdictions, of which 113 have been rated after completion of their Phase 2 reviews. In addition, three jurisdictions have been rated overall "Non-Compliant" on an exceptional basis without having undergone a Phase 2 review, as elements critical to ensuring an effective exchange of information in their legal and regulatory framework remained not in place for more than 2 years.

The outcomes of the first round of reviews show that the EOIR standard is already substantially implemented throughout the world with only a small minority of members that have still to reach a satisfactory level of implementation. The detailed breakdown of results is as follows:

- 99 jurisdictions received "Compliant" or "Largely Compliant" ratings;
- 12 jurisdictions were rated "Partially Compliant"; and
- 5 jurisdictions were rated "Non-Compliant".

The list of the assessed jurisdictions and their respective rating is included in *Appendix 2* to this report.

In the course of the first round of EOIR reviews, 65 jurisdictions eliminated strict bank secrecy for EOI purposes and 31 jurisdictions abolished or introduced mechanisms to immobilise bearer shares.

b) Status update on the second round of reviews

The second round of EOIR reviews, which started in the third quarter of 2016, will be carried out under a strengthened standard for assessment of EOIR, with the notable introduction of beneficial ownership requirements. A total of 21 peer reviews have already been launched, with the first evaluation results expected in August 2017. Another 20 peer reviews will be launched before the end of 2017.

c) The fast-track reviews

The G20 Finance Ministers have called on all countries and jurisdictions to upgrade their Global Forum rating to a satisfactory level by the 2017 G20 Summit (July 2017). The Global Forum has developed a special procedure that will enable it to evaluate, on a provisional basis, whether a jurisdiction has made sufficient progress in implementing the existing EOIR standard to be eligible for an upgrade in its ratings. This will not be a full review leading to a new rating, but jurisdictions that are able to demonstrate progress will have their existing rating suspended and then be scheduled for a full review under the 2016 Terms of Reference (including a review of the availability of beneficial ownership information) in the second half of 2017.

In total, 21 jurisdictions are eligible for the fast-track process. With early April 2017 as the deadline to apply for the process, eligible jurisdictions may report their progress since the last review through a request to the Secretariat, accompanied with all supporting documentation. On this basis and also taking into account the peer input received, the Secretariat will prepare a short report highlighting the main findings and progress and determine whether the rating of the element(s) and the overall rating are likely to be upgraded. The fast-track reports will be adopted by the Global Forum in June 2017, in time to report on the progress for the G20 Leader's Summit in July 2017 for which the OECD has been called on to identify non-cooperative jurisdictions with respect to tax transparency.

Ongoing work on Beneficial Ownership

The G20 Finance Ministers called on the FATF and the Global Forum to propose "ways to improve the implementation of the international standards on transparency, including on the availability of beneficial ownership information, and its international exchange" (13 April 2016 in Washington D.C., repeated on 22-23 July 2016 in Chengdu). The initial proposals of the Global Forum were developed through consultation with the Global Forum membership and the FATF and then reported to the G20 Finance Ministers in October 2016. The Global Forum will continue to work closely with the FATF as the work develops. The Secretariat has allocated resources to ensure that work on the implementation of beneficial ownership requirements is completed rapidly.

A status update on three initial proposals and their connected actions is reported below.

a) Improving effective implementation through peer reviews

Under the first pillar, the Global Forum agreed to provide a particular focus on the effective implementation of the legal and beneficial ownership requirements during the new reviews against both the EOIR and AEOI Standards.

The implementation of this first pillar incorporates four specific actions:

- **Action 1**: ensuring particular importance is being placed on the beneficial ownership requirements during the second round of EOIR reviews. The first reviews will be considered and adopted by the Global Forum in 2017. The Peer Review Group will carefully evaluate these first reports on a horizontal basis.

- **Action 2**: providing training and support, notably on the assessment of beneficial ownership requirements. The Secretariat is providing regular training and support to prepare both assessors and assessed jurisdictions for the second round of reviews. Four training events were organised in 2016 (France, Singapore, the United Kingdom and the United States) and two are planned in 2017 (Chile in March and Romania in October).

- **Action 3**: assessing the legal framework implementing AEOI. In 2016, the Secretariat started the assessments of the legal framework implementing the AEOI Standard, including elements relating to beneficial ownership. Seven assessments of the 100 committed jurisdictions have been approved, with the rest to be completed in 2017 and 2018.

- **Action 4**: developing the AEOI Methodology and Terms of Reference. This work will be carried out in 2017, with reviews due to commence in 2019.

b) Ensuring closer institutional cooperation between the FATF and the Global Forum

Under the second pillar, it was agreed to enhance cooperation between the FATF and the Global Forum to further ensure the coherence and mutual reinforcement of work to improve transparency in relation to beneficial ownership, including through mapping out where the FATF and the Global Forum standards coincide.

This enhanced collaboration is taking the form of two concrete actions:

- **Action 5**: setting up a framework for closer cooperation between the Global Forum and the FATF at the institutional level. The institutional cooperation includes inviting the FATF to be an observer to the plenary of the Global Forum. This invitation was agreed during the 2016 plenary, and the details of this observership are currently being developed.

- **Action 6**: carrying out a mapping exercise in relation to the Global Forum and the FATF standards. This exercise aims to ensure that each organisation understands and potentially makes use of the relevant parts of each other’s evaluations. This work is on-going.

c) Facilitating effective implementation through examples of effective implementation and technical assistance

Under the third pillar, it was agreed that the Global Forum, the FATF and the OECD will work together to compile and widely disseminate examples of effective implementation for tax purposes, and will provide technical assistance as necessary.

The third pillar involves two concrete actions:

- **Action 7**: compiling examples of effective implementation in relation to the beneficial ownership requirements. A key source of these examples will be the second round of EOIR reviews, the outcomes of which will help to establish both principles and examples of effective implementation. The Secretariat is compiling this information and will make it available to all Global Forum members.

- **Action 8**: providing technical assistance. Meeting the requirements of the second round of reviews will be an immense challenge for many developing countries, with a number of them already having been rated poorly in their peer reviews in respect of the availability of legal ownership information. The first stage of assistance on beneficial ownership consists of regional seminars in Uganda (December 2016), the Philippines (March 2017) and Latin

America (mid-2017). These seminars help the Secretariat to identify the assistance needed in various regions.

Technical Assistance

Technical assistance and capacity building activities are essential to the worldwide implementation of the tax transparency standards by all Global Forum members, particularly those that are developing countries. These activities have continued to intensify and expand since the last report.

a) Offering an Induction Programme for new members

Given its already extensive membership, all new members of the Global Forum are essentially developing countries. A comprehensive induction programme, designed to enable all new members to fully benefit from their membership, is currently underway in Armenia, Chad, Cote d'Ivoire, Guyana, Lebanon, Maldives, Paraguay and Papua New Guinea. Egypt, Faroe Islands, Moldova, Niger, Tanzania, Thailand and Togo will benefit from this country-specific technical assistance in 2017.

b) Supporting the effective implementation of the AEOI and EOIR Standards

The Global Forum is fully focused on providing all the support it can to assist in the successful delivery of the AEOI commitments. Main work streams consist of the following:

- **Domestic legislative framework for AEOI**. As countries are putting in place domestic legislative frameworks for AEOI, the technical assistance team is dealing with the ever growing demand for support from the committed jurisdictions. Both generic and targeted assistance and advice in the drafting of the necessary domestic laws is provided to ensure the information is collected and reported by financial institutions.

- **Confidentiality and data safeguard standards**. Around 30 jurisdictions are implementing action plans to improve their confidentiality and data safeguard standards to enable them to receive information automatically. These jurisdictions are all offered support to deliver the necessary improvements and assure their partners that information is secure. This work is supported by experts from Australia, Mexico and the United Kingdom.

Substantial work is also carried out in the field of EOIR. In the light of the G20 Finance Ministers request for all countries to upgrade their Global Forum ratings to a satisfactory level by July 2017, the Global Forum is assisting the jurisdictions at risk of being listed as non-cooperative in revising their legislation and administrative practices to show their progress and benefit from the fast-track review. A training event, which assists the eligible jurisdictions in making the best use of this facility, was organised in February 2017 in Paris.

c) Providing other targeted assistance to developing countries

Beyond the implementation of the standards, the ultimate aim of our technical assistance work is to encourage the effective use of exchange of information tools so that developing countries can benefit from improvements in international tax transparency and enhance their domestic resource mobilisation capacity in line with the goals identified by the 2030 Agenda for Sustainable Development and the Addis Tax Initiative. Two ongoing programmes include:

- **The Pilot Projects**. The pilot projects on AEOI, endorsed by the G20, and led by the Global Forum Secretariat working with the Wold Bank Group and member jurisdictions are progressing. These are peer to peer knowledge transfers to support developing countries in implementing and benefiting from AEOI in a timely manner. Six projects have commenced, with the support of specific members, Albania (with Italy), Colombia (with Spain), Pakistan and Ghana (with the United Kingdom) the Philippines (with Australia), and Morocco (with France). One of the pilot projects (Colombia) is coming to a successful conclusion.

- **The Africa Initiative**. The Africa Initiative is a three year programme (2015-2017) to support the effective use of EOI in African member countries. Through this, eight pioneering participants (Burkina Faso, Cameroon, Gabon, Ghana, Kenya, Morocco, Nigeria and Uganda) have made great progress in meeting the set targets. Building upon the success of the initial programme, it was agreed at the Global Forum plenary meeting in Georgia (2-4 November 2016) that the Africa Initiative will be extended for a new three year period (2018-2020) with a specific focus on AEOI.

Appendix 1

Jurisdictions participating in the Convention on Mutual Administrative Assistance in Tax Matters

TABLE OF JURISDICTIONS PARTICIPATING IN THE CONVENTION ON MUTUAL ADMINISTRATIVE ASSISTANCE IN TAX MATTERS *		
	Jurisdictions	**Current status regarding the Convention**
91	Albania, Andorra, Anguilla[(1)], Argentina, Aruba[(2)], Australia, Austria, Azerbaijan, Barbados, Belgium, Belize, Bermuda[(1)], Brazil, British Virgin Islands[(1)], Bulgaria, Cameroon, Canada, Cayman Islands[(1)], Chile, China (People's Republic of), Colombia, Costa Rica, Croatia, Curaçao[(3)], Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands[(4)], Finland, France, Georgia, Germany, Ghana, Gibraltar[(1)], Greece, Greenland[(4)(5)], Guernsey[(1)], Hungary, Iceland, India, Indonesia, Ireland, Isle of Man[(1)], Israel, Italy, Japan, Jersey[(1)], Kazakhstan, Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mauritius, Mexico, Moldova, Montserrat[(1)], Nauru, Netherlands, New Zealand, Nigeria, Niue, Norway, Poland, Portugal, Romania, Russian Federation, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, San Marino, Saudi Arabia, Senegal, Seychelles, Singapore, Sint Maarten[(4)], Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Tunisia, Turks and Caicos Islands[(1)], Uganda, Ukraine, United Kingdom, Uruguay, United States[(6)].	Convention entered into force
5	Malaysia, Marshall Islands, Monaco, Pakistan, Saint Lucia.	Instrument of ratification, acceptance or approval deposited
12	Burkina Faso, Cook Islands, Dominican Republic, El Salvador, Gabon, Guatemala, Jamaica, Kenya, Morocco, Panama, Philippines, Turkey.	Protocol/amended Convention signed

* This table includes State Parties to the Convention as well as other Global Forum members, including jurisdictions that have been listed in its Annex B naming a competent authority, to which the application of the Convention has been extended pursuant to Article 29 of the Convention. It also includes participating jurisdictions that are not Global Forum members.

(1) Extension by the United Kingdom.

(2) Extension by the Kingdom of the Netherlands.

(3) Extension by the Kingdom of the Netherlands. Curacao and Sint Maarten used to be constituents of the "Netherlands Antilles", to which the original Convention applied as from 1 February 1997.

(4) Extension by the Kingdom of Denmark.

(5) Jurisdictions which are not Global Forum members.

(6) The United States have signed and ratified the original Convention which has been in force since the 1st April 1995. The Amending Protocol was signed the 27 May 2010 but is awaiting ratification.

Appendix 2

Overall ratings following the First Round of Reviews

Australia, Belgium, Canada, China (People's Republic of), Colombia, Denmark, Finland, France, Iceland, India, Ireland, Isle of Man, Japan, Korea, Lithuania, Mexico, New Zealand, Norway, Slovenia, South Africa, Spain, Sweden	Compliant
Albania, Argentina, Aruba, Austria, Azerbaijan, The Bahamas, Bahrain, Barbados, Belize, Bermuda, Botswana, Brazil, British Virgin Islands, Brunei Darussalam, Bulgaria, Burkina Faso, Cameroon, Cayman Islands, Chile, Cook Islands, Cyprus[1], Czech Republic, El Salvador, Estonia, Former Yugoslav Republic of Macedonia, Gabon, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guernsey, Hong Kong (China), Hungary, Israel, Italy, Jamaica, Jersey, Kenya, Latvia, Lesotho, Liechtenstein, Luxembourg, Macao (China), Malaysia, Morocco, Malta, Mauritania, Mauritius, Monaco, Montserrat, Netherlands, Nigeria, Niue, Pakistan, Philippines, Poland, Portugal, Qatar, Romania, Russia, San Marino, Senegal, Singapore, Slovak Republic, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Saudi Arabia, Seychelles, Switzerland, Turks and Caicos Islands, Uganda, United Kingdom, United States, Uruguay	Largely compliant
Andorra, Anguilla, Antigua and Barbuda, Costa Rica, Curaçao, Dominica, Dominican Republic, Indonesia, Samoa, Sint Maarten, Turkey, United Arab Emirates	Partially compliant
Marshall Islands, Panama …………………………………………………………………………………… Guatemala*, Federated States of Micronesia*, Trinidad and Tobago*	Non-compliant

*****This jurisdiction has been rated overall Non-Compliant on an exceptional basis without having undergone a Phase 2 review as elements critical to ensuring an effective exchange of information in its legal and regulatory framework remained not in place for more than 2 years after its Phase 1 review. Individual ratings for each element are not assigned for the jurisdiction.

[1] Note by Turkey
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

ANNEX 1

OECD SECRETARY-GENERAL REPORT TO G20 FINANCE MINISTERS

TAX CERTAINTY

IMF/OECD Report for the G20 Finance Ministers

March 2017

Acronyms

ADR	Alternative Dispute Resolution
APA	Advance Pricing Agreement
BEPS	Base Erosion and Profit Shifting
BIAC	Business Industry Advisory Committee
CIT	Corporate Income Tax
CIV	Collective Investment Vehicle
COSEFIN	Council of Ministers of Finance of Central America, Panama and the Dominican Republic
CRS	Common Reporting Standard
EAC	East African Community
EI	Extractive Industries
ETPF	European Tax Policy Forum
FT	Financial Times
FTA	Forum on Tax Administration
G20	Group of Twenty
GAAR	General Anti-Avoidance (Abuse) Rule
GST	Goods and Services Tax
IMF	International Monetary Fund
MAP	Mutual Agreement Procedure
MNE	Multinational Enterprise
NACE	Nomenclature Statistique des Activités économiques dans la Communauté Européenne
NPV	Net Present Value
OECD	Organisation for Economic Co-operation and Development
OUCBT	Oxford University Centre for Business Taxation
SAAR	Specific Anti-Avoidance Rule
TADAT	Tax Administration Diagnostic Tool
TRACE	Treaty Relief and Compliance Enhancement
UN	United Nations
VAT	Value Added Tax

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EXECUTIVE SUMMARY

This report responds to the request from the G20 Leaders at their Summit in Hangzhou, China in September 2016 for the OECD and the IMF to work on issues of tax certainty.[1]

The request arises against the backdrop of heightened concern about uncertainty in tax matters and its impact on cross-border trade and investment, especially in the context of international taxation. There are many reasons for heightened concerns about tax uncertainty, affecting both taxpayers and tax administrations. These include: the spread and emergence of new business models and increased internationalization of business activities; heightened concern with aggressive tax planning; some fragmented and unilateral policy decisions; certain court decisions; and updates to the international tax rules, such as through the G20/OECD Base Erosion and Profit Shifting (BEPS) Project, which are necessary to ensure that the international tax rules remain up to date with the changing environment.

At a time when good progress has been made in fighting tax evasion and aggressive tax avoidance through increased transparency and the G20/OECD BEPS Project, it is also important to focus on tax certainty. In this context, the importance of providing greater tax certainty to taxpayers to support trade, investment and economic growth has become a shared priority of governments and businesses.

This report explores the nature of tax uncertainty, its main sources and effects on business decisions and outlines a set of concrete and practical approaches to help policymakers and tax administrations shape a more certain tax environment. It draws on the experience of the IMF and the OECD and on input received by the OECD from businesses, tax administrations and civil society. The report provides new information from an extensive global survey by the OECD of more than 700 businesses—representing annual turnover of more than USD 17 trillion and companies headquartered in 62 different jurisdictions—and a survey of 25 predominantly G20 and OECD tax administrations. It is recognised that surveys of this kind need to be interpreted with caution. Narrative evidence, from a new IMF dataset, is also presented on the frequency and pre-announcement of changes in corporate taxation in twelve advanced countries.

This report focuses on tax certainty from the perspective of businesses and tax administrations in G20 and OECD countries, and stresses that the issues faced and many of the responses needed are likely to be different in developing countries. While there is widespread agreement on the need to increase certainty in tax matters, the report recognizes that developing countries can face particular challenges of capacity and in combining the need to secure sustainable revenues to support domestic revenue mobilization with ensuring the tax certainty necessary to create an attractive business environment.

[1] The report has been prepared by staff from the OECD and IMF, under the responsibility of the Secretariats and Staff of the two mandated organizations. The report reflects a broad consensus among these staff, but should not be regarded as the officially endorsed views of those organizations or of their member countries.

Key Messages

The report highlights that there is risk of uncertainty discouraging investment. The effects of uncertainty on investment are ambiguous in theory. But the empirical evidence, while sparse, is more clear-cut—and does suggest adverse effects on investment and trade. The results of the business and the tax administration surveys presented in this report are instructive, with respondents to both reporting that tax uncertainty is a major concern:

- **Uncertainty in the corporate income tax and the VAT systems is reported by business as having an important influence on investment and location decisions**. Over 60 percent of respondents to the OECD business survey indicate that uncertainty in the corporate income tax and the VAT is very or extremely important to investment and location decisions.
- **Tax certainty is a high priority for tax administrations,** with over 80% of respondents to the tax administration survey identifying it as a very high or extremely high priority of their tax administration.

While the sources of uncertainty are many and varied, the key findings from the surveys are:

- **According to businesses, issues related to tax administration were ranked as among the major drivers of uncertainty in tax systems,** with the top two, and three out of the top 10, sources of tax uncertainty deriving from issues related to tax administration. In this regard, the main sources included bureaucracy to comply with the tax legislation, although this may also reflect concern over compliance costs, and inconsistent treatment.
- **Concerns over the inconsistent approaches of different tax authorities towards the application of international tax standards ranked high in the business survey.**
- **Issues associated with dispute resolution mechanisms, including timescales, were also identified as an important driver of uncertainty.** In particular, respondents to the business survey highlighted concerns about lengthy decision making of the courts—which may be an aspect of the wider judicial system, and not wholly under the tax authorities' control.
- **Tax administrations identified taxpayer behaviour as an important source of uncertainty**, in particular as a result of aggressive tax planning and a lack of cooperation. They also highlighted complexity in legislation, lengthy court procedures, unclear drafting and frequency of legislative changes.
- **A key area of agreement in both surveys was that legislative and tax policy design issues are a major source of tax uncertainty**, mainly through complex and poorly drafted tax legislation and the frequency of legislative changes.

The narrative analysis suggests there is considerable variation across advanced countries in both the frequency of corporate tax changes and the lag before implementation. Most corporate income tax changes, however, are announced at least ninety days in advance of implementation. There is no obvious trend towards less pre-announcement of corporate income tax changes.

Practical tools to enhance tax certainty

The report outlines a set of concrete and practical approaches and solutions to enhance tax certainty in G20 and OECD countries. While recognising that governments and tax administrations already take a wide range of measures in pursuit of tax certainty in both the domestic and international context, the report highlights the benefits of reducing or addressing uncertainty at the earliest stage possible. However, where issues cannot be avoided or resolved early on, effective dispute resolution mechanisms will be needed.

More specifically, the report outlines the following practical tools to enhance tax certainty:

- **Reducing complexity and improving the clarity of legislation through improved tax policy and law design.** The development of a robust principles-based tax law design and monitoring framework coupled with various other measures to improve clarity and reduce complexity, including avoiding inappropriate retroactivity, ensuring appropriate mechanisms for consultation on proposed or announced legislation and enhanced guidance.
- **Increasing predictability and consistency by tax administrations,** through timely issuance of rulings and technical interpretations. Proactive taxpayer engagement and education can also improve understanding of the legislation and its requirements, and of the practices of the administration.
- **Effective dispute resolution mechanisms have a critically important role to play in establishing certainty.** Dispute resolution mechanisms should be fair and independent, accessible to taxpayers and effective in resolving disputes in a timely manner.
- **Tackling tax uncertainty in the international context can be particularly important.** The report outlines a number of approaches to enhance tax certainty in the international context for G20 and OECD countries, including through:
  - **Dispute prevention and early issue resolution programs,** such as cooperative compliance programs and advance pricing agreements (APAs), as well as simultaneous and joint audits, where appropriate. The innovative use of these tools in a multilateral context also received support from the business and tax administration surveys.
  - **Robust and effective international dispute resolution procedures,** such as mutual agreement procedure (MAP), including fully implementing the minimum standard under Action 14 of the G20/OECD BEPS Project, and the use of arbitration, where countries elect to do so.
  - **Updating of tax treaties through the use of the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS**. The multilateral instrument will allow for the amendment of treaties to be made rapidly and consistently, thereby enhancing certainty.
  - **Making further progress towards simplified and effective withholding tax collection and treaty relief procedures.**

- **Cooperation and coordination on the development of coherent international standards and guidance**, and consistent implementation, play an important role in ensuring greater tax certainty.

Next steps

This report highlights that tax certainty is an important priority for governments and businesses in G20 and OECD countries and outlines a set of concrete and practical tools to enhance tax certainty. In this context, this report represents an important opportunity for the G20 to affirm its commitment, which could for instance be included in a declaration, to enhanced tax certainty and its support for practical actions by governments, tax administrations and businesses to provide a more predictable and certain tax environment to support cross-border trade and investment and secure a more stable and predictable revenue stream for governments.

While the focus of this report is on the G20 and OECD, it also presents an important opportunity to engage in dialogue with developing countries on areas where enhanced tax certainty furthers their development goals. Developing countries need to mobilize domestic resources to finance the Agenda 2030 for Sustainable Development, while facing many distinct challenges in balancing the need for sustainable revenues against creating an attractive business environment. The appropriateness for developing countries of the specific tools to enhance tax certainty suggested in the report for G20 and OECD countries needs to be assessed in terms of their weaker enforcement capabilities and lower implementation capacity. While noting that many issues relating to tax certainty are already embedded in existing capacity building programs, as a specific practical measure, the report proposes a consultative workshop on tax certainty for African countries to be held in the region in 2017 to take forward the discussion on the particular challenges that developing countries face.

INTRODUCTION

This paper responds to the September 2016 request from the G20:

> *"We emphasize the effectiveness of tax policy tools in supply-side structural reform for promoting … the benefits of tax certainty to promote investment and trade and ask the OECD and IMF to continue working on … tax certainty."*[2]

The present is widely seen as a time of heightened 'tax uncertainty' especially though not only in international matters. In a recent survey of business opinion,[3] Devereux (2016), for instance finds a large majority of respondents to feel that 'uncertainty in relation to corporation tax' has increased in 20 of the 21 advanced and emerging countries for which usable responses were received. The doubling of the Mutual Agreement Procedure (MAP)[4] inventory over the period 2006 and 2015 may also be seen as an indicator of significant uncertainty in the international tax system.[5] Such uncertainty is of obvious concern to businesses, seeking adequate and reliable guidance for the investment, employment, organizational and other decisions they need to take. And it is a concern for governments too, seeking secure and reasonably predictable revenues, and with a strong interest in the real investment and other decisions that businesses take.

There are several reasons why uncertainty in tax matters has become elevated. The period since the financial crisis has been an especially active one in tax policy,[6] as many countries have tackled the challenge of stimulating growth while consolidating their public finances—and rapid change inevitably creates uncertainties and hence potential costs to be weighed against the benefits. Such trade-offs have long been recognized. But several more specific factors have contributed to heightened tax uncertainty:

- ***The increased internationalization of business activities***: With markets that are more integrated, businesses invest, produce and trade more across different jurisdictions. Differences in tax legislation and inconsistency in their application across countries can be a source of uncertainty.

- ***The emergence and spread of new business models***, many arising out of the growth of intangible assets and the increased digitalization of the economy, has made it harder to

2 G20 Leaders' Communique, Hangzhou Summit, China, 4-5 September 2016.

3 With 88 respondents, estimated to cover at least 10 percent of all businesses with turnover above $5 billion per annum. These responses of course need to be treated with caution, as with the OECD surveys reported later in this report.

4 The MAP article in tax conventions allows designated representatives (the "competent authorities") from the governments of the contracting states to interact with the intent to resolve international tax disputes. These disputes involve cases of double taxation as well as inconsistencies in the interpretation and application of a convention. Since most probable occurrences of double taxation are dealt with automatically in tax conventions through tax credits, exemptions, or the determination of taxing rights of the contacting states, the majority of MAP cases are situations where the taxation of an individual or entity is unclear.

5 Available at http://www.oecd.org/tax/dispute/map-statistics-2015.htm (accessed 1 March 2017). See also Figure 15 below.

6 See Figure 9 below.

assign the creation of value to a specific jurisdiction and tax businesses with an essentially digitalized value chain.

- ***Fragmented and unilateral policy decisions, and some rulings and court decisions,*** have in some cases been seen as contributing to uncertainty.
- ***The BEPS Project transition:*** A central purpose of the G20-OECD BEPS Project is to avoid the uncertainty arising from fragmented or unilateral action by achieving greater cooperation and coordination in international tax matters. The phase during which proposals to do so were developed was naturally one of some uncertainty. As with the implementation of any new legislation or regulation, implementation inevitably involves a transition period; however, it is expected that as countries proceed with the coordinated implementation of the BEPS measures, this uncertainty will ease.

This report focuses on the sources of tax uncertainty, and measures and possible tools to mitigate the consequence of such uncertainty as it affects businesses—particularly international businesses—and tax administrations in G20 and OECD countries. For many developing countries, the problems will differ, or will have differing levels of importance—and the appropriate tools and solutions will also differ. While it must be stressed that the analysis and the practical measures and tools outlined in this report are focussed on G20 and OECD countries, there is scope to build on this work to engage in a dialogue with developing countries on the significance of tax certainty concerns to them and on potential responses to address any such concerns, including by businesses.

The report is structured as follows. It first reviews theory and evidence on the nature and impact of tax uncertainty, and then identifies and discusses its main drivers. New survey and narrative evidence bearing on key aspects of tax uncertainty are then presented, before a range of practical measures and tools to enhance tax certainty are outlined. The report concludes with thoughts on taking forward this agenda.

THE NATURE AND IMPACT OF TAX UNCERTAINTY

This section takes stock of the concept of tax certainty, and reviews related analytical and empirical work.

A. Preliminaries

Certainty in tax matters is an important objective and governments take a wide range of measures in its pursuit. Beyond seeking (in principle at least) clarity and simplicity in tax legislation, and consistency in implementation, governments commonly adopt a variety of measures serving to limit their own discretion and provide certainty to taxpayers. These may include, for instance, providing advance rulings and advance pricing agreements (APAs), providing safe harbours, entering into tax treaties, committing to formal international tax standards, providing fiscal stability agreements, entering in to regional tax-relevant agreements, delegating powers to independent judiciaries or revenue authorities.

Absolute certainty in tax matters, however, is unattainable… It would require that while tax outcomes naturally vary with uncertain economic outcomes—such as the profitability of investments, the success of innovations, the input choices made—there is no doubt as to what that tax outcome will be, given any particular realization of the non-tax uncertainties. However, no tax law can specify tax outcomes without ambiguity in all possible circumstances, no administration can enforce the law without error and—perhaps most fundamentally—no government can bind its successors. There can be no question, for instance, as to the right of sovereign governments to change the general rate of the corporate income tax (CIT) in light of evolving economic and social conditions.[7] As businesses inevitably operate with many uncertainties, their decisions do not need absolute certainty in tax matters but an environment where they are able to manage the risk associated with tax uncertainty. Importantly, the nature of the tax certainty they need will differ depending on their circumstances: smaller enterprises considering entering new markets abroad face differing potential uncertainties, for instance, than large multinationals evaluating alternative tax planning arrangements.

…and the pursuit of certainty needs to be weighed against other important tax policy objectives. While tax certainty can have positive effects on economic activity, it is only one of a number of important objectives that will need to be balanced by policymakers. Governments may face a trade-off between, on the one hand, maintaining flexibility to design and implement tax policy as desired to achieve their economic and social policy objectives and, on the other, providing full clarity and certainty to guide investors and taxpayers.

B. Analytical perspectives

Concerns regarding tax uncertainty should be distinguished from the concerns with the level of taxation. Ongoing efforts to reduce tax avoidance, in particular—notably the G20-OECD BEPS Project—can be expected, all else equal, to increase corporate tax payments; this may

[7] It may of course enter into agreements that constrain its tax-setting rights—and experience with some such mechanisms is reviewed below—but here too the certainty that agreement will last forever is not assured. And while tax laws could in principle be written as contingent on a wide range of possible outcomes—such as the results of future elections—this is clearly impracticable.

be a source of concern to business, but it is not in itself a source of uncertainty. The distinction is of course often very hard to make. It may be that both expected tax payments and the range of tax payments that businesses perceive have recently increased. Conceptually, nonetheless, it is important to assess uncertainty as applying conditional on an expected tax rate or, perhaps more naturally, on expected tax revenues.[8] Doing so raises the question of whether concerns relate to uncertainty or to levels of taxation.

The impact of tax uncertainty—on profits, revenues and business decisions—depends critically on when that uncertainty is resolved, relative to those decisions. There are (at least) three possibilities:

- ***Uncertainty is resolved prior to irreversible decisions being taken.*** Suppose, for instance, that it is unclear what the applicable tax rate will be on some input—perhaps investment—but the company can costlessly delay its input decision until that rate is known. In this case, simple uncertainty over the rate that will be applied leads to lower expected tax revenue, higher expected after-tax profit and, quite possibly, higher expected input use than would be the case if the rate were instead certain at the expectation of these uncertain rates. This is because the company can economize on the import if the tariff is high and use more if the rate is low.[9] An implication is that firms may even benefit from introducing uncertainty in taxation where previously there was none. This example also highlights another important analytical point: if the situation in which the tax rate is perfectly certain is compared to one in which it is uncertain but revenue (rather than the rate itself) is expected on average to be the same, the results are less clear cut, though the most likely outcome is that the company will indeed be harmed by uncertainty of this type, and the level of its activity fall.[10]

- ***Uncertainty is resolved at some particular calendar date***. Suppose for instance it was known that all tax uncertainty will be resolved in 2018. In this case, there is potentially a sharp and damaging 'hold up' problem: companies may have an incentive to delay incurring sunk costs until 2018, when they can be sure of the tax rules that will apply. Some element of this uncertainty may apply for example, to reviews of tax law, and if so would argue for credible pre-announcement or speedy implementation.

- ***Uncertainty is resolved only after sunk costs are incurred***. This is probably the most realistic case. There is then no hold up problem: the firm learns nothing by waiting to take its decisions. But its decisions may nonetheless be impacted by that uncertainty: they may be different, that is from those that would be taken if the tax rate, or tax payments, were set for sure at the expected values they take in the uncertain world. Most clearly, this will be the case if some investment will be profitable under some but not all possible tax outcomes. This structure brings to the fore the 'time consistency' problem: once

[8] The distinction here is that between comparing a world in which some tax parameter *T* is uncertain, and yields expected revenue *ER*, with worlds in which the tax rate is certain and fixed at either (a) the expected tax rate $E[T\}$ or (b) a tax rate that yields tax revenue of *ER*.

[9] This point is made in relation to investment by Hartman (1972) and Abel (1982). Generically, higher expected after-tax profits and lower expected tax revenue are consequences of the textbook result that a firm's profits are a convex function of any prices that are beyond its control.

[10] Details are in Hines and Keen (forthcoming).

investments have been sunk, governments are presented with an inelastic tax base and so—however well-intentioned—have an incentive to set a higher tax rate than it made sense to offer investors before the investment was made (when it faced an elastic tax base). It is a general principle that such outcomes, in which the government reneges, are ultimately inferior in terms of economic welfare to those in which it can credibly commit to the tax treatment it announces before investments are made.[11]

The behavioural impact will also depend on the tax instruments affected—likely being less for taxes on pure rent. Since a tax on the rents earned by a project—the excess of the return over the minimum required by an investor to undertake it—does not affect whether it is privately profitable or not, uncertainty over that rate will leave private decisions unchanged.[12] This is so whichever of the time lines for the resolution of uncertainty set out above applies: the rate at which rents are taxed affects only the division of those rents between investor and government. The relevant rents here, it should be stressed, are those that apply over the full lifetime of the project: the time consistency problem arises from the temptation to tax 'quasi-rents': those that remain ignoring the costs of sunk investment. Importantly, taxes that are designed to act as rent taxes over the full lifetime of the project are not vulnerable to this time consistency.[13]

The theoretical literature finds that the impact of uncertainty in taxation on investment is unclear. Conceived mainly in the third timing structure above, the few theoretical studies on the issue (reviewed in Appendix A) do not confirm the common presumption that tax uncertainty discourages investment: instead there emerges a "theoretical difficulty of constructing models that produce the intuitively plausible result that higher uncertainty harms investment."[14] The theory concludes that the effect of tax uncertainty on investment can go either way, depending on the assumptions. Whether or not these assumptions match real-world circumstances, however, can be hard to assess.[15] But it is easy to construct examples in which, for a given level of expected revenue, uncertainty in taxation leads to *highe*r investment.

The theoretical literature, however, neglects some features that may make tax uncertainty more damaging to investment. These models have the feature, for instance—as noted above—that uncertainty in taxation does not create an incentive to delay investment (because delay provides no additional information on tax matters), though it may amplify or conceivably ease one. In addition:

- Investors are assumed to be risk-neutral: if they were risk averse, uncertainty would be inherently harmful to them. Although no empirical evidence is available, there are good reasons to suppose that large multinationals, undertaking diversified projects and being held by diversified shareholders, should act in a risk neutral fashion. For smaller

[11] The classic statement remains Fischer (1980). There may of course be short-term gains to the government: that is the source of the time consistency problem.

[12] This assumes risk-neutral investors (as discussed below) and that the taxpayer cannot exploit differences in rates of rent taxation across countries or sectors.

[13] Boadway and Keen (2015). This is a consequence of the general principle that non-distorting taxes are not vulnerable to time inconsistency.

[14] Hassett and Sullivan (2015), p.15.

[15] In Hassett and Metcalf (1999), for instance, the direction of effect depends on whether the random tax rates move smoothly or in jumps.

operations, risk aversion may be a reasonable premise and adverse effects on investment consequently more likely. One consequence, moreover, is that variation of risk preferences across enterprises means that tax uncertainties can imply both inequities and inefficiencies in the allocation of resources between them.

- How tax uncertainty is resolved is assumed to be independent of how non-tax uncertainty plays out. Investment will clearly be discouraged, for instance, if the rate at which rents are taxed if they turn out to be positive is higher than the rate at which loss offset is provided if they are negative.

- The analysis is generally carried out in a single country context, but the costs of uncertainty will affect the relative cost of doing business in different countries. Differences in uncertainty across countries could affect the location of investment.

While cautioning against simple presumptions on the directions of its effects, theory leaves open the risk of significant distortions from tax uncertainty. Ambiguity of effect does not imply insignificance. It should be borne in mind too that, though less of a concern in the present conjecture, distortions which encourage investment can be as costly as those discouraging it. As in other areas of taxation, the benchmark should be neutrality of tax systems and not—in the absence of good reason to do so—tilting private decisions in one direction rather than another.

Tax uncertainty affects not only businesses, but also governments—and differences in their risk preferences can create mutual advantage in reducing it. Governments set the tax rules, but the outcome is determined by the hard-to-predict behavioural responses of business, including, perhaps, in identifying unanticipated opportunities for avoidance. And governments even in some developed countries heavily dependent on tax payments by a few subsidiaries of large multinationals, may be less able to bear uncertainty in these payments than, for the reasons above, is the multinational. Certainty may then be mutually beneficial: replacing a system in which tax payments are uncertain by one in which they are certain, but somewhat lower in expected value, would benefit both sides.

It also needs to be recognized that measures which enhance tax certainty for businesses may not enhance it for governments—and vice versa. For instance, the routine pre-announcement of tax changes may promote certainty for businesses by providing time for them to react, but for the same reason—the nature and extent of that response being to some degree unpredictable—reduces the certainty of revenue for government. The survey results reported below, however, suggest significant congruence between the concerns of business and tax authorities in G20 and OECD countries, suggesting that there is indeed significant scope for mutual benefit in strong tax certainty.

C. Evidence

Empirical work remains sparse and rudimentary, but suggests that various forms of tax uncertainty do adversely impact investment and trade. There is increasing evidence that policy uncertainty in general is damaging for investment. In relation to tax uncertainty more specifically, the difficulty arises as to how best this can be quantified so as to disentangle its effects from, in particular, those of overall levels of taxation. Few papers attempt this. Such empirical work as there is, however, tends to find that activity is stimulated by reducing tax uncertainty:

- For U.S. based multinationals, tax treaties stimulate foreign investment most for sectors in which inputs are more heterogeneous, since these items are hardest to value and are likely to be those most prone to transfer pricing disputes. This suggests that the availability of MAP positively affects cross-border investment (Blonigen, Oldenski and Sly, 2014).

- Conditional on their level, volatility in effective tax rates—though this of course not the same thing as uncertainty—has been found, on aggregate data, to have a significantly negative impact on investment (Edmiston, 2004).

- For U.S. based public companies, an important part of the negative effect of uncertainty on investment is driven by tax-related uncertainty measured as the number of temporary tax provisions set to expire.[16] Investment rebounds once uncertainty is resolved but this occurs over two to three years, suggesting that it can take a substantial amount of time to recover from the effects of uncertainty (Gulen and Ion, 2015).

- In the trade context—and controlling for the level of applied tariff rates—exports are significantly higher (on both extensive and intensive margins) the lower is the gap between applied and bound tariff rates in the importing country—which is indicative of a lesser risk of tariff increases. The effect is also larger in importing countries with lower quality institutions and in relation to intermediate inputs[17] (Osnago, Piermartini and Rocha, 2015).

[16] The authors estimate that a doubling in the level of policy uncertainty is associated with an average decrease in quarterly investment rates of approximately 8.7% relative to the average investment rate in the sample.

[17] It is tempting to think of this uncertainty on tariff rates applied to intermediate inputs as similar to that which may be associated with transfer pricing of such items within multinationals.

MAIN SOURCES OF TAX UNCERTAINTY

This section groups into six categories the main sources of tax uncertainty, and outlines for each some initial solutions to enhance predictability in the tax system.

A. Policy design and legislative uncertainty

Unexpected, frequent changes in tax law, regulations and guidance

Changes in tax policy have often been thought of as one of the main sources of tax uncertainty. Many studies (e.g., Baker, Bloom and Davis, 2016) measure tax uncertainty by counting the number of specific statutory changes or possible changes; we report below on an exercise of this kind in relation to tax policy changes in a sample of OECD countries.

But while tax policy changes can lead to uncertainty, it is not change per se that creates uncertainty. Changes may, of course, be fully anticipated. Moreover, if changes rationalize and simplify the tax system, overall uncertainty may actually be reduced in the longer term, even if short-term uncertainty could temporarily affect business decisions.

Some uncertainty in tax matters is an inevitable consequence of the wider uncertainties with which governments must cope in addressing their economic and social objectives. Tax policy and administration play important roles in promoting economic growth, addressing redistributive issues and negative externalities in the economy. Consequently, it is important for governments to have sufficient scope to manage the tax system to respond to new challenges such as an economic slowdown, a larger budget deficit or increased inequality. Where the changes are frequent and economic agents require time to adapt to such changes (because, for example, of difficulties in understanding or incorporating new rules in their compliance systems) the tax environment could become more uncertain. In such a context, proactive consultation with stakeholders (starting as soon as possible, ideally from the initial policy development stage and going through to implementation), announcing changes in advance and with timely issuance of guidance and information would ideally give enough lead-time to business to adapt to the new environment and consequently, reduce uncertainty. Clearly the more frequent the changes,[18] the more difficult it will be for the tax authority to give enough advanced notification and for business to assimilate all the modifications introduced in the tax system. Further, the process for implementing the relevant changes is also critical to managing the level of uncertainty produced by the change. For example, taxpayers experience considerable uncertainty when proposed changes to the law are announced but are not legislated in a timely manner.

Timely communication of changes could be particularly critical for some taxes. Changes to VAT/GST rules, for instance, such as changes to rates or reporting requirements, often have an immediate impact on large volumes of transactions, often with high aggregate or individual values, that occur daily. If uncertainty is resolved unfavourably for the taxpayer, the firm may stand to lose substantially. In this context, if the business is risk-averse or for some other reason especially averse to large losses, economic activity will be negatively impacted. Additionally, sunk costs could be substantial in the VAT/GST space. For VAT/GST purposes, decisions about the tax

[18] A negative impact of frequent, abrupt changes in the tax system can come not only through changes in the legislation but also through modifications in regulations and guidance to such legislation.

treatment of each individual transaction must often be made before each individual transaction and it is often costly or in any case, problematic to correct the VAT/GST treatment of a transaction after the event. Additionally, the VAT/GST treatment of many of the transactions is likely to affect pricing and accounting and reporting processes throughout the firm.

There can be very good policy reasons for the swift implementation of some tax changes with minimal pre-announcement. This is especially so when the intention is to address, or a need not to create, avoidance possibilities—as for example with the artificial shifting of income between tax periods, and forestalling in relation to excise tax increases. It may also be warranted to avoid undesired intertemporal distortions of individuals' or firms' real decisions (with consequent impact on the level and time path of tax revenues), such as the incentive to bring forward purchases, especially of durables, in advance of a VAT increase,[19] or delay investment in the face of an announced cut in the corporate tax rate. (In some cases, of course, tax changes may be pre-announced precisely in order to induce such effects).

Retroactive changes

While "retroactivity" is frequently cited as very harmful as it relates to uncertainty, it is critical to distinguish between "retroactivity" and "tax stabilization"—including in the latter concepts relating to government's reneging on previous taxpayer-specific promises (such as of particular tax incentives granted to attract specific taxpayer investments). And it is equally critical to distinguish the impact of retroactive changes on incentives to invest, from general concepts of unfairness, and again, from adverse signals regarding the trustworthiness of specific governments going forward.

True "retroactivity" would mean changes to tax laws that are applied to *past tax years*, as opposed to changes in law that apply to future years. Defining the concept in relation to anticipated returns to existing investment would imply that *no* change in tax policy, including changes in tax rates, could be applied to any existing activities. This obviously would eliminate the government's ability to conduct not only tax, but macroeconomic policy—and would open the door to vast amounts of tax planning to determine what activities were covered; where one stops and another begins. Further, it should be noted that, in regard to any specific investment already made, a retroactive change (that is, one that would change the legal tax liability in regard to past years) by definition could not have any effect on the decision to make that investment—and thus in some sense could be viewed as perfectly efficient.

The issue then, is whether changes applied to past tax years would generate "uncertainty" in the sense of causing taxpayers in general to distrust the future actions of a specific government—much in the way that nationalization of sectors or companies can do. In the extreme, such actions may be something that a government only gets the opportunity to do once.

There are legal doctrines, as well, that apply to the concept of "retroactivity." Some jurisdictions have constitutional prohibitions against making retroactive changes to laws generally, and sometimes such prohibitions apply specifically to changes to tax laws. Frequently though, even then exceptions exist: for example, where the changes are in the nature of technical fixes or corrections to the tax law, for instance when the change merely restores or clarifies the

[19] See for instance Carare and Danniger (2008).

original intent of the law. Generally, unless there are strong reasons to do otherwise, changes in tax rules should only be implemented prospectively, in respect of the next tax period (for instance, for a change in tax rates) or to transactions taking place after the change is announced (for instance, where existing rules are modified), as opposed to applying to tax years before the announced change (true retroactivity).

Transitional provisions

Tax law changes that reflect a change in tax policy require consideration as to whether transitional or grandfathering provisions should be enacted. Where the change affects the fundamental tax treatment of an existing investment (for instance, the removal of a specific tax incentive), there are strong arguments for adopting transitional (for instance, a phase-out period) or grandfathering provisions in respect of that existing investment on certainty and transparency grounds. The impact of any existing contractual protections (such as investment agreements entered into to confer bilateral certainty and stability to existing investors) would also need to be considered before implementing any changes. Confining changes to appropriate circumstances sends important signals to taxpayers and investors about the stability, credibility and certainty of the tax rules and the level of legislative risk in relation to a particular jurisdiction.

Temporary provisions

Tax provisions that are implemented on a temporary basis or are introduced subject to a "sunset clause" can be an important source of uncertainty. One of the components of the popular uncertainty index constructed by Baker, Bloom and Davis (2016) (the 'BBD index') is the dollar impact of US tax provisions set to expire every year in the following 10 years. This component of the index aims at capturing uncertainty created by the presence of temporary provisions in the tax system.

Nonetheless, like changes in general, temporary measures do not create uncertainty per se. Temporary incentives generate uncertainty when their expiry date is either unclear or not credible, as for example when there is uncertainty about their renewal. As noted above, Gulen and Ion (2015) find evidence that policy uncertainty is persistently and negatively correlated with corporate investment, with an important part of the negative effect of tax-related uncertainty measured as the presence of temporary measures where the expiration date or the possibility for renewal are unclear. Such uncertainty risks creating a hold-up problem, as firms defer investment until the uncertainty is resolved—so undermining the effectiveness of such measures.

Uncertainty due to temporary provisions will affect firms differently, depending on the type of capital spending. For example, long-term investment projects will be less affected by temporary measures: a reduction in the overall tax rate (and the consequent increase in the net present value of the project) due to temporary measures will be small with respect to the overall average cost of a long R&D cycle, although it may still have some effect on the intertemporal allocation of some of the investment. Temporary measures may be more effective in substantially reducing the tax cost for shorter-term projects. Consequently, uncertainty about the expiration and renewal of temporary measures may be more relevant for shorter investment cycles such as replacement of existing plant and machinery.

Explicitly temporary tax measures can be useful policy tools. For example, governments may introduce temporary tax incentives for investment to encourage spending during an economic downturn, or set limits on the length of a tax change with legislative "sunset clauses". For example, Desai and Goolsbee (2004), Edgerton (2010), House and Shapiro (2008) and Zwick and Mahon (2014) find that such temporary incentives implemented in the US during the 2001-02 economic downturn and the latest global financial crisis were effective in stimulating investment spending. If the expiration date is clear and credible, the temporary nature of the provision should incentivise firms to spend today to capture the transient tax benefits now.

Unclear, poorly drafted law and ineffective tax law making and monitoring processes

The clarity of the legislative provisions will have an impact on certainty. Unclear, vague or poorly drafted legislative provisions will lead to tax uncertainty. Having a methodical and consultative tax design process can help to improve the clarity of tax laws. This raises two related but distinct issues, both of which are critical to improving tax certainty with respect to the transparency of the tax law and the ease of taxpayer compliance with the law. These are: (i) the tax law design, making and monitoring process; and (ii) the quality of the tax law drafting itself.

The processes of designing, making and monitoring tax law are critical, as they shape the quality, effectiveness and acceptability of the tax law. Each of these qualities will increase the certainty of the tax law in terms of both compliance and administration. In particular, where there is no clearly established, well-developed and coherent process for tax law design, making and monitoring, there is likely to be added uncertainty. The uncertainty could be further exacerbated in the absence of proper and timely consultation on draft legislation.

The quality of tax law drafting is critical to achieving reasonable tax certainty, as unclear, vague or poorly drafted legislative provisions are a common source of tax uncertainty. A proper legislative drafting and review process should ensure that certain general principles of tax law design and drafting are achieved. There is likely to be increased uncertainty where tax provisions are unnecessarily difficult to understand, poorly organised within or not integrated into the consolidated tax law and where they fail to give clear effect to the stated policy objective.

Complexity in the tax laws can have the effect of creating more uncertainty over time. Some degree of complexity is inevitably needed to cover possible circumstances and considerations sufficiently broadly to lead to reasonable certainty. But the more complex the tax code, the greater the need for taxpayers to dedicate significant amounts of resources to undertaking the research or, more relevantly, obtaining the advice needed to understand their obligations and determine their ultimate tax liability. Therefore, a complex tax code can be presumed to disadvantage small and medium size business as they are likely to have fewer resources to dedicate to attempt to overcome this complexity and any associated uncertainty (by, for example, obtaining legal and accounting advice).

The use of various tax incentives and reliefs, especially for corporate income tax purposes, can increase complexity. Special tax treatment of particular sectors or activities—such as tax-free zones, or regional incentives—create opportunities for tax minimization too, which then require anti-avoidance legislation. These difficulties have to be weighed against the advantages offered by special treatments, which have often been found to be very limited. There are many other policy reasons for using various tax incentives and reliefs with caution.[20] Further, many of

[20] IMF, OECD, United Nations and World Bank (2015) argue this in relation to low income countries, but the point is more general.

the issues and uncertainties created by the introduction of tax incentives and reliefs are problematic for both direct and indirect taxes. For example, the number and variety of exemptions and rates in VAT/GST regimes tends to create complexity and uncertainty for businesses. There are other practical dimensions of complexity which seem to be a consistent source of uncertainty for business activities. Even if tax law is clear and coherent, the interactions of different tax laws can create uncertainty: for example, the treatment of acquisition costs or transfer pricing adjustments and their impacts on VAT/GST. In this environment, it would be useful to look at the overall tax system and at how to effectively design the interaction between various taxes (such as VAT/GST and direct tax) with the aim to reduce complexity and conflicts.

Even the best designed and drafted tax laws are not capable of anticipating every new product, service or business model and every taxpayer transaction and structure, particularly those of an aggressive nature or those that are otherwise undertaken for tax avoidance purposes. Therefore, various tax integrity or anti-avoidance rules may need to be implemented in order to effectively counter tax avoidance practices and protect the integrity of the tax system. Anti-avoidance provisions can take different forms and their effect on tax certainty should be carefully considered. The choice of an inappropriate anti-avoidance instrument or poor drafting and arbitrary implementation of the relevant provisions could be a source of tax uncertainty. For instance, a general anti-avoidance rule (GAAR) may be effective in reducing aggressive tax planning as its mere existence may change taxpayer behaviour (for instance, by taxpayers adopting more conservative tax positions), however, a GAAR may generally be perceived as potentially increasing tax uncertainty as such a provision is necessarily less rules-based and more discretionary in its application. For this reason, care should be taken with the choice of an anti-avoidance instrument, its drafting and its implementation.

B. Policy implementation and administrative uncertainty

Tax administration is at the heart of the implementation of tax legislation and consequently a crucial channel for delivering an appropriately certain tax system. Clear, coherent legislation does not guarantee tax certainty if it is not accompanied by coherent, fair and efficient implementation.

Ineffective and unpredictable implementation

Where there is a gap between the tax legislation and its application, there is likely to be an increase in uncertainty. For example, tax law could be clear that taxpayers are entitled to obtain reliefs, credits and refunds but they may find it hard in practice to obtain them in a timely fashion or perhaps at all. In particular, specific issues of uncertainty seem to arise around the ability to obtain withholding tax reliefs, for example for withholding taxes on portfolio investment and around the ability of business to claim VAT/GST input tax credits and refunds. Even among some G20/OECD countries, access to cash refunds seems to be especially uncertain where, even though legal procedures are in place, they may entail compliance burdens so significant as to effectively constitute an obstacle to obtaining the benefits provided for under the domestic law or double tax convention.

Uncertainty can also arise from the discretionary and incoherent application of tax rules by the tax authority. This can happen at various levels including for example in the discretionary granting of tax incentives, in tax rulings and in audit practices. The inconsistent treatment of taxpayers in similar circumstances would make the tax system more unpredictable, creating increased uncertainty. Protracted audit periods, long running and unresolved disputes, unprincipled proposed adjustments, large variations in the results of audits can give rise to considerable unpredictability.

Tax uncertainty often derives from a poor general relationship between business and the tax authority.[21] The risk is of a vicious cycle of self-fulfilling expectations: administrations see taxpayers as aggressively avoiding or evading, and redouble their efforts to counter this; taxpayers see themselves as pressured by an ineffective and unreasonable administration. And the reaction of each side to its expectation of the other validates those expectations. The increased focus on aggressive tax minimization may have amplified this: while it reflects legitimate public and political pressures on the side of the authorities, at the same time many businesses have expressed concerns over what they perceive as an increase in the aggressiveness of the tax administration in some jurisdictions, a lack of understanding of their increasingly complex business models and an increasing stigmatisation of all businesses in the current political debate over tax avoidance. In this context, a more cooperative approach to tax compliance, such as through cooperative compliance programs[22], could reduce uncertainty for low risk companies, assist tax administrations to better focus their resources and promote a culture of greater trust.

Remuneration systems and fragmented tax authority can amplify the risk of an incoherent, uneven application of tax law. This can arise, for instance, when remuneration structures reward auditors on the basis of the additional tax liabilities assessed and when the tax administration function is fragmented in different, independent bodies without an overall oversight entity charged with maintaining the general coherence of the tax system and of its tax policy objectives.

Corruption

Corruption is not in itself necessarily a cause of tax uncertainty—but can both exploit and exacerbate it. In some cases, indeed, the consequences of corruption may be a reduction in tax uncertainty: a tax holiday, for instance can be very certain; and bribes may lead to more timely VAT refunds. On average, however, the link seems to run in the opposite direction. A simple tabulation between the corruption index for 168 countries in 2015—so here looking beyond the G20/OECD—and the standard deviation in their statutory corporate tax rate within the last five years, for instance, suggests that the level of corruption is positively associated with the frequency in the change of tax rates (the correlation score is 0.22 between the rank of corruption and the standard deviation in the statutory tax rate between 2011 and 2015).[23] The link between corruption and tax uncertainty is further corroborated by a high correlation score of 0.84 between the corruption index and the score of tax uncertainty for 21 countries in Devereux

[21] In Devereux (2016), a poor general relationship with the tax authority is cited as an important determinant of tax uncertainty.

[22] Cooperative compliance programs are compliance risk management strategies used by revenue bodies that focus on effectively influencing and improving taxpayer compliance behaviour. Cooperative compliance programs are designed to establish on a voluntary basis a relationship based on co-operation and trust between taxpayers and revenue bodies.

[23] Transparency International Report on "Corruption Perception Index 2015" (2016).

(2016), which provides a direct measure of the level of corporation tax uncertainty in these countries.[24] This does not establish causality: it may be that the corrupt find particular opportunities to exploit tax uncertainty. Nonetheless, there are several approaches—such as the provision of timely and accessible dispute procedures—that can serve to both limit the scope for corruption and enhance tax certainty. Administratively, anti-corruption reforms typically revolve around measures to make it more difficult for staff to circumvent rules, professionalize management cadres, stipulate clear rules identifying unacceptable behaviour, establish an appropriate set of sanctions for violating those rules, and create a credible system for detecting violations and applying the sanctions. This report does not amplify further on these issues.

C. Uncertainty around dispute resolution mechanisms

A lack of clear and timely dispute resolution mechanisms and processes is likely to generate ongoing uncertainty. Lingering, unresolved tax questions may not only cause commercial difficulty in themselves when they occur but the possibility of their arising may, the evidence cited above suggests, deter investment. This, it should be stressed, is not only a matter for cross-border investments; backlogs of domestic dispute cases can be substantial, to the extent of being in some cases effectively unmanageable.

Issues can arise even when such procedures are in place:

- ***Ongoing and frequent differences between the legislators and associated guidance provided by tax administrations on the one hand, and the courts on the other,*** could also create uncertainty.

- ***Lengthy judicial dispute resolution processes***, which leave business in an uncertain tax position for a long period of time, also create uncertainty.

- ***The costliness of the procedures may mean that access to enhanced certainty is greater for larger/more profitable companies***, with the additional concern that it may be smaller and less established companies that are less able to cope with uncertainty.

- ***In addition, unpredictability of the costs of litigation and any ancillary dispute resolution processes is likely to add to tax uncertainty***. In this environment, the lack of published decisions clarifying the interpretation of the law could worsen tax uncertainty.

D. Uncertainty arising from changes in business and technology

As stressed above, tax rules are unlikely to be able to cover all eventualities, especially when business models are changing rapidly. The application of existing tax rules to new business activities may be difficult and, in the absence of timely and relevant guidance, may lead to uncertainty regarding the tax treatment of certain activities (such as new types of assets, new types of services and new types of business models such as peer-to-peer businesses). The increasing adoption of new business models—for example, due to the effects of digitalization—where the locus of value creation is not always clear also creates increased tax uncertainty.

[24] Devereux (2016).

The difficulties of the tax system in adapting to rapid changes in business models have been particularly apparent in the international tax arena, where the interaction between different systems adds an extra layer of complexity. It is in the international context that tax legislation not in line with the evolution of new business models has, in recent years, most added to tax uncertainty for both business and tax authorities. Against this background, lack of understanding of international business and lack of expertise in the tax administration on aspects of international taxation—which are themselves still evolving—could worsen uncertainty.

E. Taxpayer conduct can contribute significantly to uncertainty

Uncertainty can rise from the conduct of taxpayers. Some taxpayers will test the limits and interpretation of tax provisions they are faced with. Where taxpayers pursue aggressive tax strategies that are likely to be challenged if identified by the tax administration, there is likely to be an increase in tax uncertainty for both the taxpayer and the tax authority. Taking decisions to implement tax strategies that may carry high risks without seeking to obtain the protection of rulings or advice, where they are available, can also increase the level of tax uncertainty. Such uncertainty can be exacerbated where taxpayers choose to avoid transparency and openness in their dealings with the tax administration.

Tax uncertainty can also arise where a taxpayer does not have a clearly articulated approach towards its overall tax planning strategy or a clearly defined understanding of the levels of tax risk it is willing to accept. In particular, the absence of a clear tax compliance control framework, which is understood and accepted throughout its organisation, can lead to increased tax uncertainty especially as various parts of the business could be pursuing different and possibly conflicting strategies. Large businesses with operations in different subsectors and jurisdictions lament that it is often very challenging to control and manage the tax implications of all the local operations. The complexity of the business inherently brings uncertainty.

F. International aspects of uncertainty

With companies increasingly operating in many different jurisdictions an increasingly broad range of businesses are interacting with different tax systems. This environment not only increases complexity for businesses, but also means that tax authorities are facing an additional level of engagement and co-operation with the tax administrations of other sovereign countries. As far as national tax systems are different from each other and the interactions between them are not managed appropriately, uncertainty could increase for both businesses and tax authorities.

International tax standards aim at reducing this type of uncertainty and are crucial to enhance predictability in the international tax system. Non-adoption of minimum standards, inconsistent international standards or inconsistent interpretation and implementation of such international standards (e.g. the OECD/G20 BEPS Package, international standards relating to tax treaties and transfer pricing guidelines, the OECD International VAT/GST Guidelines) could substantially increase uncertainty in the international tax system, in particular with regard to whether instances of double taxation could arise. The same is true when in international transactions different national tax laws with different features—which by themselves may be perfectly legitimate—interact.

The interaction between tax laws and non-tax laws and agreements can create uncertainty. Where non-tax laws could be applied in ways that may affect the tax liabilities of taxpayers, a lack of clarity over how tax and non-tax laws interact and give rise to uncertainty. In the international context, there could be an additional level of uncertainty, arising from the interaction of tax laws and non-tax international agreements to regulate specific economic and policy areas, such as for example bilateral investment treaties.

NEW EVIDENCE ON TAX UNCERTAINTY

This section presents some new evidence on tax uncertainty in the context of G20 and OECD countries. This comes from two major surveys undertaken by the OECD in order to gain a better understanding of the sources of tax uncertainty, and their perceived implications for investment,[25] and an analysis of the variability and predictability of key aspects of tax policy making in a sample of advanced countries undertaken by the IMF.

A. Summary of Findings

The OECD conducted a business survey on tax certainty in late 2016 … A large number of businesses participated in the exercise: 724 companies headquartered in 62 different countries/jurisdictions submitted a response, with most of the respondents being senior tax specialists within a firm, with expertise in both direct and indirect taxation.

… and, in conjunction with the Forum on Tax Administration (FTA), the OECD also conducted a survey of FTA member tax administrations on tax certainty in January 2017. Tax administrations from 25 of the 47 FTA administrations responded.

The results should be viewed as relating to concerns in more advanced countries, since the surveys were completed almost entirely by business tax experts and tax administrations from G20 and OECD countries.

The key results of these two surveys are:

- **The tax system is reported as an important factor influencing investment and location decisions, but—unsurprisingly—is not the most important factor.**
- **Uncertainty in the CIT and the VAT systems is reported by businesses as having an important influence on the investment and location decisions of businesses.** Issues associated with tax treaties also appear to be an important factor affecting tax certainty, especially for multinationals.
- **According to businesses, issues related to tax administration were ranked as among the major drivers of uncertainty in tax systems,** with the top two, and three out of the top 10, sources of tax uncertainty deriving from issues related to tax administration. In this regard, the main sources included bureaucracy to comply with the tax legislation, although this may to some degree reflect concern over compliance costs rather than uncertainty.
- **Concerns over the inconsistent approaches of different tax authorities towards the application of international tax standards ranked high in the business survey,** in third place amongst the sources of uncertainty identified by businesses.
- **Issues associated with dispute resolution mechanisms, including timescales, were also identified as an important driver of uncertainty.** These accounted for two of the top ten sources of tax uncertainty reported by businesses. In particular, respondents to the

[25] Implications for financial decisions (financing/holding structures, repatriations, tax-planning etc.) are not considered.

business survey highlighted concerns about lengthy decision making of the courts—which may be an aspect of the wider judicial system, and not wholly under the tax authorities' control.

- **Tax administrations identified taxpayer behaviour as an important source of uncertainty,** in particular as a result of aggressive tax planning and a lack of cooperation.
- **Administrations also highlighted complexity in legislation, lengthy court procedures, unclear drafting and frequency of legislative changes.**
- **A key area of agreement in the two surveys is that legislative and tax policy design issues are a major source of tax uncertainty,** mainly through complex and poorly drafted tax legislation and the frequency of legislative changes.

The results of the OECD surveys are instructive. Nonetheless, as with any other exercise of this type, the results need to be interpreted with caution. Being explicitly presented as relating to tax certainty, the surveys in themselves could signal to potential respondents that this is seen by the G20 as important enough to warrant particular study. This may bias the results towards attaching importance to the issue, and those who respond are likely to be those particularly concerned about tax certainty and may not necessarily be those responsible for investment decisions. Moreover, a survey of tax experts may be biased toward finding taxation issues to be particularly important. Nonetheless, responses on the relative importance of various parts of the tax system, and various drivers of and solutions to tax uncertainty are likely to be highly informative.

The IMF has undertaken a narrative analysis of the frequency of CIT changes, and delays between announcement and implementation, in twelve advanced countries. The analysis, which draws on a new IMF database still under construction, uses textual searches[26] of OECD country reports and publications of the International Bureau for Fiscal Documentation to identify rate changes of one percentage point or more and base changes that inspection suggests to be significant. The key findings of this analysis are that there is considerable variation across advanced countries in both the frequency of corporate tax changes and the extent to which changes are pre-announced:

- Most CIT changes, however, are announced at least ninety days in advance of implementation.
- There are no obvious trends in the either the frequency of CIT policy changes or the extent of pre-announcement.

Here too, caution is needed in interpreting results. It is difficult, for instance, to gauge the practical importance of changes affecting the CIT base simply from a description of the rule changes.

B. The business survey

This section describes the main results from the business survey. A detailed account of the survey and results is in Appendix B.

[26] An approach popularized by Romer and Romer (2010).

Background

The design of the survey is based on the Business Survey on Taxation developed by the European Tax Policy Forum (ETPF) and the Oxford University Centre for Business Taxation (OUCBT).[27] During the design phase, the draft survey was circulated using the OECD network of government officials, tax practitioners, civil society[28] and businesses, including the OECD's Business Industry Advisory Committee (BIAC) and amended in response.

The number of participants provided excellent geographic and sectoral coverage of businesses, particularly international business. The survey was open between October and December 2016 and received 724 responses from firms headquartered in 62 different countries (Figure 1) and with regional headquarters in 107 different jurisdictions (Figure 2). Among the respondents, the top five countries of global headquarters are Bulgaria,[29] the United States, Italy, Japan and Germany, in order of number of respondents. The top five countries for regional headquarters are slightly different from those of global headquarters among the survey respondents. Most respondents have regional headquarters in the United States, United Kingdom, Singapore, Germany, the People's Republic of China and Mexico.[30] In the survey, the top five sectors in terms of respondents were Manufacturing (32%), Financial and Insurance Activities (13%), Wholesale and Retail Trade (13%), Professional, Scientific and Technical Activities (8%) and Information and Communication (6%).

[27] Devereux (2016).

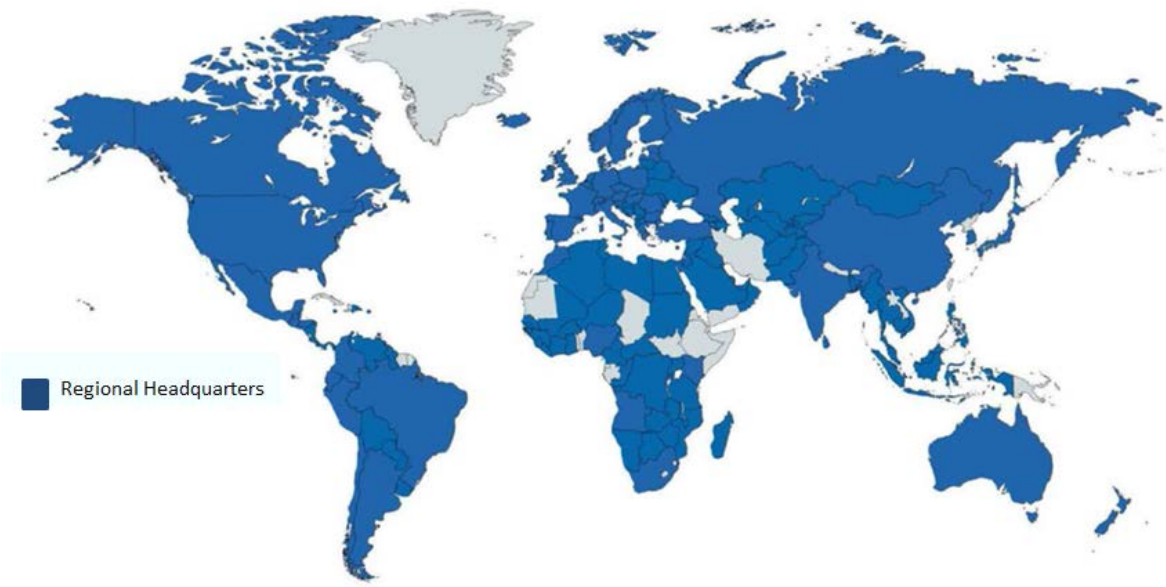
[28] Civil society organisations have been consulted during two phases: the design of the survey and the interpretation of the results. A draft of the survey and the results were circulated using the OECD network and responses were collected by the OECD through a conference call and by email.

[29] Most of the Bulgarian respondents are domestic firms and about 74% of the domestic firms in the survey are Bulgarian businesses. The results for domestic firms will thus be driven by Bulgarian businesses.

[30] The countries here are listed in order of number of respondents.

Figure 1. Countries of the global headquarters of the businesses of survey respondents

Figure 2. Countries of the regional headquarters of the businesses of survey respondents



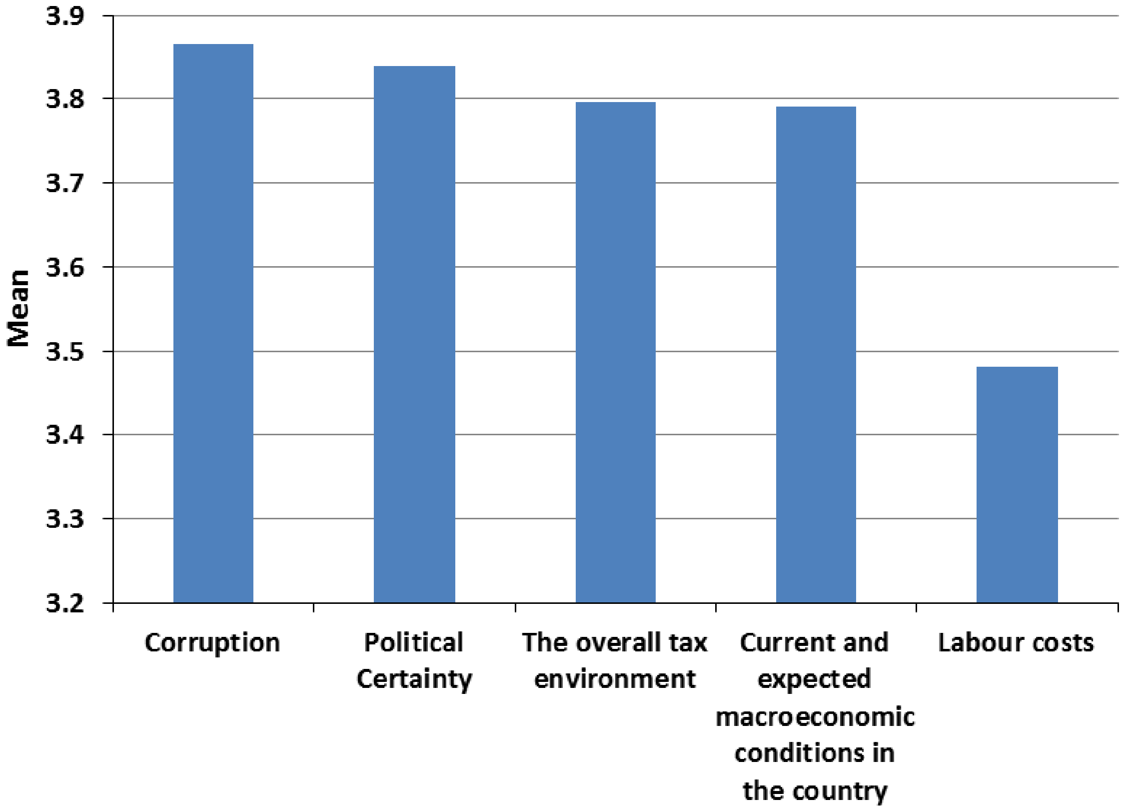
The business survey likely gives extremely good coverage of large multinationals; less so for purely domestic companies. The total turnover reported by the respondents is around USD 17 trillion, which, by way of scaling, is approximately the same amount as the total turnover covered by the Financial Times Global 500—although the respondent sample is not synchronous with that set. This strong coverage largely results from the substantial number of large multinationals in the survey. Slightly more than half of the respondents are classified as multinational companies with around 38% of total respondents operating in more than 10 jurisdictions. Approximately 37% of the respondents are purely domestic companies operating in only one jurisdiction; but of these, 74% are headquartered in Bulgaria. If the domestic Bulgarian responses were excluded, roughly 52 percent of the remaining sample would be companies that operate in more than 10 jurisdictions, and only roughly 67 (13 percent) of the remainder would be purely domestic companies.

The survey targeted individuals with expertise in tax matters and, as a result, tax specialists were responsible for submitting a large proportion of the responses. The aim of the business survey was to gather information on issues affecting domestic and international tax systems. For this reason, it was important that respondents be familiar with the tax system and also, that their expertise be wide enough to encompass the various complexities of today's tax systems. This is why the survey was targeted to senior tax professionals within a firm. As a result, a large proportion of the respondents work in their firm's tax department (40%). Additionally, 68% of the overall respondents specialise in both direct and indirect tax. This may reflect the fact that the survey may have been circulated within the firm so that both direct and indirect tax experts were able to provide their input. The respondents were also senior in their positions. Most were the director (or equivalent) of the tax department (46%) and another 20% were senior managers (or equivalent) of international or specific tax issues.

General factors contributing to uncertainty

Investment and location decisions are driven by many factors of which the tax system is only one—a common finding. According to the respondents, the five most important factors, in order of highest importance, were: (i) corruption; (ii) political certainty; (iii) the overall tax environment; (iv) current and expected macroeconomic conditions in the country; and (v) labour costs (Figure 3). The overall tax environment was ranked as the third most significant factor. This gives noticeably more importance to tax matters than is common in general surveys of factors affecting investment, which is likely because the survey was promoted as a survey on taxation and was targeted at tax specialists.

Figure 3. Top five general factors affecting investment and location decisions*



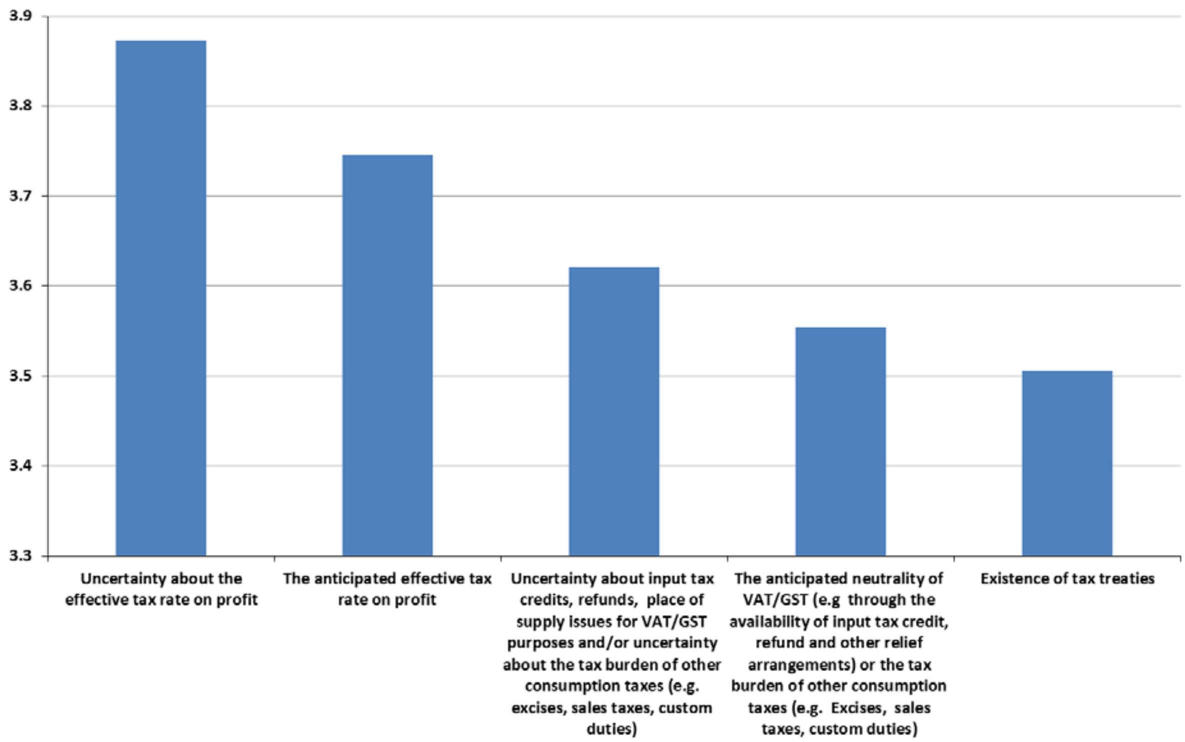
* Note: the respondents were asked to rate each factor on a scale from 1 to 5 where 1 means that the factor is not important for investment and location decisions and 5 means that the factor is extremely important.

Specific tax factors affecting investment and location decisions

Among the tax factors affecting investment and location decisions, issues related to the corporate income tax and the VAT systems appear to be most important. According to businesses, the five most important tax factors affecting business and investment decisions are: (i) uncertainty about the effective tax rate on profit; (ii) the anticipated effective tax rate on profit; (iii) uncertainty about input tax credits, refunds, place of supply issues for VAT/GST purposes and/or uncertainty about the tax payable in respect of other consumption taxes (e.g. excises, sales taxes, customs duties); (iv) uncertainty related to VAT payments (e.g., through the availability of input tax credits, refunds and other relief arrangements) or other consumption taxes; and (v) uncertainty related to the absence of tax treaties. The focus on the corporate income tax and VAT (or other consumption taxes) holds for both multinational and domestic firms, the only caveat being that the absence of tax treaties ranks as the second most important factor for multinationals operating in more than 10 jurisdictions (after uncertainty in the corporate tax system and just before uncertainty in VAT and consumption tax systems).

Uncertainty about each type of tax is generally reported as more important than the level of the tax itself—a result which can only be taken as symptomatic of the importance respondents attach to the issue. With the exception of labour taxes, this is reported to be the case in relation to all taxes (i.e., taxes on profits, VAT and other consumption taxes, withholding taxes and other taxes such as land and resources taxes – see Figure 4 and Appendix B). The same pattern can be observed across different types of firm, whether multinational or domestic companies. The same result is found in the survey undertaken by the ETPF and the OUCBT in early 2016.[31] It is hard to believe, however, that the level of taxation is less influential on investment and location decisions than is uncertainty around the effective level of tax. These reported views are probably best seen as indicative of the importance that the responding tax experts place on uncertainty in tax matters, reinforcing the point made earlier that the survey is more informative about the relative importance of various factors that determine tax uncertainty than of the absolute importance of tax uncertainty.

Figure 4. Top five tax factors affecting investment and location decisions*



* Note: the respondents were asked to rate each factor on a scale from 1 to 5 where 1 means that the factor is not important for investment and location decisions and 5 means that the factor is extremely important.

The main sources of tax uncertainty identified by business

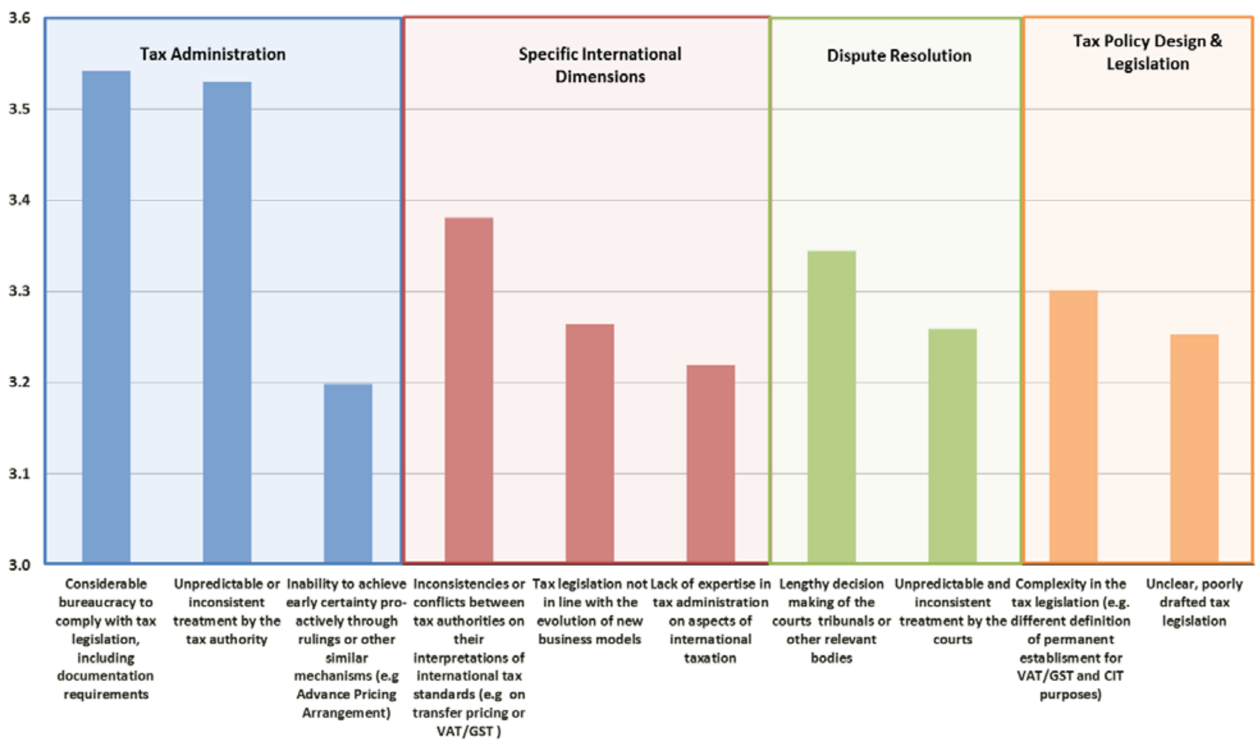
Figure 5 shows the top 10 sources of tax uncertainty across four dimensions: tax policy design, tax administration, dispute resolution, and specific international issues.

- **Issues related to tax administration were among the most important factors creating tax uncertainty for business.** In particular, ''considerable bureaucracy to comply with tax legislation, including documentation requirements" and "unpredictable or inconsistent treatment by the tax authority" were ranked as the two most important sources of tax uncertainty. The "inability to achieve clarity pro-actively through rulings—which also links to dispute resolution—was also among the top ten sources of uncertainty.

[32] Devereux (2016).

- **A number of specific international tax issues were ranked high as factors contributing to tax uncertainty.** In the area of international tax, the top factor identified as creating uncertainty was related to inconsistency or conflicts between two or more tax administrations in the interpretation of international tax standards. Also ranking high were concerns about tax legislation not keeping up with the evolution of new business models and a lack of international tax expertise in tax administrations.
- **Issues associated with dispute resolution mechanisms are also an important driver of uncertainty,** with the lengthy decision making of the courts, and their unpredictable or inconsistent treatment of taxpayers considered the fourth and sixth most important drivers of uncertainty, respectively.
- **Legislative and tax policy design issues also contribute to uncertainty**, mainly through complexity in the tax legislation (e.g. different definition of place of supply for VAT/GST and permanent establishment for corporate income tax purposes) and unclear, poorly drafted legislation.

Figure 5. Top 10 sources of tax uncertainty across four dimensions*



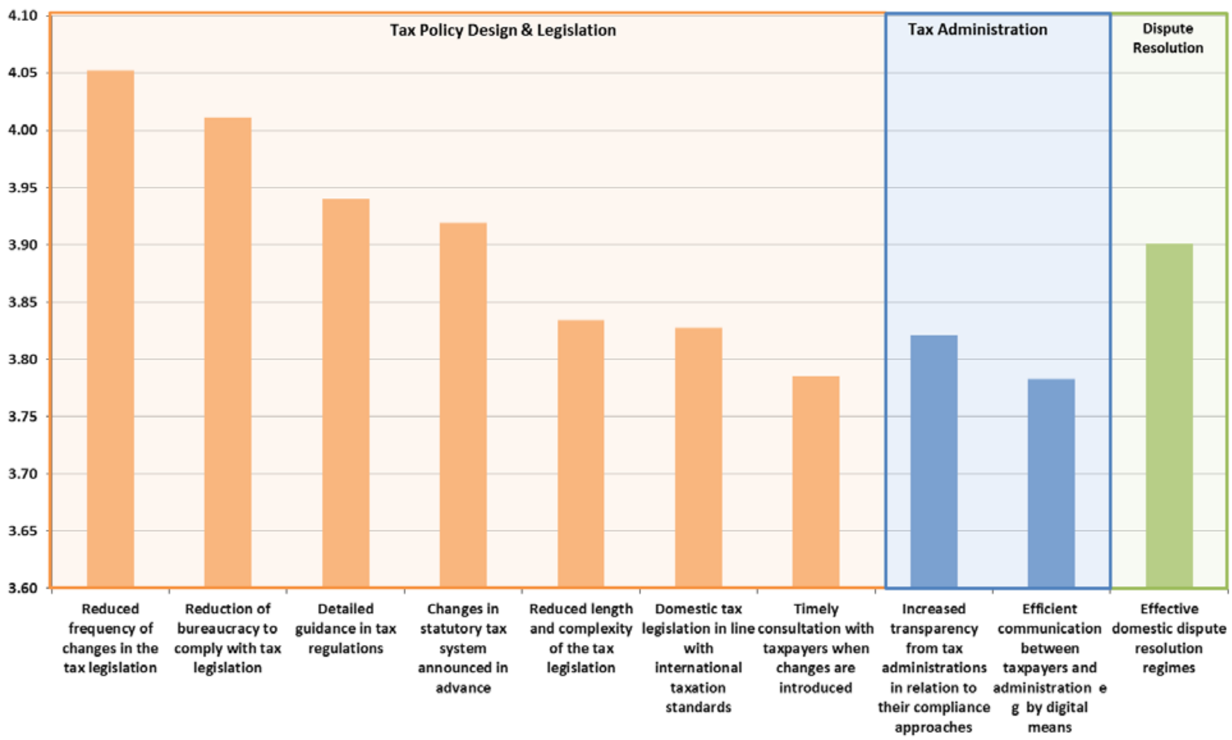
* Note: the respondents were asked to rate each factor on a scale from 1 to 5 where 1 means that the factor is not important for investment and location decisions and 5 means that the factor is extremely important.

Business views on effective tools and options for enhancing tax certainty

The business survey also asked respondents to identify how tax certainty could be enhanced by ranking a list of tools that have been utilised or could be utilised in the future to improve certainty and predictability in the tax system. Figure 6 shows the top 10 tools (more details are included in Appendix B).

- **Factors related to tax policy design and legislation, account for seven of the top 10 potential tools or measures that could improve tax certainty.** According to respondents, the most effective tools or measures that could enhance certainty include: ''Reduced frequency of changes in the tax legislation", "Reduction of bureaucracy to comply with tax legislation", "Detailed guidance in tax regulations'', "Changes in statutory tax system announced in advance", "Reduced length and complexity of the tax legislation" ''Domestic tax legislation in line with international taxation standards'', and "Timely consultation with taxpayers when changes are introduced".
- **A number of tax administration tools were also identified as being particularly useful in addressing tax uncertainty.** In the area of tax administration, "Increased transparency from tax administrations in relation to their compliance approaches" and ''Efficient communication between taxpayers and administration, e.g., by digital means" are among the 10 most important tools for reducing tax uncertainty.
- **Tools relating to dispute resolution were also ranked as important to supporting tax certainty.** Featuring in the top 10 tools was the importance of "Effective domestic dispute resolution regimes".

Figure 6. Top 10 tools for fostering tax certainty



There are other tools, outside of the top 10, which received strong support with close to a majority of respondents rating them as very or extremely important in reducing uncertainty….

- **In the area of tax policy design and legislation**, "Streamlined and effective withholding tax relief reclaim systems" were also considered important, especially for respondents in the financial and insurance sector where 59% of the respondents rated such factor as very or extremely important.

- **In the area of tax administration** "Timely communication of tax authority during tax audits" and "Increased transparency from tax administrations in relation to their risk assessment protocols" were rated very important by close to half of respondents.
- **In the area of dispute resolution**, "Mutual Agreement Procedure (MAP)" was ranked as the second most important tool.
- **The importance of ensuring international consensus on general principles for tax certainty was widely recognised.** Over 50% of respondents rated international consensus on general principles for tax certainty as very important or extremely important. This probably mirrors the fact that inconsistencies or conflicts between tax authorities on their interpretations of international tax standards was ranked as the third most important source of tax uncertainty.

A number of innovative multilateral approaches in the area of international taxation received sound support, even if they have not yet been used widely in practice. This is the case, for example, for "Multilateral APAs in collaboration with other jurisdictions", "Multilateral co-operative compliance programs in collaboration with other jurisdictions" and "Multilateral audits in collaboration with other jurisdictions". These are relatively new and innovative approaches, which are clearly most relevant for multinationals. Given their novelty, it is striking that both multilateral APAs and multilateral co-operative compliance programs were rated as very or extremely important in enhancing tax certainty by more than 30% of all respondents with the same figures for multinationals increasing to 44% and 36%, respectively.

One feature of these survey results is the mismatch between the high number of respondents identifying tax administration related sources of uncertainty and the lower number of respondents identifying specific tax administration tools to increase certainty. This partly reflects that—to keep the length of the survey manageable—when a factor was proposed in the list of sources of tax uncertainty, the measure related to that particular factor was not proposed again in the list of tools for a more predictable tax system separately. Another explanation for this result is that the roots of the uncertainty in tax administration are in the design of the tax law. Thus, while uncertainty is perceived as coming from interaction with the tax administration, the solutions could be primarily found in measures in the tax law. The results from the survey with tax administrators seems to be consistent with this latter view.

C. The tax administration survey

Background

The tax administration survey was conducted through the FTA and completed by 25 tax authorities from predominantly OECD and G20 countries.[32] The FTA was established in 2002 and is a forum that brings together the Tax Commissioners of 47 OECD and non-OECD advanced and emerging tax administrations. More detail regarding the survey results is in Appendix C.

According to the survey respondents, tax certainty was ranked to be of high importance for tax administrations. The first two survey questions asked (i) whether tax certainty is a current priority for the administrations themselves; and (ii) for the views of tax administrations on

[32] The survey was carried out on a confidential basis and for this reason the respondent tax administrations are not specifically identified.

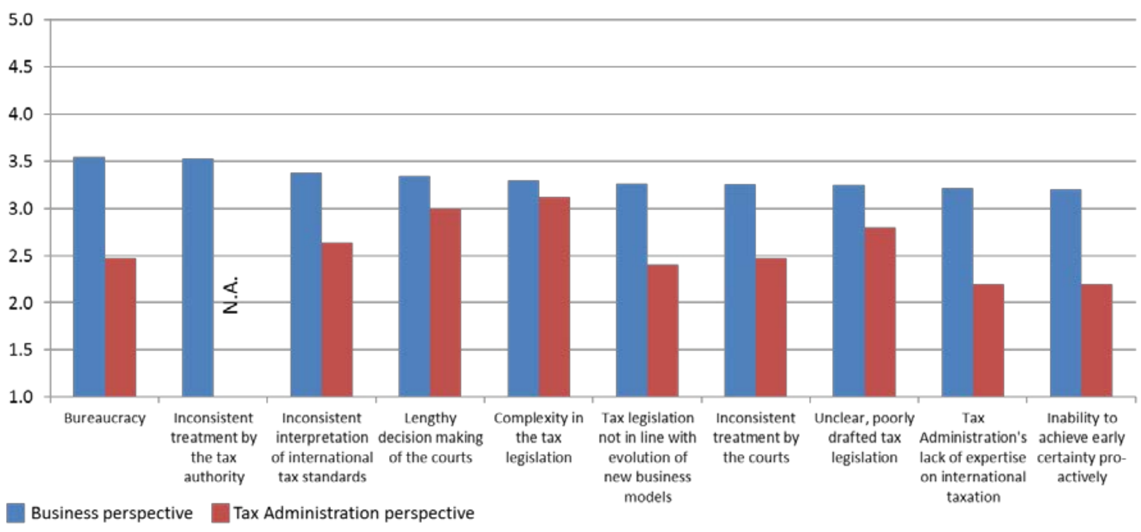
the importance attached to tax certainty by business. The response was strongly positive for both. The mean score was 4.3 out of 5 as regards the priority assigned by tax administrations to tax certainty and 4.5 out of 5 as regards its importance to business. In respect of the 25 respondents, the survey results show that the importance of tax certainty is recognised by tax administrations. When these results are considered in light of the findings of the business survey, it would seem that tax certainty is an important agenda for both tax administrations and respondents to the business survey.

Sources of uncertainty

In general, tax administrations assigned less importance to the various sources of tax uncertainty than was the case for business (Figure 7). The potential sources of uncertainty were categorised under: tax policy design and legislation, tax administration, dispute resolution and specific international dimensions. The leading sources of tax uncertainty seen by tax administrations were in tax policy design and legislation and dispute resolution: complexity in legislation, lengthy court procedures, unclear drafting and frequency of legislative changes. As regards the international dimension, inconsistencies or conflicts between tax authorities on their interpretations of international tax standards (for example on transfer pricing or VAT/GST) ranked highest. This contrasts with the business survey where respondents ranked factors related to the tax administration as those with the highest potential of creating uncertainty in the tax system.

Factors relating to tax administration in general had the lowest scores among tax administrations, and business behaviour ranked highly. Tax administrations did flag the importance of bureaucracy in complying with tax legislation, though it is unclear whether respondents identified this as a factor within the control of the tax administration or a product of complexity in tax legislation. Part of the explanation for the lower scoring of factors connected to tax administration may well be that business behaviour was also identified as a significant source of uncertainty by tax administrations. The behaviours most frequently mentioned were aggressive tax planning and non-cooperation, including lack of transparency and delay.

Figure 7. Top 10 sources of tax uncertainty for both businesses and tax administrations*



* Respondents to the survey were proposed the following question: "'*The following factors (legal systems, tax administration, dispute resolution, and specific international dimensions) have been identified as increasing the overall uncertainty on tax issues. Please identify from your tax administration's perspective the extent to which you believe each of these factors contributes to tax uncertainty for business*

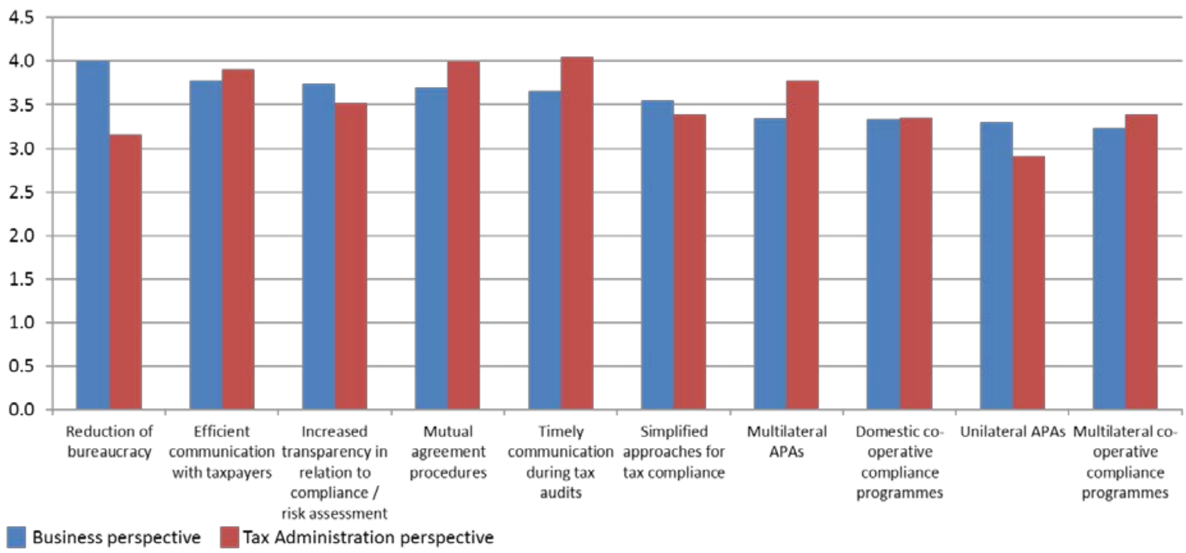
taxpayers in your country's tax system, regardless of whether or not the factors are within the control of the tax administration to influence." The factors proposed to the tax administrations are the same as those proposed in the business survey.

Views on tools for enhancing tax certainty

The top ten tools to improve tax certainty identified by tax administrations closely matched those identified by businesses. In terms of both the ranking and individual scores, there was a strong similarity between the views of tax administrations and businesses. The largest difference is in respect of the bureaucracy involved in complying with tax legislation: business reports that the ability of this specific factor to enhance tax certainty is much higher than that reported by tax administrations. As noted above this may have been interpreted by tax administrations at least in part as a legislative issue and thus out of their direct control.

Timely communication by the tax authority during tax audits was the tool that received the highest score from tax administrations. This is also likely to reflect the importance of enhanced communication by business as well. This is unsurprising given that tax audits are in themselves events which may generate significant and sometimes prolonged uncertainty. Communication in relation to compliance approaches and risk assessment also scored highly by tax administrations. Both are sources of information which may enable taxpayers to adjust behaviour in ways which can increase certainty as to expected outcomes and treatment. More generally, and in line with current trends in tax administration, more efficient communication with taxpayers, including through use of e-services and digital communication, was seen as important in providing greater certainty.

Figure 8. Top 10 tools for fostering tax certainty for businesses and tax administrations*



* The respondents were asked the following question: "*The following tools have been identified as potential solutions to enhancing certainty in the tax system in regard to legal systems, tax administration, dispute resolution, and specific international dimensions. Please identify from your perspective the extent to which you think each tool could enhance tax certainty in your country's tax system, regardless of whether or not the tools are within the control of the tax administration.*" The tools for enhanced tax certainty are the same as those proposed in the business survey.

The survey highlighted the importance respondents attach to mechanisms for avoiding or minimising the probability of disputes as well as ensuring effective dispute resolution

procedures. The scores given to communication with taxpayers, transparency and cooperative compliance, as well as to effective dispute regimes, demonstrate that tax administrations acknowledge the importance, in both the domestic and international context, of attempting to avoid or resolve disputes at the earliest stage possible. In the international context, mutual agreement procedures (MAP) scored highly as did the use of mandatory binding arbitration. Tools that were identified as having the biggest potential impact in avoiding disputes were multilateral advanced pricing agreements (and to a lesser extent unilateral APAs and other ruling regimes); domestic and multilateral cooperative compliance programs; and simplified approaches for tax compliance (for example safe harbour provisions).

There was strong agreement between businesses and tax administrations on the most effective tools to help reduce tax uncertainty. Both assigned high importance to addressing perceived weaknesses in tax policy design and legislation. The highest scores were given to detailed guidance in tax regulations; announcement of changes to tax legislation in advance; reduced frequency of changes to tax legislation; bringing domestic tax legislation into line with international tax standards; and effective withholding tax relief and reclaim systems. In many countries such legislative issues, including guidance within tax regulations, will be the responsibility of Ministries of Finance rather than tax administrations. This is reflected in the relatively low score given by tax administrations regarding their ability to reduce tax uncertainty on those items. Figure 8 above shows the scores given by tax administrations to the top ten tools identified by business when only those factors more in the control of tax administrations are included.

D. Narrative analysis of CIT changes

Dimensions of tax uncertainty: Some empirical evidence

This subsection explores the experience of twelve advanced countries[33] **along two dimensions affecting tax certainty in the CIT system**: the frequency of policy changes, and lags in implementation. As noted earlier, the underlying dataset identifies both rate changes of one percentage point or more and base changes that inspection suggests to be significant.34 For the twelve countries that the dataset now covers 201 identified CIT rate and base changes between 1983 and 2014. (Appendix C provides summary statistics for these changes).

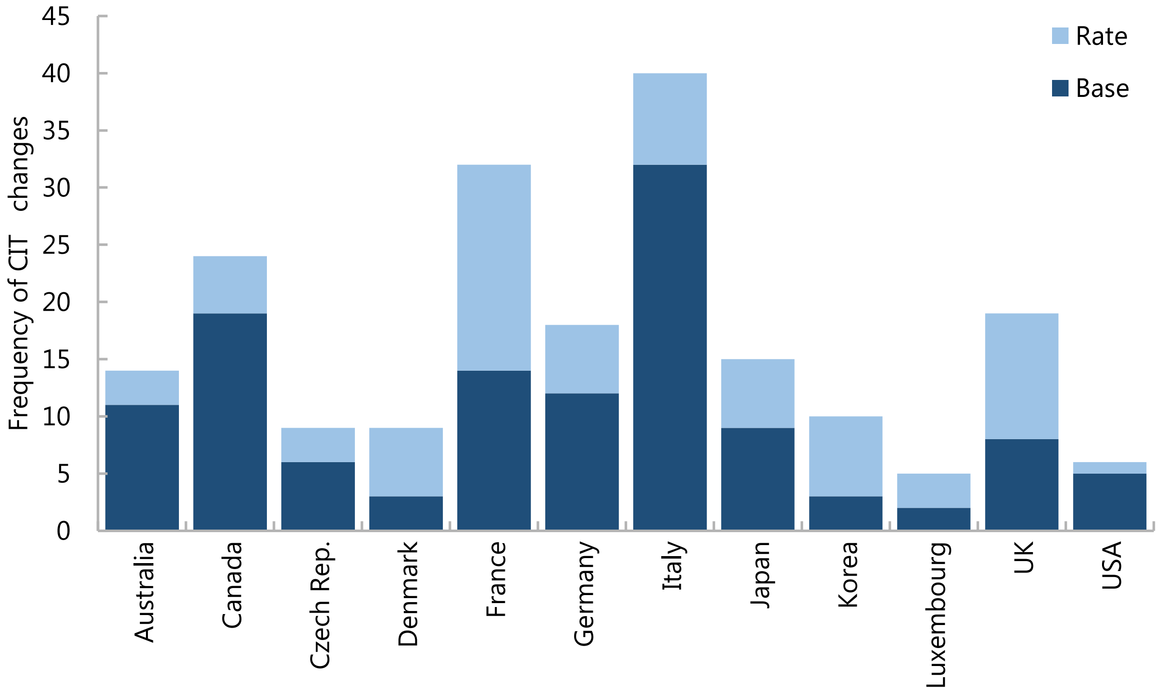
Frequency of changes

The frequency of changes in CIT policy varies widely across countries (Figure 9). On average, there are 17 significant policy changes per country over the sample period: a little more than one every eighteen months. There is, however, significant variation in this frequency. It is greatest in France and Italy (with 40 and 32 changes respectively) and least in Denmark and Korea (9 and 10 changes). In most countries, significant base changes have been noticeably more common than rate changes.

[33] These are: Australia, Canada, Czech Republic, Denmark, France, Germany, Italy, Japan, Korea, Luxembourg, the United Kingdom, and the United States.

[34] These relate mainly to changes in capital allowances.

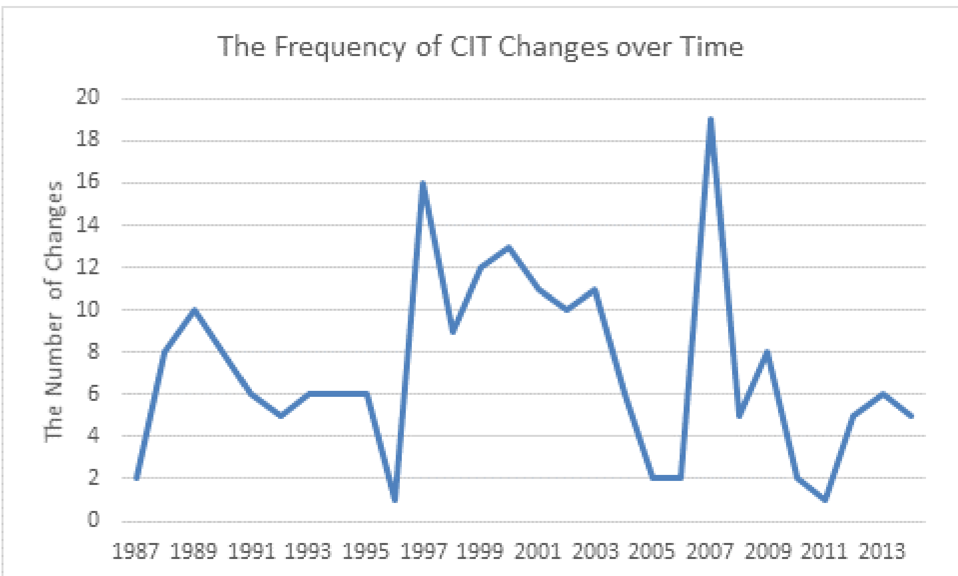
Figure 9. Frequency of CIT Changes by Country



Source: Data constructed by IMF staff.

After spiking during the financial crisis, CIT changes have been relatively infrequent over the last few years (Figure 10). Less apparent than any trend in the frequency of changes is an appearance of waves of reform.

Figure 10. Frequency of CIT Changes Over Time



Source: Data constructed by IMF staff.

Implementation periods

The longer the interval between announcement and implementation of some policy change—the 'implementation period'—the greater the ease with taxpayers can adjust to them. This does not mean, of course, that longer implementation periods are always to be preferred: in some cases, government may wish to use the expectation of future changes to influence current behavior (pre-announcing reduced generosity of depreciation allowances, for instance, in order to bring forward investment). In others, they may wish to limit avoidance opportunities by giving immediate effect to policy changes. Among the many factors to balance, however, is that longer implementation periods—and the expectation that lengthy implementation periods will be provided—increases taxpayers' certainty.

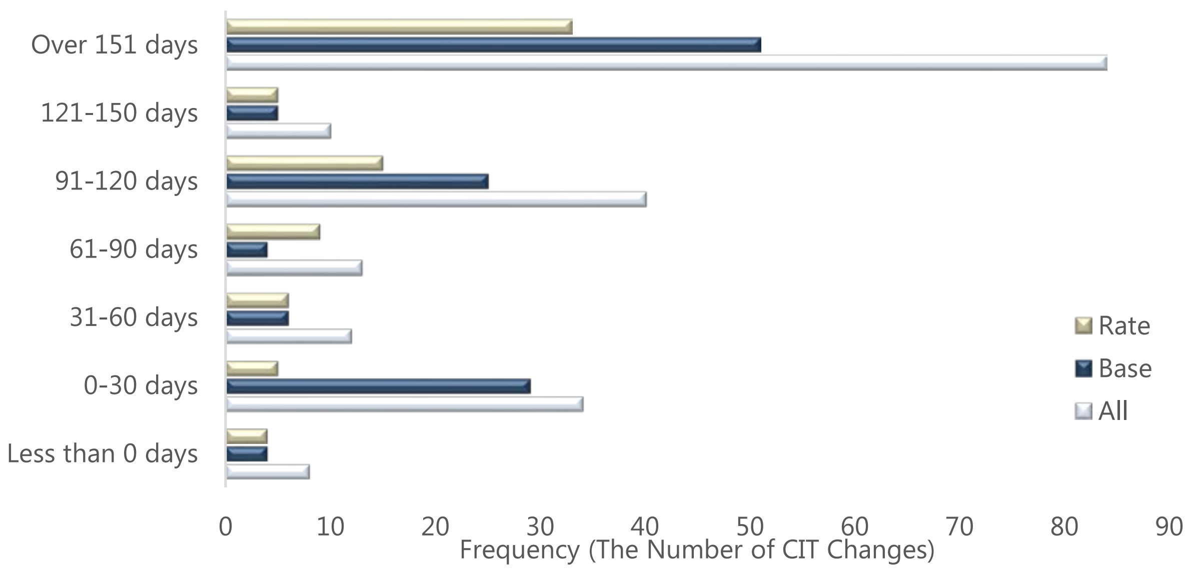
In the countries examined, implementation periods were typically quite lengthy… For the CIT changes examined:

- **Most were implemented at least 150 days after announcement** (Figure 11)
- ***About two thirds can reasonably be thought of as fully anticipated by taxpayers*¸** in terms of the common practice in the wider literature of regarding policy changes as 'anticipated' if the implementation period is more than 90 days[35] (Figure 12)

There seems little difference in implementation periods between rate and base changes, or in the extent to which revenue-increasing and revenue-reducing policy changes are anticipated.

…but a significant minority are implemented with very little delay. Around 42 of all changes identified—twenty percent of the total—took effect in 30 days or less.

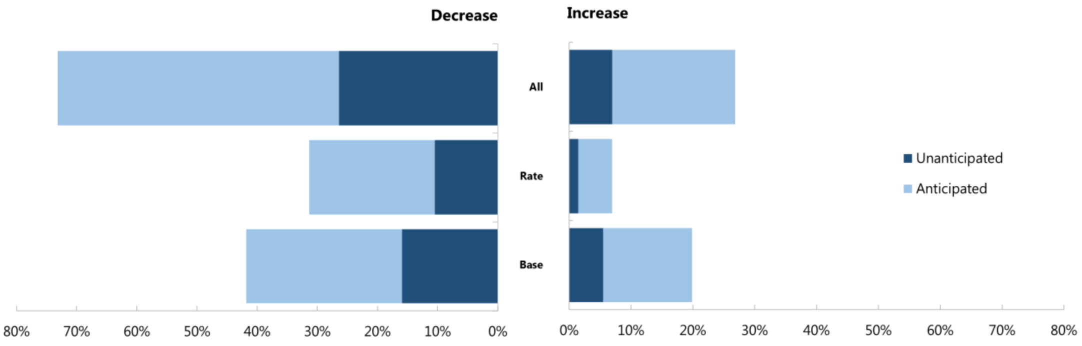
Figure 11. The Distribution of Implementation Periods



Source: Data constructed by IMF staff.

[35] E.g., Mertens and Ravn (2012).

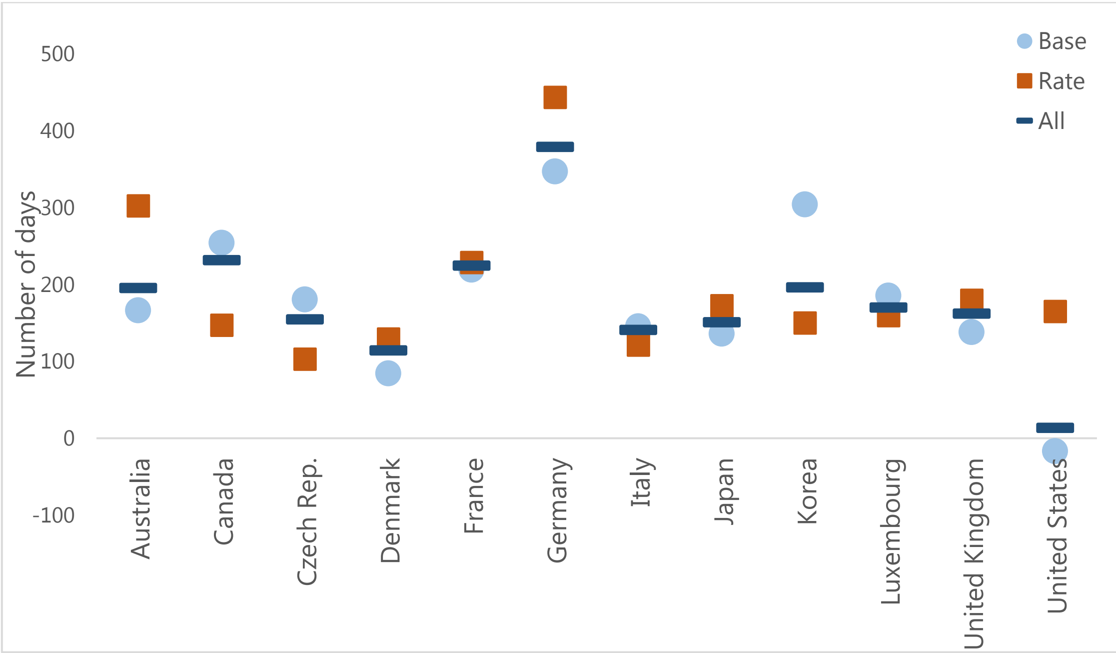
Figure 12: 'Anticipated and 'Unanticipated' Changes in Corporate Taxation



Source: Data constructed by IMF staff.

There is systematic and wide cross-country variation in the length of implementation periods. (Figure 13). It is highest in Germany (379 days), followed by Canada and France (232 and 225 days, respectively). Within each country, implementation periods are similar for rate and base changes. The United States stands out as an exception with relatively few measures and a very short implementation period; these changes mainly related to depreciation provisions.

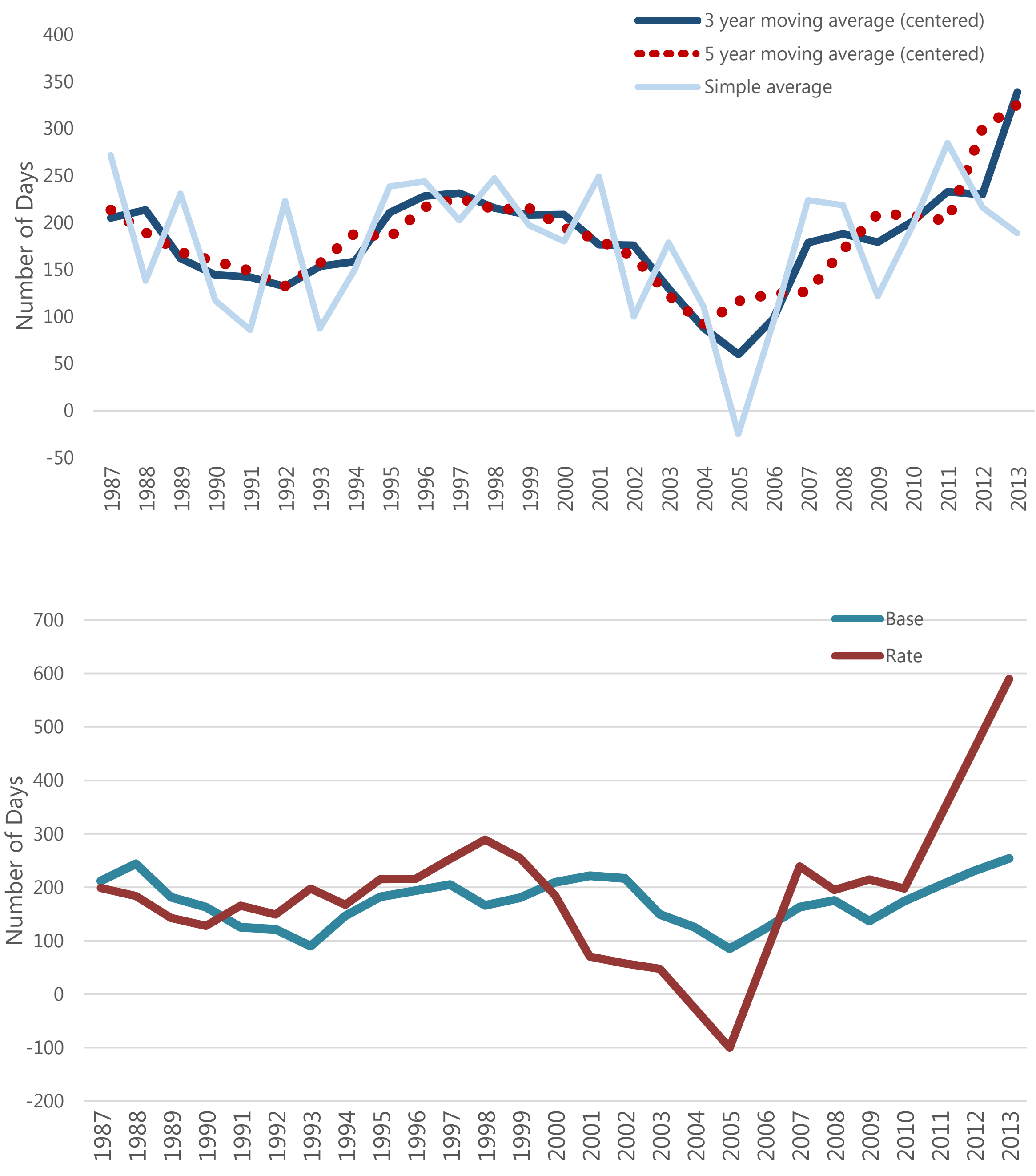
Figure 13. Average Implementation Period by Country



Source: Data constructed by IMF staff.

Implementation periods have increased in recent years—pointing to greater tax certainty—though there is no marked long-term trend. Figure 14 shows the average number of days it took to implement measures announced in any particular year. It shows, for instance, that, on average, the implementation of measures announced in 1997 was 184 days. There has been a marked increase in implementation periods over the last decade or so, but this essentially marks a recovery from a previous trough around 2005 (upper panel). There has, however, been noticeably greater variation in the implementation period for rate changes than for base changes. (lower panel).

Figure 14. Average Implementation Periods Over Time



Source: Data constructed by IMF staff.

Retroactivity

Eight changes—about 3 percent of the total—had a negative implementation period (i.e. less than 0 days). A closer look shows that four of these were rate cuts announced after the beginning of, but applied in full to, the fiscal year, while the others were base changes also announced for implementation in the same fiscal year. All, noticeably, were favourable to the taxpayer. Nonetheless, such cases do mean that business decisions had to be taken without certainty as to the tax consequence within the same fiscal year.[36]

[36] The sample contains no announced changes that were not implemented.

PRACTICAL TOOLS FOR ENHANCING TAX CERTAINTY IN G20 AND OECD COUNTRIES

With G20 and OECD countries in mind, this section considers practical tools having the potential to increase predictability in tax matters and presents concrete measures that could be implemented to enhance tax certainty. In doing so, it draws on the new evidence presented above, as well as on the wider literature.

The focus is on areas in which governments have the initiative. The behaviour of taxpayers in terms of aggressive tax planning and taking risky positions can also play a critical role in reducing tax uncertainties—but this is not addressed here.

A. Tax policy design and legislation

Tax policy design represents the earliest stage at which uncertainty can be tackled. There are a number of concrete measures that governments can take to improve the design, reduce the complexity and increase the clarity of tax policy and legislation.

A well-developed tax law design, legislation and monitoring framework

A well-developed tax law design, making and monitoring process is necessary for a reasonable degree of tax certainty. Such a system has the following features:

- Within the executive, the ministry of finance has the final responsibility for tax and related legal policy matters, and all tax provisions are gathered in tax laws;
- So far as is practicable, the ministry of finance consults on tax law changes at the initial design stage, prior to any announcement of the change, or as soon as practicably possible thereafter, if pre-announcement consultation conflicts with other tax policy objectives which may require that the change be swiftly implemented or announced without prior consultation (as discussed above);
- Substantive tax changes are developed under a tri-partite tax law design model, comprising the finance ministry (as lead body), the tax authority and non-government stakeholders such as the private sector and civil society organisations. Some external expert engagement could be considered to ensure that the tax law design is better informed by practical knowledge of the law, industry structures and commercial practices;
- There is a public consultation process in relation to the draft legislation (so far as is consistent with other tax policy objectives);
- The tax laws are subject to debate, review and/or approval of a representative legislative body before taking effect; and
- Substantive new tax laws are subject to early monitoring of their implementation so as to ensure that the legislation is operating as intended. This is often critical for identifying

legislative refinements that are needed and ensuring that appropriate administrative guidance is provided.

Addressing complexity in tax policy design and legislation

A variety of administrative techniques and institutions can help reduce the uncertainty for taxpayers that some unavoidable complexity of tax rules can create. These include consultation processes of the kind described above, which, with the mediation of civil servants, can help feed experts' advice into the legislative process to better integrate expertise into the policy-making process, facilitating communication with taxpayers and reducing complexity and uncertainty in their interaction with the tax system.[37] So too can cooperative compliance programs (discussed further below in the section on tax administration), though these may not be suitable for all tax administrations.

Additionally, in a complex tax system, a statute of limitations can be a useful tool to limit effects of complexity and uncertainty. Best practice is for the legal framework to set out the period after which the tax authority cannot issue or vary a tax assessment. However, the limitation periods need to be appropriately designed (it should not apply, for example, in cases of fraud or evasion) and should not be so short as to inhibit the review and audit activity of the tax authority.

A principles-based approach to drafting can help strike an appropriate balance in the inherent trade-off between certainty and simplicity. A desire for greater certainty can—if not properly managed—lead to more detailed and complex laws that are ultimately less simple to apply and comply with. A desire for simplicity may lead to laws that are incomplete or vague, which would ultimately make the law harder to comply with and administer, and increase uncertainty. A principles-based approach to tax law drafting avoids overly detailed rules which can make the tax law complex and difficult to understand, and also improves the resilience of the tax law in the face of changing business structures and practices. This approach requires the preliminary clause of any provision to set out its overarching principle, with deviations from that principle then explained in more specific provisions that follow. This approach—consisting of a statement of general principle followed by the more detailed inclusion and exclusion rules—promotes consistency and readability, thus increasing transparency and certainty in the application and administration of the law. Further detailed provisions in support of the core legal provisions should then be left to subsidiary legislation (such as regulations) or taxpayer guidelines, as appropriate. Care is also needed that discretionary powers are not inappropriately expanded by including key rules in regulations rather than the law itself.

To reduce complexity created by tax policy—and the distortionary effects of the tax system—care should be exercised in the use of various tax incentives and reliefs, especially for corporate income tax purposes.[38] A well-functioning and inclusive tax system does not need special incentives to attract investment and stimulate growth. Importantly, special tax treatment of particular sectors or activities—such as tax-free zones, or regional incentives—also create

[37] Freedman (2015).

[38] IMF, OECD, United Nations and World Bank (2015) argue this in relation to low income countries, but the point is more general.

opportunities for tax minimization, which then require anti-avoidance legislation. These difficulties have to be weighed against the advantages offered by special treatments, which have often been found to be very limited. Indeed, the OECD business survey highlighted once more that the presence of specific tax incentives was rated by respondents as one of the least important tax factors affecting investment and location decisions.

Improved clarity through better drafting of tax laws

Unclear, vague or poorly drafted legislative provisions will lead to tax uncertainty. Having a methodical and consultative tax design process can help to improve the clarity of tax laws.

A proper legislative drafting and review process should ensure that the following general principles of tax law design and drafting are achieved:

Understandability: ensuring that the tax law is easy to read and follow;

- ***Organization***: achieving good internal organization of the tax law, with tax provisions consolidated in the tax law, while also being well coordinated with other laws;
- ***Effectiveness***: ensuring that the legislative provisions give effective expression to the policy objective of the tax law; and
- ***Integration***: achieving consistency with the legal system and drafting style of the jurisdiction concerned.

Transparency of tax legislation can be enhanced by properly structuring substantive provisions and separating them from procedural rules. Substantive tax rules should be structured so that the general rules are set out first, given that these rules are likely to be relevant to all taxpayers. Rules relating to specific types of taxpayers (for instance, collective investment vehicles, partnerships etc.), specific sectors (for instance, extractive industries), and specific transactions (for instance, international transactions) should be grouped and appear after the general provisions. This makes the law more user-friendly than if these rules are mixed in with the general or unrelated rules. Further, separating the procedural rules from the substantive provisions allows the tax authority's administrative powers to be easily identified; it also allows taxpayers to easily and quickly find the rules governing procedures and relevant taxpayer protections; and facilitates greater harmonization of the administrative provisions across different taxes.

Anti-Avoidance Rules

Even the best designed and drafted tax laws are not capable of anticipating every new product, service or business model and every taxpayer transaction and structure, particularly those of an aggressive nature or those that are otherwise undertaken for tax avoidance purposes. Therefore, various tax integrity or anti-avoidance rules can be implemented in order to protect the integrity of the tax system. However, the successful application of such rules ultimately depends on: (i) the design and drafting of the particular anti-avoidance rule, which is often less rules-based and therefore more discretionary in its application; and (ii) the capacity of the tax authority to appropriately apply such an anti-avoidance rule in a measured, even-handed and predictable way. Both aspects are critical to achieving greater tax certainty.

Care must be exercised in the design and drafting of anti-avoidance rules. Anti-avoidance provisions can take different forms and their effect on tax certainty needs to be considered carefully. One specific legal instrument often considered with a view to combatting unacceptable tax avoidance practices is a statutory general anti-avoidance (or anti-abuse) rule (GAAR). A GAAR is a provision of last resort capable of being invoked by a tax authority to strike down unacceptable tax avoidance practices that would otherwise comply with the terms and statutory interpretation of the law. A GAAR is typically designed to strike down those otherwise lawful practices that are found to be carried out in a manner which undermines the intention of the tax law, such as where a taxpayer has misused or abused that law. Unacceptable tax avoidance practices may also be dealt with through other legal instruments or doctrines, such as a specific legal provision of targeted application in domestic law (for instance, a specific anti-avoidance rule or SAAR), equivalent provisions to that of a GAAR or SAAR in tax treaties, or through judicial anti-abuse doctrines.

The choice of anti-avoidance provision can have an impact on tax certainty. Choosing an inappropriate anti-avoidance instrument can increase tax uncertainty. For instance, a GAAR is generally perceived as potentially increasing tax uncertainty as such provisions are necessarily less rules-based and more discretionary in their application. However, a GAAR can be effective in reducing aggressive tax planning as its mere existence may change taxpayer behaviour (for instance, by taxpayers adopting more conservative tax positions). In contrast, a SAAR is relatively less likely to cause tax uncertainty, because its scope and the circumstances in which it applies are by definition more constrained. However, a SAAR can in certain circumstances also lead to more aggressive tax planning, in particular where it incentivizes taxpayers to adopt bespoke structures to circumvent the specific application of the SAAR. To illustrate the legal policy choice, when seeking to combat the inherent debt bias in a tax system, a GAAR should not operate to impede a taxpayer's legitimate financing choice between debt (where returns are ordinarily tax deductible) and equity (where returns are typically non-deductible) where the nature of the financing instrument chosen also has relevant key (non-tax) legal, commercial and accounting benefits and consequences.[39] A specific integrity provision or SAAR would ordinarily be the most appropriate tool for giving effect to a policy that seeks to limit tax deductibility, such as interest deduction limitation rules (as for example in BEPS Action 4). However, a GAAR could still have residual application to strike down a blatant, artificial or contrived arrangement that was designed to overcome the specific application of the SAAR.

The frequency of changes in the tax legislation should be kept to a minimum and there should be timely communication of tax changes. Subject to the other economic and social objectives of government, certainty is enhanced if the frequency of changes be kept to a minimum. Where changes are necessary, inappropriate retroactivity should be avoided. (Retroactivity arises, recall, when changes to the tax legislation are applied to past tax years, as opposed to future tax years). Generally, unless there are strong reasons to do otherwise—and as seen above on occasions there can be—changes in the tax legislation should be implemented prospectively. For example, a legislative change giving effect to a change in tax rates should apply in respect of the next tax period. In addition, it is important that changes in the tax law be communicated to taxpayers in a timely fashion, allowing them the necessary time to adjust their

[39] Of course, policymakers need to consider whether a differential tax treatment of debt and equity is desirable.

commercial, record keeping and accounting processes in order to comply with the law. The narrative analysis reported in the previous section shows that, at least among the sample of countries examined, both the frequency of changes in corporate income taxation and the lag with which they are implemented varies quite widely across countries. While a clear majority were adopted with a delay of at least 90 days, the fact that about one third were not suggests scope for some improvement in this dimension of tax certainty. (There were also a few instances in which tax changes were announced in the course of the fiscal year in which they took effect). Consultation with external stakeholders, as suggested above, will help assist legislators in determining the appropriate timing for changes to take effect.

B. Tax Administration: Avoiding and Resolving Disputes

The sources of tax uncertainty arising from tax administration and the tools for reducing such uncertainty can be broadly split into two categories. The first category concerns the avoidance of disputes through a more transparent relationship between businesses and the tax administration together with mechanisms to provide greater clarity around the application of tax law. The second category provides that where disputes do arise, effective and timely dispute resolution mechanisms need to be put in place. Both categories have a domestic and international dimension.

This report places most focus on the international dimensions relating to tax dispute management and resolution. However, many of the approaches that support greater tax certainty in an international context are also relevant in the domestic context, and the discussion begins with that.

Effective domestic dispute resolution regimes

Effective domestic dispute resolution regimes are essential to enhance tax certainty for both taxpayers and tax authorities. In the absence of an effective mechanism for settling disputes, taxpayers' trust in the fairness of the tax system will be eroded, jeopardizing the foundation of a modern tax system based on self-assessment. The tax authority, for its part, must have the confidence that when disputes with taxpayers arise, a mechanism is in place to settle such disputes effectively so that it can move forward with its core task of administering the tax system. An effective dispute resolution mechanism is also essential for ensuring the integrity of the tax system itself, as it can provide an important feedback loop to tax policy makers and tax administrators as to the resilience of the tax system and its ongoing ability to meet its objectives.

Tools should be put in place to reduce the likelihood of disputes arising in the first place… Many of the tools for improving tax certainty elaborated on elsewhere in this report will also reduce the opportunity for tax disputes to arise in the first place. In that sense, these tools can also be seen as effective ways for dealing with tax disputes. This is the case, in particular, for detailed guidance provided to taxpayers through regulations and rulings, whether of general or individual application (public/private rulings, APAs, etc.), and high-quality audit and enforcement activities.

Timely issuance of rulings and technical interpretations will help clarify administration of the tax law, and improve taxpayers' understanding of the legislation and its requirements. Proactive taxpayer engagement and education programs help ensure that taxpayers have a clear understanding of their obligations, so reducing the potential for disputes. Effective tax audit programs not only serve as a deterrent mechanism but are a useful tool for taxpayer education and dispute prevention. Strong communication during audit is therefore critical, with good training and appropriate remuneration structures being critical to this. Proper documentation of the large number of agreements commonly reached during audit is also critical. A generally cooperative attitude of both the tax administration and taxpayer can avoid conflict and uncertainty or speedily resolve them. In this regard, the large majority of respondents to the tax administration survey reported that they regularly provide transparency in relation to their various compliance approaches. Of the few who do not yet do so, most reported that they had plans to introduce this practice. In regards to transparency in relation to risk assessment protocols, over half of responding tax administrations do this as a matter of routine. Most of those who do not yet do so are now planning to introduce this practice. Most tax administrations also recognised that the benefits of further actions to improve tax certainty outweighed their cost (including other possible disadvantages). And on the policy side, tax legislation that is of better quality, more stable over time and easier to comply with, can all be expected to reduce the opportunities for tax disputes to arise.

...but nonetheless, some level of tax disputes cannot—and should not—be avoided. It is not possible to determine an appropriate volume of tax disputes that a given tax system 'should' generate, though indicators such as the time needed to resolve disputes, an increased backlog of cases or a high volume of outstanding tax arears typically point to inefficiencies in settling tax disputes. Nor, for the reasons discussed above, is the existence of disputes necessarily a sign of failure. Indeed, the complete absence of tax disputes is more likely to be an indication of systemic problems than of an extremely efficient tax system.

The dispute resolution mechanism should be fair, independent from audit activities, accessible to taxpayers and effective in resolving disputes in a timely manner.[40] This requires a process that safeguards a taxpayer's right to challenge an assessment resulting from an audit and to get a fair hearing. The process should be based on a legal framework that is known and understood by taxpayers, is easily accessible, guarantees transparent independent decision-making, and resolves disputes in a timely manner. More specifically, taxpayers should be entitled to dispute all three elements of a tax assessment: (i) the accuracy of the facts relied upon by the auditor; (ii) the correctness of the interpretation and application of the tax law; and (iii) the amount of any penalties imposed by the tax administration.

This requires an independent, workable and graduated dispute resolution process comprising an administrative and a judicial stage. The *administrative review* phase—typically compulsory before a dispute can move to the judicial phase[41]—should consist of an independent review by the tax administration, undertaken by designated review officers who are functionally independent of the audit department. This gives the tax administration the opportunity to reconsider its own decisions, and avoids all disputes, including those regarding minor issues, being subjected to often more expensive and lengthy court proceedings. For similar reasons, there may be a strong case for alternative dispute resolution (ADR) mechanisms through which

40 Gordon (1996), at p. 105. The remainder of this paragraph draws on TADAT (2015), at p. 58.

41 The administrative review phase was reported to be compulsory in over three-quarters of the countries surveyed by OECD FTA (2015), p. 313.

parties attempt to resolve disputes other than through litigation, such as using mediation, conciliation and arbitration. However, ADR is not appropriate in all cases (e.g. ADR should not be used as a convenient way of reaching a settlement outcome that is fundamentally inconsistent with the policy intent of the tax law). Where the taxpayer is dissatisfied with the outcome of the administrative review decision (or the dispute is unable to be settled through ADR, where that route has been followed), they should be able to proceed with the *judicial review stage*. This stage is itself typically two-tiered, with a first review by an independent tribunal,[42] and a second review—often limited to questions of law only—by an appellate court.

Other key design features of an effective domestic dispute resolution mechanism include clear rules with respect to:

- *Reasonable timelines* for taxpayers to file an objection or appeal, and for the reviewing authority or tribunal to take a decision.[43];
- *Burden of proof*, which in relation to an objection or appeal against a tax assessment typically lies with the taxpayer, while the burden of proof may be on the tax administration for demonstrating that any penalties it imposed were appropriate;
- *Whether and to what extent the obligation to pay tax is stayed pending review or appeal*, so as to strike an appropriate balance between the rights of the taxpayer and the country's financial interests. Countries' approaches to the collection of disputed amounts of tax differ. It is important to design a domestic dispute resolution system that does not incentivize taxpayers to initiate frivolous review or appeals, but which also preserves the practical opportunity for taxpayers to assert their review or appeal rights. A common balance is to collect (or seek security for) payment of some percentage (for example, 50 percent) of the disputed tax liability in relation to both the administrative and judicial appeal process (while requiring full payment of a non-disputed tax liability and charging interest on the outstanding disputed amount). Most countries have mechanisms that allow them to collect (or seek security for) some or all of the disputed amount of tax, in particular when the dispute moves to judicial review; see also the survey results reported by OECD FTA (2015), p. 313.

The Tax Administration Diagnostic Tool (TADAT) provides a framework for assessing domestic tax dispute resolution regimes, as part of a wider appraisal of a country's system of tax administration. [44]These regimes are the subject of one of TADAT's nine 'performance outcome areas,' with trained assessors gauging several specific aspects relative to international good practice. TADAT thus provides a standardized and objective framework for assessing the performance of tax administrations (at all levels of development) in this area.[45]

[42] While many countries have specialized tax courts, this is not a general practice. Special tax courts were reported in just over half of the countries surveyed by OECD FTA (2015), p. 313.

[43] This would include rules on the consequences of not meeting those timelines (a condition that is all too often not met, with unresolved cases dragging on for years).

[44] General information on TADAT is at www.tadat.org

[45] To date, 32 counties have received a TADAT assessment, almost all of them developing. Most received a good score for the overall design of their dispute resolution mechanism, but most countries also received a low score for settling disputes in a timely fashion—although in many instances the low score resulted from a lack

Tax administration and programs for resolving international tax disputes

A key element of increasing certainty in international tax matters is the development of a comprehensive suite of dispute resolution programs. Several mechanisms are available to both jurisdictions and taxpayers to minimize the risk of tax uncertainty, ranging from pre-filing interventions, to co-ordination at the audit stage, to resolution through the mutual agreement procedure (MAP) and eventually arbitration. There are clear benefits to resolving international issues at the earliest stage, when all relevant information is readily available and positions have not yet become entrenched. Complementing MAP and arbitration procedures with early dispute resolution programs also means reducing the MAP "pipeline" and having the MAP program focused on cases that fail to get resolved through other means.

Employing a suite of coordinated dispute resolution programs designed for different stages of the process helps minimize instances of tax uncertainty as they mutually support and strengthen one another, with front loaded interventions helping to minimize and focus the MAP pipeline while more back-end programs, such as MAP and arbitration, also positively impacting stakeholders' behaviour in the earlier stages. Such a comprehensive approach should in turn foster a more cooperative international economic environment more conducive to growth, providing a pathway to greater international tax certainty for lower risk companies operating internationally and helping tax administrations better apply resources to compliance risks.

Cooperative Compliance Programs

Cooperative compliance programs are a compliance approach designed to provide early certainty based on increased transparency, co-operation and collaboration between a tax authority and a taxpayer. The aim is to positively influence taxpayer behaviour and improve tax compliance, while providing groups with greater tax certainty. Cooperative compliance programs vary in terms of their degree of formality and regulation, but all aim to improve the dialogue between a tax authority and a taxpayer with respect to a taxpayer's activities that impact the level of tax risk it poses to that country. These programs can sit alongside other approaches, such as advanced pricing agreements (APAs) which provide more specific and legally binding certainty for particular transfer pricing transactions, including before a transaction is entered into.

Cooperative compliance programs have a number of benefits for both tax authorities and for businesses. From a country's perspective they improve the ability of a tax authority to understand the business and tax affairs of taxpayers, enabling a more effective risk assessment to be conducted, in some cases before tax returns are filed. This should reduce costs for tax authorities, so that their resources can be focused on taxpayers and transactions which pose the greatest risk. By demonstrating transparency in a tax authority's dealings with taxpayers, cooperative compliance programs can also promote confidence and improve perceptions of fairness in a country's tax system, so driving greater compliance. For businesses, cooperative compliance programs provide taxpayers with the opportunity to gain greater certainty at an early

of (in some instances, reliable) case monitoring information. The assessment results also indicate that the extent to which tax administrations act upon the lessons learned from disputes has not been very strong.

stage, in return for greater transparency and engagement. This can reduce compliance costs, as the number of subsequent compliance interventions may be reduced and those that take place will be more targeted. These programs may also reduce the need for groups to recognise significant tax reserves in their financial statements, if it is possible for them to agree their tax position more quickly. Early engagement with the tax authority may also allow taxpayers to manage their own tax risks better, as potential risks can be identified and dealt with before positions become entrenched and contemporaneous information is no longer available.

Around 30 countries engaged in the OECD's FTA currently operate domestic cooperative compliance programs. Many of these are well-established and are proven as an effective tool for delivering broad improvements in compliance where a group is prepared to participate fully and openly in the program (OECD (2013)).

There may be an opportunity for existing programs to be built on and extended into a more multilateral approach. This would allow groups to engage simultaneously with tax authorities in different countries where they have operations and, to the extent they can demonstrate that they pose a low risk, gain improved tax certainty in each of these countries as regards their international tax risk exposure, such as transfer pricing.

A multilateral approach to cooperative compliance may not be suitable for all groups in all countries. These programs involve an investment of resources on the part of a tax authority to engage with taxpayers in as close to real time as possible. Countries may therefore limit access to such programs to taxpayers with a low or medium risk profile. A multilateral program would be most effective where it is targeted to the international tax risks that are a concern to all countries involved, with domestic and other tax risks dealt with through a country's normal program. Where tax authorities engage in cooperative compliance with taxpayers on a multilateral basis, this could provide each tax authority with greater comfort that the level of tax risk posed by the taxpayer was fully understood.

Multilateral cooperative compliance would not require countries to change the tools they currently use to risk assess groups, although co-ordination in terms of the timing and manner of engagement with the group would be needed. The fact that each country engaged in the program would apply its own risk assessment methods to the same information provided by the group would make it even more likely that any tax risk that does exist would be identified and shared with the tax authority in the relevant country. While working collaboratively, tax authorities may also be encouraged to share other information that they have which is relevant to the risk profile of a group, within the restrictions imposed by domestic law and treaties. Where no material risk is identified, the tax authorities engaged in the program may give comfort to the group that there is no expectation of further compliance action with respect to the relevant period.

A multilateral approach to cooperative compliance would be consistent with other changes to risk assessment coming out of the OECD's work on BEPS. Under new rules on Country-by-Country Reporting, (subject to conditions on confidentiality and appropriate use) groups will be required to provide consistent information on their global activities which will be shared with the tax authority in every country where they have operations for use in risk assessment. In future, tax authorities will thus increasingly be working from the same data, which will inform their risk assessment process.

Countries with limited capacities may face higher risks in engaging in cooperative compliance programs. For them, amplification of issues of asymmetries in information and technical capacity create a significant risk of becoming locked into disadvantageous arrangements. Countries facing such risks will need to consider carefully the costs and benefits of such programs, before entering into such arrangements.

Mandatory Disclosure

Mandatory disclosure regimes can help to reduce the uncertainties, for both taxpayers and tax administrations, associated with aggressive tax planning.[46] By requiring taxpayers to disclose aggressive tax schemes and by enabling tax authorities to quickly access information on such aggressive tax planning strategies (e.g., Action 12 of the BEPS Package), it is likely that some taxpayers will become more averse to taking an aggressive stance. Committing to the spontaneous exchange between tax administrations of certain tax rulings can reduce potential harmful tax practices that often facilitate tax avoidance (e.g., Action 5 of the BEPS Package).

Advance Pricing Agreements

Advance Pricing Agreements ("APAs") can improve certainty for businesses and tax authorities. An APA between a given taxpayer and tax administration(s) determines, in advance of controlled transactions, an appropriate set of criteria (e.g., method, comparables and appropriate adjustments thereto, critical assumptions as to future events) for the determination of the transfer pricing for those transactions over a fixed period of time. Typically, the associated enterprises applying for an APA provide documentation to the tax authorities concerning the industry, markets and countries to be covered by the agreement, together with details of their proposed methodology, any transactions that may serve as comparables, and a functional analysis of the contribution of each of the relevant enterprises. Because APAs govern the methodology for the determination of transfer prices for future years, they necessitate assumptions or predictions about future events. An APA can be (i) unilateral, when it is established between a tax administration of one country and a taxpayer in the same country or (ii) bilateral or multilateral, when two or more countries concur.

Implementing an APA program can increase predictability of tax payments for the period covered by the APA, as they can prescribe a taxpayer's transfer pricing policy over several years. Nevertheless, APAs generally cover only the methodology, the way it will be applied, and the critical assumptions. This particular feature also enhances tax certainty as it ensures that applying the agreed methodology will remain appropriate in the future as long as critical assumptions remain the same. During the period covered by an APA, the taxpayers' compliance with the APA needs to be monitored by the tax administration, to which end taxpayers may be required to provide the tax administrations with annual reports demonstrating their compliance with the terms and conditions of the APA and that critical assumptions remain relevant. Further, the tax administrations may continue to examine the taxpayer as part of the regular audit cycle but without re-evaluating the methodology. The methodology to be applied prospectively under a bilateral or multilateral APA may also be instructive in determining the treatment of comparable

[46] Mandatory disclosure can be an important tool employed in both the domestic and international context.

controlled transactions in earlier years. The "roll-back" of the APA to these previous years may then be helpful to prevent or resolve potential transfer pricing disputes that could eventually be subject to the MAP.

Bilateral and multilateral APAs can help taxpayers and tax authorities reduce or eliminate the risk of double taxation by enhancing the predictability of the tax treatment of international transactions as all the jurisdictions connected with such a transaction can participate. Some countries allow for unilateral arrangements where the tax administration and the taxpayer in its jurisdiction establish an arrangement without the involvement of other concerned tax administrations. Because of concerns over double taxation, most countries prefer bilateral or multilateral to unilateral APAs. The bilateral (or multilateral) approach is indeed far more likely to ensure that the arrangements will reduce the risk of double taxation, will be acceptable to all tax administrations and taxpayers involved, and will provide greater certainty to the taxpayers concerned. By contrast, unilateral APAs do not provide certainty in the reduction of double taxation because other tax administrations affected by the transactions covered by the APA may take a different position. Unilateral APAs can therefore create potential distortions and in the absence of exchange of information they can give rise to BEPS concerns. In order to address this, Action 5 of the BEPS Action Plan requires that unilateral APAs are subject to the spontaneous exchange of information among the concerned jurisdictions.

APAs, including unilateral ones, differ in some ways from the more traditional private rulings that some tax administrations issue to taxpayers. An APA generally deals with factual issues, whereas more traditional private rulings often tend to be limited to addressing questions of a legal nature based on facts presented by a taxpayer. The facts underlying a private ruling request may not be questioned by the tax administration, whereas in an APA the facts are likely to be thoroughly analysed and investigated. In addition, an APA usually covers several transactions, several types of transactions on a continuing basis, or all of a taxpayer's international transactions for a given period of time. In contrast, a private ruling usually is binding only for a particular transaction.

Since APAs are formally initiated by a taxpayer and require interactions between the taxpayer, one or more associated enterprises, and one or more tax administrations, this leads to correlative advantages that also support tax certainty. Taxpayers actively participate in the process of obtaining an APA, by presenting the case to and interacting with the tax administrations concerned, providing necessary information, and reaching agreement on the transfer pricing issues. From the taxpayers' perspective, this ability to participate may be seen as an advantage as it also provides a direct access to the tax administration, which would not only lead to an acceptable solution but may also decrease the complexity of tax legislation or bureaucracy needed to comply with tax legislation, even though administrative work may still be required to enter into APA negotiations.

APAs also provide an opportunity for both tax administrations and taxpayers to consult and cooperate in a non-adversarial spirit and environment. The opportunity to discuss complex tax issues in a less confrontational atmosphere than may be the case in an audit context can stimulate a free flow of information among all parties involved for the purpose of coming to a legally correct and practicably workable result.

APAs can prevent costly and time-consuming examinations and litigation of major transfer pricing issues for taxpayers and tax administrations. Once an APA has been agreed, fewer resources may be needed for subsequent examination of the taxpayer's return, because more information is known about the taxpayer.

The close consultation and cooperation required between the tax administrations in an APA program also leads to closer relationships with treaty partners on transfer pricing issues. Thus, between those countries that use APAs, greater uniformity in APA practices could set forth general guidelines and understandings for the reaching of mutual agreement in other or future cases involving transfer pricing issues concerning the same or other taxpayer(s).

Through an APA program tax administrations have access to useful information about business models, industry data and analysis of pricing methodologies in a cooperative environment. Consequently, the disclosure and information aspects of an APA program as well as the cooperative attitude under which an APA can be negotiated, may help tax administrations gain deeper insight into complex international transactions undertaken by MNEs. An APA program would then lead to improving knowledge and understanding of highly technical and factual circumstances in areas such as global trading and the tax issues involved. Eventually, the development of specialist skills that focus on particular industries, specific business models, or specific types of transactions will also enable tax administrations to provide better service to other taxpayers in similar circumstances.

APAs are not costless, however, and—as with cooperative compliance programs—countries with limited capacity need to consider carefully before entering into them. They can for instance, take several years to negotiate, and issues of asymmetric information can again pose significant risks to the tax authorities.

Simultaneous and joint audits

Multilateral approaches to audits can contribute to improved tax certainty. A multilateral approach can be described as a co-ordinated control of the tax liability of one or more related taxable persons, organised by two or more participating countries having common or complementary interests. Multilateral controls may be organised simultaneously or jointly.

As a compliance and control tool used by tax administrations, simultaneous tax examinations can be effective in a variety of circumstances, including cases where international tax avoidance and evasion is suspected. Simultaneous tax audit or examination is an arrangement by two or more countries to examine simultaneously and independently, each on its territory, the tax affairs of taxpayers (or a taxpayer) in which they have a common or related interest with a view to exchanging any relevant information which they so obtain. This requires the co-operation of tax administration officials located in different states who will simultaneously but independently examine the taxpayer(s) within their jurisdiction, trying as far as possible to synchronise their work schedules. The examination can relate to both direct and indirect taxes. They can assist in revealing exploitation or abuse of existing laws and procedures in individual countries. Simultaneous tax examinations also ensure high levels of efficiency regarding the exchange of information between tax jurisdictions and enable a comprehensive review of all relevant business activities. Simultaneous tax examinations may reduce the compliance burden for taxpayers by co-ordinating enquiries from different states' tax authorities and avoiding duplication. They can also play a role in averting double taxation and thus prevent the need to subsequently resort to a mutual agreement procedure.

Joint audits can also be an effective way of increasing certainty. A joint audit can be described as two or more countries joining together to form a single audit team to examine an issue(s) / transaction(s) of one or more related taxable persons (both legal entities and individuals) with cross-border business activities, perhaps including cross-border transactions involving related affiliated companies organized in the participating countries, and in which the countries have a common or complementary interest; where the taxpayer jointly makes presentations and shares information with the countries, and the team includes Competent Authority representatives from each country.

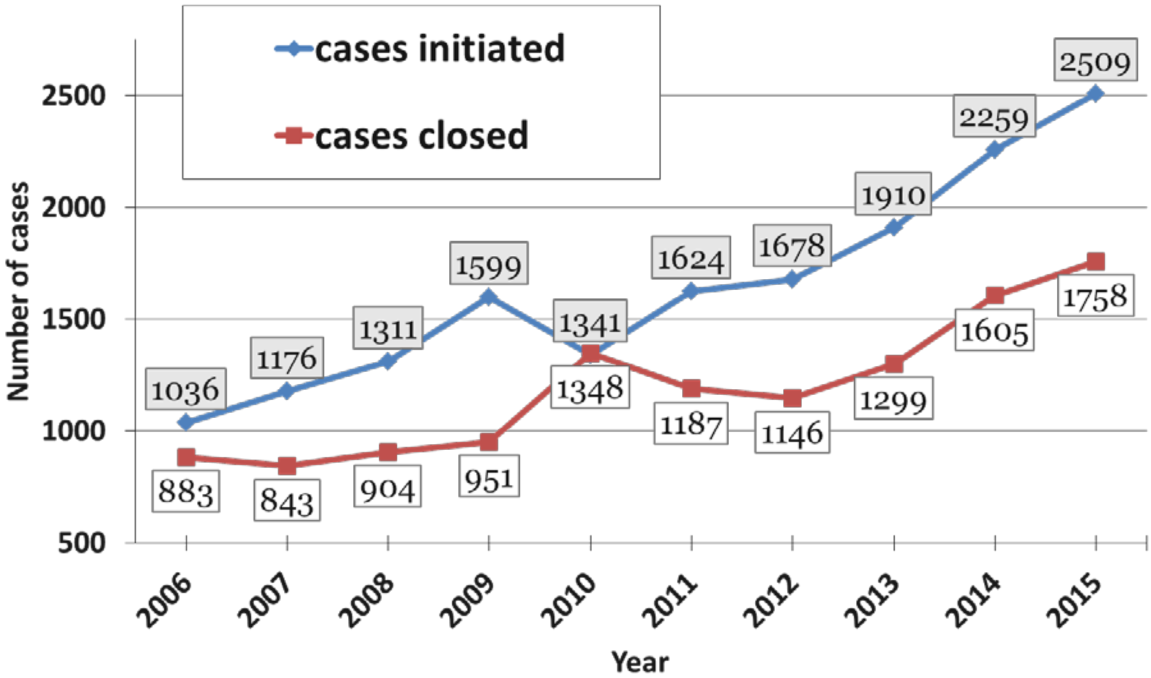
Joint audits represent a new form of coordinated action between and among tax administrations. Joint audits should result in quicker issue resolution, more streamlined fact finding and more effective compliance. They also have the potential to shorten examination processes and reduce costs, both for revenue authorities and for taxpayers. However, jurisdictional and legal constraints, and issues of national sovereignty, may restrict the ability of some countries to engage in joint audits, leaving simultaneous audits as the better avenue to pursue in those circumstances. This is because a joint audit would typically require an outside person to conduct or participate in a local audit and existing domestic legislation and existing international bilateral or multilateral agreements may not permit what would be necessary to operationalize the joint audit team, including accessing and sharing of specific taxpayer information for these purposes. Therefore, some domestic law reform or a new or amended international agreement could be required.

Mutual Agreement Procedure

Ensuring the availability of effective dispute resolution mechanisms can increase tax certainty. Taxpayers wish to have certainty on the tax treaty treatment of their cross-border trade and investments and clarity on the application and interpretation of tax treaties. Such clarity and certainty is equally important for tax authorities. Where tax treaty-related disputes arise between taxpayers and the tax authorities, a dispute resolution mechanism available to taxpayers and based on the tax treaty is necessary, irrespective of the remedies provided by the domestic laws of the treaty partners. Furthermore, an effective dispute resolution mechanism requires resolving disputes in a timely and principled manner.

Mutual Agreement Procedure (MAP) is a means through which tax administrations consult to resolve disputes regarding the application of double tax conventions. It is a quasi-diplomatic process that requires each competent authority to endeavour to resolve the case by mutual agreement with the competent authority of the other Contracting Party, with a view to the avoidance of taxation which is not in accordance with the tax treaty. This procedure described and authorized by Article 25 of the OECD's Model Tax Convention or the UN Model Tax Convention can be used to eliminate or partially eliminate double taxation. While a MAP does not guarantee that double taxation will be fully eliminated, it is a key tool for taxpayers to minimize the risk of incurring such taxation.

Figure 15. Mutual Agreement Procedure - trends



Making dispute resolution mechanisms more effective formed an integral part of the BEPS project. In light of the yearly increase of the number of MAP cases worldwide (see Figure 15), the BEPS Action 14 final report[47] mandated timely, efficient and effective dispute resolution to deal with the large number of existing MAP caseloads via the implementation of a minimum standard and a peer review process to ensure compliance with the minimum standard reviewed. [48] The elements of the minimum standard seek to achieve the following three general objectives, in order to ensure that dispute resolutions are made more effective:

- treaty obligations related to MAP are fully implemented in good faith and MAP cases are resolved in a timely manner;
- administrative processes promote the prevention and timely resolution of treaty-related disputes; and
- taxpayers that meet the requirements to access the MAP can do so.

Fully implementing the Action 14 minimum standard will provide increased certainty in international tax matters. The expected conclusion of the Action 14 peer review process in 2020 should result in increased predictability for taxpayers operating in multiple jurisdictions. A more timely, effective and efficient MAP across jurisdictions will provide more certainty to

47 http://www.oecd-ilibrary.org/docserver/download/2315391e.pdf?expires=1487872246&id=id&accname=guest&checksum=DD2F61B5AB37342C60BF3EE6B7886C35

48 Many developing countries have not yet encountered meaningful levels of MAP requests and the peer review methodology therefore allows for a deferral of their review.

taxpayers and minimize the risk of double taxation. In doing so, the availability and accessibility of a well-functioning MAP procedure in a jurisdiction will foster the investment climate by increasing tax certainty for taxpayers. The recent peer review process conducted by the Global Forum on Transparency and Exchange of Information for Tax Purposes demonstrated that peer reviews can have tangible and measurable impacts. Although the MAP peer review has just begun, improvements in countries' MAP functions have already been observed. Lastly, MAPs facilitate close consultation and cooperation between tax administrations, resulting in closer relationships with treaty partners and common interpretations of treaty texts.

Arbitration

A mandatory and binding arbitration provision equivalent can help competent authorities reach a MAP agreement before such an arbitration provision is invoked. As a result of the OECD's Base Erosion and Profit Shifting (BEPS) project, 20 countries—accounting for 90% of OECD countries' MAP inventory—agreed in 2015 to provide in their tax treaties for mandatory binding arbitration of unresolved cases. Arbitration increases tax certainty given that competent authorities must only "endeavour" to reach an agreement in the absence of an arbitration provision and are thus not legally bound to resolve the dispute. As part of the work on Action 15 of the BEPS project on the multilateral instrument,[49] most of this group of 20 countries developed and agreed together with other interested jurisdictions on a mandatory and binding arbitration provision as a supplement to the MAP. This provision is supplemented with detailed rules for conducting the arbitration procedure and also includes proper default rules to ensure that disputes are resolved through arbitration in a timely and effective manner.

It is expected that more jurisdictions will opt for mandatory binding arbitration via the multilateral instrument. The relevant part of the multilateral instrument provides that, where the treaty partners are unable to reach an agreement on a case pursuant to the mutual agreement procedure within a period of two years, unresolved issues will, at the request of the person who presented the case, be submitted to arbitration. By default, a "final offer" arbitration process (otherwise known as "last best offer" arbitration) will apply, unless the parties agree on different rules. Under this approach, the parties will each submit to the arbitration panel a proposed resolution which addresses all of the unresolved issues in the case, and the panel must simply choose between them, with no option of some compromise between them.

Several countries appear to have strong reservations about mandatory binding arbitration. Further efforts should be envisaged to better understand these concerns and, where necessary and possible, improve the processes to address them. To facilitate this process, the multilateral instrument allows countries to make "free-form reservations", which permit a limitation of the scope of eligible cases and thus enable a gradual introduction of arbitration.

Improved withholding tax collection and treaty relief procedures

Concerns have been raised by taxpayers about the uncertainty created by the inadequacy of certain existing procedures for claiming treaty relief on income from cross-border

[49] References to the "multilateral instrument" are to the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (http://www.oecd.org/tax/treaties/multilateral-convention-to-implement-tax-treaty-related-measures-to-prevent-BEPS.pdf)

portfolio investments. While such income is generally derived through complex chains of intermediaries, including custodians and Collective Investment Vehicles (CIVs), existing administrative procedures to claim treaty benefits are often not adapted to these intermediated holding structures. In addition to not being adapted to the intermediated holding environment, countries often do not provide relief at source, but withhold tax at the rate provided by domestic law and then require the investor to make a claim for refund. Refund systems can fuel uncertainty for taxpayers as they frequently feel that their claims for refund disappear into a "black box", with no way of knowing whether the claim is being processed, or whether it has failed because of some deficiency in the paperwork. They also create uncertainty for governments as they are particularly prone to fraud.

Standardized systems for claiming withholding tax relief at source on portfolio investments such as TRACE (Treaty Relief and Compliance Enhancement), which was adopted by the OECD in 2013, can facilitate improved processing of treaty benefits and increase tax certainty. TRACE is designed to enhance tax certainty for:

- portfolio investors, by removing the administrative barriers that currently affect their ability to effectively claim treaty benefits with respect to investments held through custodians;
- investors making use of pooled investment vehicles (whether collective investment vehicles (CIV) or non-CIV funds), by addressing administrative challenges that may be associated with demonstrating their eligibility for treaty benefits and applying anti-abuse provisions (including those adopted under Action 6 of the OECD/G20 BEPS Project);
- governments, by improving compliance and reducing the risk of fraud and abuse related to refund systems.

TRACE represents a relatively low-cost technical solution. As the system is based on the same infrastructure and technical solutions as the Common Reporting Standard (CRS), the additional costs of implementing TRACE should be minimal for governments and financial institutions.

C. International Aspects

International Standards and Guidance

Cooperation and coordination on the development of coherent international standards and guidance will play an important role in ensuring greater tax certainty. Continued engagement of countries in multilateral fora where international standards and guidance can be developed will be of crucial importance to enhancing certainty in international tax matters.

Such cooperation will also be necessary to ensure consistent implementation of international standards (e.g. the OECD/G20 BEPS Package, international standards relating to tax treaties and transfer pricing guidelines, the OECD International VAT/GST Guidelines). For example, the ongoing peer-review monitoring of the BEPS minimum standards by the Inclusive Framework on BEPS will help ensure consistent implementation of these international standards. Ensuring the consistent adoption, interpretation and implementation of these minimum standards could substantially increase certainty in the international tax system, in particular with regard to whether instances of double taxation could arise.

D. Other approaches

This section considers two devices by which governments can tie their hands in some tax matters and so provide greater certainty to taxpayers: fiscal stabilization agreements, and regional agreements. The former are not widely observed in the G20 and OECD, but are instructive as being the extreme example of providing considerable certainty to at least some taxpayers. The latter are a special case of international agreements more generally—several of which (notably tax treaties and international tax standards) feature prominently throughout this report—but important enough in themselves to warrant particular discussion.

Fiscal stability agreements[50]

Fiscal stabilization agreements are an extreme form of the attempt to provide investors with certainty as to their tax treatment. They have been most common in the extractive industries (EIs), and the experiences have been instructive.

The significant upfront sunk costs and long investment recovery periods characteristic of the EIs make certainty of tax treatment a particularly prominent concern for investors. These features—also found, if to a less elevated degree, in other sectors—create a fundamental problem of 'time inconsistency': the host country (however well intentioned) has an incentive to make fiscal terms less favourable after an investment has been sunk (the tax base has become much less responsive to taxation); perceiving this, investors factor in a higher country risk premium, which increases the cut-off threshold for the investment decision.

Over time, a country can mitigate time consistency problems by establishing a reputation for credibility in tax matters. This requires minimizing unanticipated policy changes and refraining from opportunistic tax increases once the investor has incurred sunk costs. In the EIs, a progressive fiscal regime, with the government's share of profits adjusting to realized profitability of the project, has been found to reduce the need for ad hoc policy changes. The ex post effective average tax rate the company faces will then be lower on less profitable projects and higher on more profitable ones, but this (conditional on external drivers of profitability) can be anticipated (and indeed can be modelled ex ante under different scenarios). A well-designed fiscal regime can thus reduce ex post political pressure to renegotiate or unilaterally change fiscal terms.

Countries without an established reputation, and/or with little prospect of substantial future investments, have a greater challenge… Building a reputation for reliability of tax announcements can take time, and payoff from doing so may be modest when there are few possible future investments to attract (as, for instance, in a country that has one large mineral deposit and no likelihood of future discoveries).

…leading some to offer legislative or contractual assurances of stability. There are some cases where a large investment project is implemented under project-specific legislation (albeit nothing binds legislatures from subsequently changing the law). Contractual fiscal stability provisions are more common for projects implemented under negotiated agreements. These face

[50] This section draws particularly on Daniel and Sunley (2010).

the challenge of ensuring that the negotiated agreement is consistent with the fiscal laws; in principle, a contract cannot override enacted legislation.

Fiscal stability clauses can be complex to design and administer, and ultimately prove viable only if the underlying fiscal terms are sustainable. They are not a shortcut to establishing credibility in tax policy making (indeed can make doing so harder) or to providing investors with certainty as to their tax treatment.

Regional agreements

In principle, regional agreements can serve as commitment devices that enhance tax certainty.[51] As with other multilateral agreements and treaties, they can do so by constraining governments' ability to depart from agreed and clearly stated policies and practices—at least to the extent that such departures impose on them some political, reputational or other costs. Regional agreements also have the potential to reduce incompatible or conflicting approaches to aspects of tax law, and reduce the frequency of changes in domestic tax legislation and rules. They often aspire, in particular, to mitigate tax competition between participating countries, competition that may benefit taxpayers because of a reduced tax liability but may also amplify tax uncertainty for both taxpayers and governments, especially by making revenue less certain for the public sector—because of both possible measures by other jurisdictions and the potential need to respond. On the administrative side too, regional agreements and the processes needed to produce them can promote tax transparency through discussions and negotiation among partners, as well as facilitating exchange of information. This leads to greater openness and more certainty for governments and business. To the extent that such agreements are binding, honored and enforced, they can thus, if well designed, play an important role in increasing tax certainty for multinational enterprises, domestic companies, and country authorities alike.

In practice, regional agreements have had some success in increasing tax certainty… Some aspects of tax policy, legislative and regulatory coordination have been easier to agree and sustain than others. In some, considerable progress appears to have been achieved. The customs unions that have been established in a number of regional contexts have often functioned well and brought credibility to trade policy, in many regions. Core directives regarding central elements of the domestic tax system have also in many cases been successful in bringing some degree of consistency and certainty to some key areas of domestic tax policy.

…but have also fallen short in several respects. It has proven very difficult to reach enforceable agreements on the coordination of CIT bases and rates and, especially importantly, to reduce regional competition through the grant of specific income tax incentives. Clearly, countries are quite unwilling to limit their sovereignty in regard to business taxes, by giving up control of what is a key tool for both competition for cross border investment and the pursuit of domestic social and economic policy. In this respect, the experience of regional blocs reflects some of the tensions between providing tax certainty while allowing sufficient flexibility in policymaking. Requirements for consensus or unanimity, for instance, can make it harder to

[51] Regional tax agreements take a variety of forms. They range from the establishment of common external tariffs in regional customs unions (often the starting for closer regional integration), to non-binding codes of conduct, to extensive binding directives with supranational judicial enforcement.

respond to changing circumstances than would be the case for less constrained national governments.

Experience suggests several lessons for the potential of regional agreements to foster tax certainty:

- **Administrative cooperation and information exchange are easier to achieve than at least some aspects of policy and legislative coordination, but can be highly valuable** in contributing to certainty for governments and businesses. Pursuing cooperation at all levels—from technical coordination on tax incentive catalogues (as in the Council of Ministers of Finance of Central America, Panama and the Dominican Republic (COSEFIN)) to high level political discussion in advance of policy proposals (as in the East African Community (EAC))—can be productive, and in many contexts, mechanisms could be put in place to further this without loss of sovereignty.
- **Mechanisms for implementing and enforcing legislative or regulatory agreements on tax law and procedure are indispensable for long-term success.** Lack of enforcement and monitoring can undermine even the most well-intentioned plans.
- **To reduce the uncertainty for governments created by competition in corporate taxation, only political commitment at the highest levels can lead to success**. There are many examples of high quality technical groundwork for such minimization of tax competition and avoidance of ad hoc approaches that have not been brought into effect due to lack of such political agreement and commitment. Nonetheless, regional work and agreement in areas where this is possible to achieve should be undertaken.

TAKING THE TAX CERTAINTY AGENDA FORWARD

This report has identified a number of practical means by which G20 and OECD countries can improve tax certainty (though also stressing that business needs to play its part too). While the application of these tools and approaches will of course need to be tailored to countries' circumstances and preferences, there may be scope to encourage and support greater tax certainty by assessing the progress made and by an affirmation, perhaps by way of inclusion in a declaration, of G20 members' commitment to supporting practical actions by governments, tax administrations and businesses that will enhance tax certainty.

While this report has focused on G20 and OECD economies, the underlying concerns and suggested approaches have potential relevance to developing countries too. Enhancing tax certainty in developing countries can both support the investment climate and help improve the reliability and sustainability of revenue flows.

…but developing countries face different challenges, which could require alternative tools. Their circumstances may imply different priorities in strengthening their tax systems, and different challenges in improving tax certainty. Many developing countries face significant capacity constraints in design and administration of their tax systems that may in the short term, limit the suitability and practicability for them of the tools discussed above. More needs to be done to assess the importance and nature of tax certainty issues affecting developing countries and the appropriate responses, including any adjustments that could be made to enhance the utility for them of the tools discussed above.

Benefits could be leveraged for developing countries from the G20's work on tax certainty by hosting a consultative workshop on tax certainty in Africa—perhaps under the auspices of the Platform for Collaboration on Tax. In this regard, a consultative workshop is planned in Africa for later in 2017, in close consultation and collaboration with African revenue authorities. Such a workshop could bring together senior officials from developing countries in the region to share international experiences on how to best balance their revenue collection imperatives with the need to provide a more stable and certain investment environment. Private sector and civil society participation may also be useful.

The topics for such a workshop could include: identification of the primary sources of uncertainty faced by governments, companies and taxpayers, with open discussion of ways in which they can best be resolved; a review of current international tax initiatives (including the G20/OECD BEPS project) and how they can contribute to tax certainty; the need for BEPS toolkits to help support low capacity countries with BEPS complexity, thus supporting predictability in a practical way; balancing flexibility and predictability in tax policy and tax law design and drafting; practical ways in which both businesses and governments can respect principles of transparency and predictability, including in seeking and granting tax incentives; discussion of the costs and benefits of introducing Advanced Pricing Agreements (APAs) with business, and of cooperative compliance arrangements; and case studies on how dialogue between governments (including tax administrations) and businesses has worked well ensuring improved certainty for both parties (i.e., more predictable revenues for government and more predictable investment environment for businesses).

Appendix A
Tax uncertainty and investment: Theory and Evidence

This appendix provides an overview of the literature, both theoretical and empirical, on the impact of tax uncertainty on business investment and on trade.

The theoretical literature (summarized in Table 1.A) finds that uncertainty in taxation may either decrease or increase investment. Firms would increase their current-period investment when anticipating a lower tax rate or tax payment, or may over-invest in capacity which can be used as a threat of exit to prevent government from increasing the tax rate in the future. On the other hand, when the tax uncertainty relates to uncertainty in the price of capital (for example, uncertainty in the rate of investment tax credit that follows a non-stationary Brownian Motion process), such uncertainty may raise the required hurdle rate and have a negative effect on investment.

The empirical literature, in contrast, suggests that various forms of tax uncertainty may adversely affect investment and trade. The key empirical challenge, however, remains to distinguish the effects of tax uncertainty from those of the overall level of taxation, and, more generally, from the effects of other non-tax uncertainties and economic factors on investment.

Tax uncertainty and investment – Theory

Most theoretical studies on the effects of tax uncertainty focus on the case in which tax uncertainty is resolved only after sunk costs are incurred. In this case, there should be no distortion to investment as firms do not learn any information by waiting and holding up investment. However, a few theoretical studies focus on different types of tax uncertainty, and use different modelling assumptions in their analysis. As a result, they find that tax uncertainty may either decrease or increase investment. Overall, the findings confirm a "theoretical difficulty of constructing models that produce the intuitively plausible result that higher uncertainty harms investment" (Hassett and Sullivan, 2015).

Uncertainty in both tax payment and tax rate. Alvarez, Kanniainen, and Soedersten (1998) use a dynamic stochastic adjustment model of firm investment to analyze the anticipatory effects of a rate-reducing and base-broadening corporate tax reform. They consider tax uncertainty in two dimensions: the timing of the reform, and a mean-preserving spread in the tax rate or base. The comparisons they make, however, are not necessarily neutral in expected revenue.

Bearing this caveat in mind, uncertainty in the tax parameters induces firms to strategically time their investment, by accelerating investment when anticipating a lower rate, and delaying investment when anticipating a narrower base. Intuitively, such behavioural response would result in a lower expected tax payment by firms, similar to the example discussed in the main text. Uncertainty in the timing of the tax reform would then interact with the expectation effects, in a way that is less clear cut. Specifically, increased timing uncertainty may accelerate investment in response to an expected tax cut (but not to the degree of uncertainty about the tax rate), while such a spurt effect would wear off as the dispersion of uncertainty in timing increases.

Uncertainty in tax payment. Niemann (2011) analyses the effects of stochastic taxation on investment behaviour in a real options model, modelling uncertainty as deviations in the actual tax payment from the anticipated tax payment prior to investment that follow an arithmetic Brownian motion. In this model, tax payment uncertainty has an ambiguous impact on the timing of investment, and depends on other parameters including the degree of correlation between pre-tax cash flow and tax payment. For example, investment can be accelerated by increased tax uncertainty if tax uncertainty is small compared to cash flow uncertainty and if both processes are positively correlated. A higher expected tax payment, on the other hand, would delay investment unambiguously. In related studies, Niemann (2004) and Niemann and Sureth-Sloane (2016) reach similar conclusions when examining specifically the effect of uncertainty in capital taxes on investment.

Uncertainty in tax rate. Janeba (2000) considers uncertainty in future tax rates faced by a multinational after incurring sunk costs by investing in two countries that compete for FDI. Anticipating that the government may increase the tax rate following its entry, the multinational will not only invest in both countries but also strategically increase its investment capacity above the world demand. By doing so it would induce competition in the tax rate between the two governments by threatening to exit, and instead serve the market from the other country, if the tax rate is set too high. With a moderate cost of capacity investment such uncertainty in the tax rate will lead to over-investment in the domestic and world market.

Hassett and Metcalf (1999) also find that the impact of tax policy uncertainty on firm-level and aggregate investment depends critically on assumptions on the structure of the tax uncertainty. Here tax uncertainty is modelled as the spread between the low and high values of investment tax credit for new capital, which affect the cost of capital. Increased variation in the cost of capital would again affect the timing of investment, by waiting out in a high cost period and investing in a low cost period, resulting in a subsidy in the form of lower tax payments on investment.

On the other hand, the impact of tax uncertainty on aggregate investment depends critically on the underlying distribution of uncertainty. When the uncertainty follows a Brownian motion process, increasing uncertainty in the cost of capital also leads to an increase in the required hurdle price ratio, which in turn slows down investment. Thus whether an increase in the variance of capital costs would increase aggregate investment is ambiguous. When the uncertainty is in the form of a mean-preserving stationary jump process, the current-period capital price contains information on capital price in the next period. In particular, the value of waiting in a good state is very low since stationarity implies that the firm can only transit to a lower credit state afterwards. Moreover, the cost of waiting increases with the spread since the credit may shift to a sharply lower level as the spread goes up. Due to this feature of stationarity, increases in the spread between the low and high credit values tend to accelerate investment.

Table 1.A. Summary of the literature on tax uncertainty and investment

Study	Type of Tax Uncertainty	Direction of effect on investment[1]	Mechanism (policy experiment)
Alvarez et al. (1998)	Firms are uncertain about the timing of a decrease in the tax rate	+	Firms expect a decrease in the tax rate, but are uncertain about the timing. The expected decrease in the tax rate reduces the run user cost of capital in the pre-reform period, and firms start investing aggressively because the tax cut may take place at any date. A key mechanism is that adjustment costs are tax deductible. Thus, before the reform, firms speed up investment because an expected tax cut reduces the benefit from tax deductibility. Notably, in this paper the expected introduction of an investment tax credit has <u>no</u> effect on investment. The reason is that in this model, the firm will reconsider current investment only if uncertainty affects equipment and structures already in place. Note: In this experiment, if the timing is sure, then uncertainty about the magnitude of the tax cut does <u>not</u> affect investment.
Alvarez et al. (1998)	Firms are uncertain about the timing and magnitude of the cut in fiscal depreciation rate (while there is no uncertainty regarding tax rate).	-	The expected cut in the depreciation rate raises the present discounted value of deductions and investment will be reduced.
Alvarez et al. (1998)	When considering the above two experiments (rate <u>and</u> base uncertainty) together.	ambiguous	The result is ambiguous. Uncertainty about a <u>timing</u> of a <u>decrease</u> in the tax rate has a positive effect on investment whereas uncertainty about the timing and the magnitude of a cut in fiscal depreciation rate has a negative effect on investment.

Hassett and Metcalf (1999)	The firm produces capital and sells output. The output price (P) and the capital price (P_k) follow stochastic processes (geometric Brownian Motion, i.e., a continuous time version of a random process).	-	Increasing uncertainty slows down investment because firms wait for the good states. Essentially, increasing uncertainty leads to a higher minimum required hurdle rate (P/P_k) for the firm to start investing.
Hassett and Metcalf (1999)	An investment tax credit can take either a low or a high value, (according to a Poisson process, i.e., a discrete time version of a random process) and this will affect the price of capital. This makes the price of capital randomly jump between two values. In this experiment, the authors compare the impact of the spread between low and high values (for example, the difference between 5 and 15 versus the difference between 0 and 20).	+	Increasing uncertainty accelerates investment. The intuition is that in a good state the probability of a bad state increases, and thus firms accelerate investment before the tax credit expires. Speeding up investment in this model leads to a higher aggregate capital. This is because investment piles up in good states and more than offsets lower investment in bad states.
Janeba (2000)	Governments compete over tax rates in a two-country model. The analysis focuses on the case in which governments cannot commit to future tax rates, and so have an incentive to increase taxes once investment has taken place in their jurisdiction.		If governments cannot commit to a less than confiscatory tax rate, firms face a hold-up problem. In a one-country world, there will be no investment because firms will expect the government to implement a confiscatory tax rate-the time-inconsistency problem. In a two-country world, firms choose to have plants in both countries. The hold-up problem is then alleviated because the firm can serve one market (at least in part) from a different country.

Niemann (2004)	Profit tax rates follow a Poisson process or an arithmetic_Brownian Motion	ambiguous effects	Real investment is more likely to be encouraged by increased tax-rate-uncertainty if the underlying pre-tax cash flows are falling. The intuition is that the earlier a project's cash flows accrue, the longer these cash flows are re-invested. Projects with cash flows that are accruing early and thereafter falling over time tend to benefit from increased tax-rate-uncertainty. In contrast, projects with identical pre-tax net present values and cash flows that are rising over time tend to be discouraged by increased uncertainty because of the shorter average reinvestment period.
Fedele et al. (2011)	Profit tax rates follow a Poisson process		Jointly modelling optimal debt financing with the investment decision mitigates the impact of uncertainty on the timing of irreversible investments. Allowing for debt financing enable firms to invest earlier, in order to enjoy the tax benefit of interest deductibility, and thus reduces the distortive impacts of tax-rate-uncertainty. Notably, if, in this model, firms are credit-constrained (i.e., cannot borrow), then investments must be equity financed—which amplifies the effects of tax-rate-uncertainty (in essence, it becomes a hold-up problem).
Niemann and Sureth-Sloane (2016)	If invested, after-tax profits follow a stochastic process of arithmetic Brownian Motion. (An "arithmetic" Brownian Motion allows for negative values (losses) whereas a geometric process does not), The capital tax base also follows arithmetic Brownian Motion		An increase in the expected growth of the capital tax base increases the required return for investment to take place, which delays investment. Increasing the volatility of expected growth of capital tax base can increase or decrease the threshold required return.

Note: [1] The effect on investment in the third column can be properly summarized only in conjunction with the type of uncertainty described in the adjacent columns

Fedele et al. (2013) allow the firm to choose simultaneously their investment and capital structure. Tax rates follow a stochastic jump (Poisson) process. In this model, debt financing enables firms to invest earlier, in order to enjoy the tax benefit of interest deductibility, which reduces the distorting impacts of uncertainty in the tax rate.

Tax uncertainty and investment – Empirical evidence

Empirical work in this area remains sparse and rudimentary, but suggests that various forms of tax uncertainty may adversely affect investment and trade. Despite the limitations of the current literature, there is increasing evidence that policy uncertainty in general dampen investment. The key empirical challenge remains that of distinguishing the effects of tax uncertainty from those of the overall level of taxation on investment and of other, non-tax elements.

On measuring policy uncertainty. Baker, Bloom and Davis (2016) develop an index of economic policy uncertainty for the United States built on three components: the frequency of newspaper references to economic policy uncertainty, the number of federal tax code provisions set to expire, and the extent of forecaster disagreement over future inflation and government purchases. By construction, the policy-uncertainty index captures both uncertainty in the level of taxation and in the level of expected tax rate, holding the level of expected tax revenue constant. It also captures variation in perceptions of these uncertainties, which may be influenced by many non-tax characteristics. As such, the economic policy uncertainty index is found to be positively correlated with stock price volatility, and negatively related to investment and employment in certain industry sectors.

The impact of tax uncertainty on investment. Using the Baker et al (2013) index of economic policy uncertainty, Gulen and Ion (2016) document a strong negative relationship between firm-level capital investment and the aggregate level of uncertainty associated with future policy and regulatory outcomes. For U.S. based public companies, an important part of the negative effect of uncertainty on investment is driven by tax-related uncertainty measured as the number of temporary tax provisions set to expire. Investment rebounds once uncertainty is resolved, but this occurs with a lag.

Blonigen, Oldenski and Sly (2014) find that for U.S.-based multinationals, tax treaties stimulate foreign investment most for sectors in which inputs are more heterogeneous—which, since these items are hardest to value and are more prone to transfer pricing disputes, suggests that the availability of MAP would positively affect investment.

Using aggregate data, Edmiston (2004) finds that, conditional on their level, volatility in effective tax rates has a significant negative impact on investment. The results should be interpreted with caution, however, since, as noted in the text, volatility in effective tax rates is not the same as uncertainty in effective tax rates.

The Impact of Policy Uncertainty on Trade

In the trade context, Osnago, Piermartini and Rocha (2015) take as an indicator of trade policy uncertainty the gap between any binding tariff commitment under trade agreement and applied tariffs. Conditioning on the level of applied tariff rates, exports are significantly higher (on both extensive and intensive margins) the lower is the gap between applied and bound tariff rates in the importing country, which is indicative of a lesser risk of tariff increases. This effect is found to be larger in importing countries with lower quality institutions and in relation to intermediate inputs.

Appendix B
The Business Survey[52]

In October 2016, the OECD launched a business survey on taxation to gather the views of businesses on the sources of tax uncertainty and on the possible solutions to foster greater certainty in the tax system.

This Appendix develops a detailed analysis of each question of the survey.

The survey was open between October and December 2016 and received 724 responses from firms headquartered in 62 different countries (Table 1.B) and with regional headquarters in 107 different jurisdictions (Table 2.B). Among the respondents, the top five countries of global headquarters were Bulgaria,[53] the United States, Italy, Japan and Germany (in order of number of respondents). The top five countries for regional headquarters are slightly different from those by global headquarters. Most respondents have regional headquarters in the United States, United Kingdom, Singapore, Germany, the People's Republic of China and Mexico (in order of number of respondents). Additionally, a comparison of Table 1.B and 2.B shows that although some jurisdictions are not represented as the base for global headquarters, they are well represented as a base for regional headquarters. For example, this is the case for the People's Republic of China and Singapore.

52 This appendix was prepared by the OECD.

53 Most of the Bulgarian respondents are domestic firms.

Table 1.B: Respondents by country of global headquarters

Country of Global Headquarters	No. of Firms	Percentage
Bulgaria	140	19.3%
United States	85	11.7%
Italy	41	5.7%
Japan	40	5.5%
Germany	32	4.4%
Greece	26	3.6%
United Kingdom	25	3.5%
Mexico	24	3.3%
Chile	20	2.8%
Brazil	19	2.6%
Switzerland	17	2.3%
Netherlands	16	2.2%
Australia, Canada, France, South Africa	15	2.1%
Portugal	10	1.4%
Sweden	9	1.2%
Austria, Spain	8	1.1%
Finland	7	1.0%
Denmark, Russia	6	0.8%
Luxembourg	5	0.7%
Belgium, India, Latvia, Singapore, Turkey	4	0.6%
China (People's Republic of), Guatemala Ireland	3	0.4%
Argentina, Hungary, Malta, Morocco, Norway, Romania, Seychelles, Slovenia	2	0.3%
Angola, Anguilla, Armenia, Bermuda, Colombia, Cyprus*, Czech Republic, Ecuador, Estonia, Honduras, Hong Kong (China), Iceland, Israel, Kenya, Korea, Maldives, Mauritius, New Zealand, Nigeria, Peru, Poland, Slovak Republic	1	0.1%
Missing	53	7.3%
Total number of respondents	**724**	**100%**

This table reports the results for the following question: "Please indicate the country of your firm's global headquarters (in 2015):" The respondents could choose from a drop-down list of all countries in the world.

** As noted above, this appendix has been prepared by the OECD. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue". Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.*

Table 2.B: Respondents by country of regional headquarters

Country of Regional Headquarters	No of firms
United States	117
United Kingdom	73
Singapore	67
Germany	50
China (People's Republic of)	47
Mexico	41
Brazil	35
Netherlands	35
France	31
Switzerland	28
Chile	26
Bulgaria	25
Italy	25
Greece	24
South Africa	23
Belgium	22
Hong Kong (China), Japan	21
Australia	20
India	18
Austria, Canada, Turkey	15
Russia, Spain	14
Sweden	12
United Arab Emirates	11
Poland, Portugal	10
Argentina, Czech Republic, Hungary, Romania	9
Ireland	8
Malaysia, Panama, Thailand	6
Denmark, Korea, Luxembourg, New Zealand, Peru	5
Colombia, Estonia, Finland, Indonesia, Norway, Ukraine	4
Azerbaijan, Ecuador, Egypt, Honduras, Iraq, Kenya, Latvia, Nigeria, Philippines, Serbia, Seychelles, Slovak Republic, Slovenia, Venezuela	3
Afghanistan, Angola, Armenia, Bahrain, Bermuda, Cyprus*, Dominican Republic, Georgia, Guatemala, Kazakhstan, Lithuania, Malta, Moldova, Nicaragua, Uruguay, Uzbekistan	2
Albania, Belarus, Bosnia and Herzegovina, Costa Rica, Croatia, El Salvador, Former Yugoslav Republic of Macedonia, Ghana, Gibraltar, Iceland, Israel, Kosovo, Kyrgyzstan, Maldives, Mauritius, Monaco, Mozambique, Namibia, Niger, Pakistan, Paraguay, Puerto Rico, Qatar, Saudi Arabia, Tajikistan, Trinidad and Tobago, Turkmenistan, United States Virgin Islands, Viet Nam	1
No Regional Headquarters	89

This table reports the results for the following question: "Where are your firm's regional headquarters located (in 2015)" The respondents could choose from a list of all countries in the world and multiple selections are allowed.

** As noted above, this appendix has been prepared by the OECD. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue". Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.*

A. Survey Method

The survey[54] was developed as a result of a wide consultation with businesses, governments, tax administrations, civil society and academia and was circulated using the wide OECD network of government officials and its business networks including the Business Industry Advisory Committee to the OECD (BIAC).

The survey is not constructed through a structured random sampling of the population of global firms and therefore, for the interpretation of the results, it should be considered as a structured, wide-ranging consultation of businesses with the characteristics described in section C below.

The responses to the survey are anonymous as the name of the respondent and the name of their firm were not asked. None of the questions were compulsory.

B. Profile of respondents

The aim of the business survey was to gather information on issues affecting domestic and international tax systems and in particular, to identify sources of tax uncertainty and solutions for enhancing greater certainty and predictability. For this reason, it was important that respondents were familiar with the tax system and also, that their expertise was wide enough to encompass the various complexities characterising today's tax systems. Ideally, the survey would have been completed by senior tax professionals within the firms. For this reason, the survey gathers information on the profile of the respondent by asking about his/her function in the firm, the specific expertise and finally, his/her position within the firm.

Role within the firm

As shown in Table 3.B, most respondents work in their firm's tax department (40%). This reflects the fact that the survey was targeted to senior tax professionals within a firm. The rest of the respondents identified themselves as working in the finance office of the business (21%), as part of the senior management (20%) or as working in a law/accounting/advisory firm (11%). A further 1% identify themselves as working in another part of the business. Around 6% of the respondents did not provide any information on their role or function.

Table 3.B: Respondents by function in the firm

Functions	No. of firms	Percentage
I work in the tax department	289	39.92%
I work in the finance office of the business	155	21.41%
I am part of the senior management	142	19.61%
I work for a law/ accounting/ advisory firm	82	11.33%
I work in another part of the business	10	1.38%
Missing	46	6.35%
Total number of respondents	724	100.00%

This table reports the results for the following question: "How would you describe your role within the firm?" The respondents could choose from the above functions.

[54] The survey was written and produced online using *Checkbox* and it can be found at http://survey.oecd.org/Survey.aspx?s=0cf6dbb32c614022a1ee37e947ab8861

Expertise

Table 4.B presents information on the expertise of the respondents. 68% of the respondents specialise in both direct and indirect tax. This may reflect the fact that the survey has been generally circulated within the firm so that both direct and indirect tax experts were able to provide their input. For the remaining respondents, 15% work in direct taxation only and 4% work in the indirect tax only, while 6% indicated that they specialise in other fields. Among the responses selecting "Others", the fields of accounting, finance, and management were well represented.

Table 4.B: Respondents by expertise:

Expertise	No. of firms	Percentage
Both direct and indirect tax	490	67.68%
Direct tax	112	15.47%
Indirect tax	30	4.14%
Others	44	6.08%
Missing	48	6.63%
Total number of respondents	724	100.00%

This table reports the results for the following question: "How would you describe your expertise?" The respondents could choose from the above expertise.

Current position/ responsibilities within the firm

Table 5.B shows the position and responsibilities of the respondents, with the majority being the director (or equivalent) of the tax department (46%). Overall, 20% were the senior managers (or equivalent) of international or specific tax issues. 23% of the respondents work in other position/responsibilities, with the accounting, finance, general management, legal and professional areas all being well represented.

Table 5.B: Respondents by current position/ responsibilities

Current position/ responsibilities	No. of firms	Percentage
Director (or equivalent) of the tax department	332	45.86%
Senior manager (or equivalent) of international tax issues	115	15.88%
Senior manager (or equivalent) of specific tax issues	31	4.28%
Government relations	24	3.31%
Others	167	23.07%
Missing	55	7.6%
Total number of respondents	724	100.00%

This table reports the results for the following question: "How would you classify your current position/responsibilities within the firm?" The respondents could choose from the above position/responsibilities.

C. Firms' characteristics

This Report focuses on practical tools and solutions for fostering greater certainty and predictability in the tax system. Different approaches and solutions may be more appropriate for different types of firms. For example, some tools such as reducing bureaucracy to comply with tax legislation will be more effective for domestic businesses whilst others will be more attractive for multinational companies operating internationally (e.g., "MAP", "multilateral cooperative compliance programmes"). For this reason, it is valuable to understand the characteristics of the firms responding to the survey. This section explores the characteristics of the firms represented in the survey responses, with a focus on size, number of operating jurisdictions and sector.

To determine the size of the company, respondents were asked to report the firm's global turnover, global total assets and global number of employees in 2015.[55]

In order to understand the coverage of our survey with respect to the global population of firms, we compare the size characteristics of our sample with that of two other well-known firm level datasets, ORBIS and the FT Global 500. ORBIS gathers accounting information on over 200 million public and private companies worldwide whilst the FT Global 500 gathers accounting information for the largest global corporate groups.

While in the survey we ask for the firm's global turnover, total assets and number of employees, the data gathered through our exercise may not be as accurate as the accounting information reported in the financial statements and available in ORBIS and the FT Global 500. Another reason which could explain discrepancies between the two datasets is that more than 10% of the respondents in our survey did not answer the questions on size.[56]

Size

To understand how far the results can be generalizable, it is important to understand the coverage of the survey. This can be done by measuring how much of the global turnover is covered by all the respondents. The total amount of turnover reported by our respondents is around USD 17 trillion (Table 6.B), representing 99.74% of the total turnover covered by the FT Global 500 and 89.7% of the total turnover of the top 500 firms in ORBIS for 2015. This points to excellent coverage of the survey in terms of economic activity. As shown in column 4, if considering only multinationals as respondents to the survey, their total turnover covers 99% of the turnover reported in the FT 500 and 88% of that reported for the top 500 firms in ORBIS. The fifth column of Table 6.B shows the coverage of global turnover remains unchanged at 99.7% if we limit the survey sample to the top 500 respondents in terms of turnover. In summary, the survey covers a large part of the economic activity of the FT 500 firms or in the top 500 firms in ORBIS. This is due to the presence of large multinationals in the survey.

A large part of the firms in the survey are large or very large, with 30% of the respondents reporting a global turnover above USD 500 million (Table 6.B). Nonetheless, with respect to the FT Global 500 and the top 500 firms in ORBIS, the survey covers a larger number of smaller firms, as also indicated by the breakdown in size classes in Table 6.B. In the survey, 61 companies reported a global turnover in excess of USD 25 billion, representing 8.4% of our sample. Companies with turnover between USD 10 billion and USD 25 billion represent around 5.1% of our sample. Smaller companies with turnover between USD 500 million and USD 10 billion and companies with turnover between USD 50 million and USD 500 million both represent 17% each,

55 Respondents were allowed to choose the reporting currency from a list of currencies. The exchange rate of 2015 1-year Average to USD was from OECD (https://data.oecd.org/conversion/exchange-rates.htm) and IMF (https://www.imf.org/external/np/fin/data/param_rms_mth.aspx). The source from OECD is used for the currency in the OECD member countries; IMF data is used for the currency in other countries, e.g., Singaporean dollar.

56 Additionally, although we ask for the global figures on turnover, total assets and number of employees, it is impossible to check whether the respondents have instead reported only data for a sub-group of a larger company.

which is 34% in total. Even smaller firms with turnover below USD 50 million represent the largest group at 36% of the total respondents. A rather large number of respondents did not report information for their firm's turnover (16%).

The mean value for turnover for the overall survey is around USD 28 billion, well below the average of the ORBIS 500 and the FT 500. This shows that our survey covers a larger number of smaller firms. This is also confirmed by the median value of turnover which is about USD 99 million versus USD 25 billion in the FT Global 500.

According to the data from the FT Global 500, 181 businesses in the world were recorded as having turnover in excess of USD 25 billion in 2015.[57] This implies that the business survey includes about 33.7% of the largest companies covered in the FT Global 500 with the vast majority of them being multinationals (column 4 of Table 6.B). As already indicated by the mean and median, smaller firms with turnover below USD 10 billion are represented more often in the survey than in the FT Global 500. This also holds if we limit the survey sample to the top 500 firms in terms of turnover. As the fourth and fifth column of table 6.B show, when we limit our survey to multinationals or to the top 500 in our survey, the mean of turnover becomes comparable with those of the FT Global 500 and ORBIS. This implies that large multinationals in our sample are comparable to the companies represented in the FT Global 500.

[57] Data from March 31, 2015: https://www.ft.com/content/1fda5794-169f-11e5-b07f-00144feabdc0, downloaded on 6 December 2016.

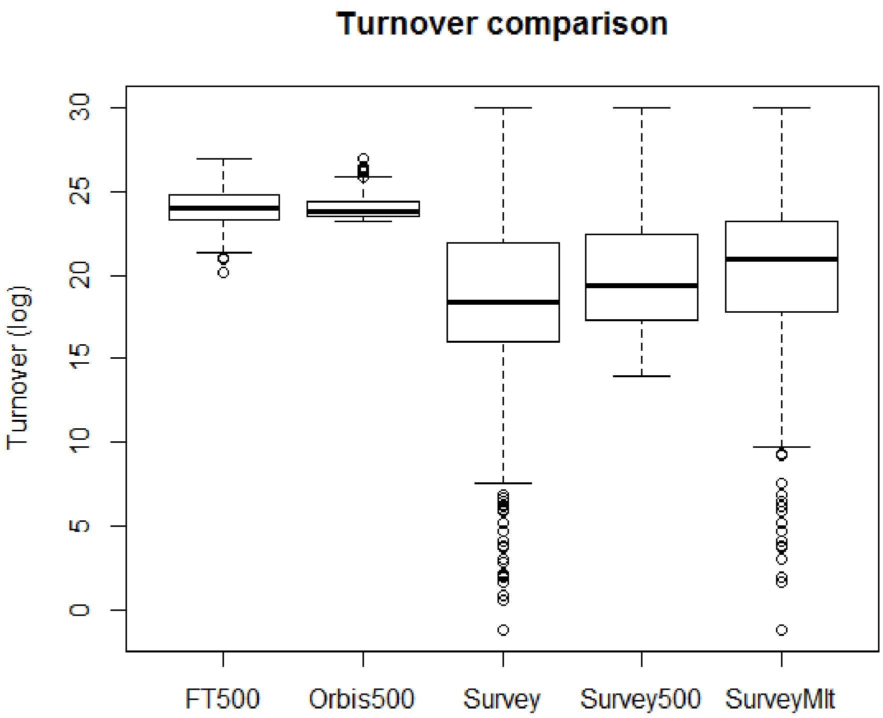
Table 6.B: Respondents by turnover

Turnover (in USD)	(1) FT Global 500		(2) ORBIS 500		(3) Survey (Overall)		(4) Survey (Multinational)		(5) Survey (Top 500)	
Frequency	**no. of firms**	**%**	**no. of firms**	**%**	**no. of respondents**	**%**	**no. of respondents**	**%**	**no. of respondents**	**%**
Less than $50m	0	0.0%	0	0.0%	262	36.2%	91	20.0%	155	31.0%
Between $50m and $500m	0	0.0%	0	0.0%	123	17.0%	68	15.0%	123	24.6%
Between $500m and 10b	55	11.0%	0	0.0%	123	17.0%	109	24.0%	123	24.6%
Between $10b and $25b	126	25.2%	279	55.8%	37	5.1%	37	8.1%	37	7.4%
Over $25b	181	36.2%	221	44.2%	61	8.4%	60	13.2%	61	12.2%
Valid	362	72.4%	500	100.0%	606	83.7%	365	80.4%	499	99.8%
NR/No answer	138	27.6%	0	0.0%	118	16.3%	89	19.6%	1	0.2%
Total	500	100.0%	500	100.0%	724	100.0%	454	100.0%	500	100.0%
Turnover (in USD)	**FT Global 500**		**ORBIS 500**		**Survey (Overall)**		**Survey (Multinational)**		**Survey (Top 500)**	
Statistics	**in $m**		**in $m**		**in $m**		**in $m**		**in $m**	
Mean	47,509.9		38,235.8		28,294.7		46,450.5		34,361.8	
Median	25,228.6		22,586.2		99.7		1,214.9		268.6	
Standard Deviation	62,068.6		44,974.8		443,044.0		570,397.6		488,112.1	
Total	17,198,580.5		19,117,909.0		17,146,558.0		16,954,438.5		17,146,537.5	
% Vs. FT 500	100.0%		111.2%		99.7%		98.6%		99.7%	
% Vs. ORBIS 500	90.0%		100.0%		89.7%		88.7%		89.7%	

Differences in the distribution of turnover are summarised in the Figure 1.B.[58] The box plots confirm that compared to the distribution of ORBIS top 500 and FT Global 500, the survey data include a larger number of smaller firms and more variation in turnover, also when limiting the sample to the top 500 companies or to multinationals.

Tables 7.B and 8.B and Figures 2.B and 3.B show that the same patterns can be observed if size is measured by total assets or total number of employees.

Figure 1.B Turnover distribution of FT Global 500, ORBIS and survey sample



[58] The chart, known as a Boxplot, shows respectively the 25^{th}, 50^{th} and 75^{th} quantile in the box. Finally, the minimum and maximum are displayed at the end of the vertical lines “whiskers”. Note that, in presence of outliers, minimum and maximum are based on calculations and are not observed. In this report, a log transformation of data has been used, in order to achieve better evidence of the data distribution

Table 7.B: Respondents by assets

Assets (in USD)	FT Global 500		ORBIS 500		Survey (Overall)		Survey (Multinational)		Survey (Top 500)	
	no. of firms	%	no. of firms	%	no. of respondents	%	no. of respondents	%	no. of respondents	%
Less than $50m	0	0.0%	0	0.0%	259	35.8%	94	20.7%	163	32.6%
Between $50m and $500m	0	0.0%	0	0.0%	99	13.7%	53	11.7%	92	18.4%
Between $500m and 10b	30	6.0%	52	10.4%	106	14.6%	88	19.4%	103	20.6%
Between $10b and $25b	85	17.0%	163	32.6%	36	5.0%	33	7.3%	36	7.2%
Over $25b	385	77.0%	282	56.4%	82	11.3%	78	17.2%	81	16.2%
Valid	500	100.0%	497	99.4%	582	80.4%	346	76.2%	475	95.0%
NR/No answer	0	0.0%	3	0.6%	142	19.6%	108	23.8%	25	5.0%
Total	500	100.0%	500	100.0%	724	100.0%	454	100.0%	500	100.0%

Assets (in USD)	FT Global 500	ORBIS 500	Survey (Overall)	Survey (Multinational)	Survey (Top 500)
Statistics	**in $m**	**in $m**	**in $m**	**in $m**	**in $m**
Mean	212,477.6	51,538.2	26,358.4	43,053.1	32,102.9
Median	52,568.9	30,983.0	99.9	1,443.3	322.5
Standard Deviation	449,258.3	65,947.5	111,125.7	141,341.9	122,243.0
Total	106,238,786.8	25,614,499.8	15,340,566.3	14,896,387.0	15,248,900.6
% Vs. FT500	100.0%	24.1%	14.4%	14.0%	14.4%
% Vs. ORBIS 500	414.8%	100.0%	59.9%	58.2%	59.5%

Table 8.B: Respondents by employees

Employees	FT Global 500		ORBIS 500		Survey (Overall)		Survey (Multinational)		Survey (Top 500)	
	no. of firms	%	no. of firms	%	no. of respondents	%	no. of respondents	%	no. of respondents	%
Less than 500 employees	2	0.4%	0	0.0%	296	40.9%	96	21.1%	191	38.2%
Between 500 and 10,000	55	11.0%	31	6.2%	169	23.3%	121	26.7%	141	28.2%
Between 10,000 and 50,000	173	34.6%	174	34.8%	81	11.2%	81	17.8%	79	15.8%
Between 50,000 and 100,000	113	22.6%	114	22.8%	33	4.6%	33	7.3%	32	6.4%
Over 100,000 employees	139	27.8%	136	27.2%	45	6.2%	44	9.7%	41	8.2%
Valid	482	96.4%	455	91.0%	624	86.2%	375	82.6%	484	96.8%
NR/No answer	18	3.6%	45	9.0%	100	13.8%	79	17.4%	16	3.2%
Total	500	100.0%	500	100.0%	724	100.0%	454	100.0%	500	100.0%

Employees	FT Global 500	ORBIS 500	Survey (Overall)	Survey (Multinational)	Survey (Top 500)
Statistics	**No. of employees**	**No. of employees**	**No. of employees**	**No. of employees**	**No. of employees**
Mean	95,822.5	96,157.7	25,447.9	41,500.3	31,231.2
Median	53,293.5	57,409.0	650.5	5,000.0	1,200.0
Standard Deviation	150,229.5	139,388.2	130,739.8	166,436.9	147,331.8
Total	46,186,430.0	43,751,764.0	15,879,519.2	15,562,614.2	15,115,883.2
% Vs. FT500	100.0%	94.7%	34.4%	33.7%	32.7%
% Vs. ORBIS 500	105.6%	100.0%	36.3%	35.6%	34.5%

Figure 2.B Employees distribution of FT Global 500, ORBIS and survey sample

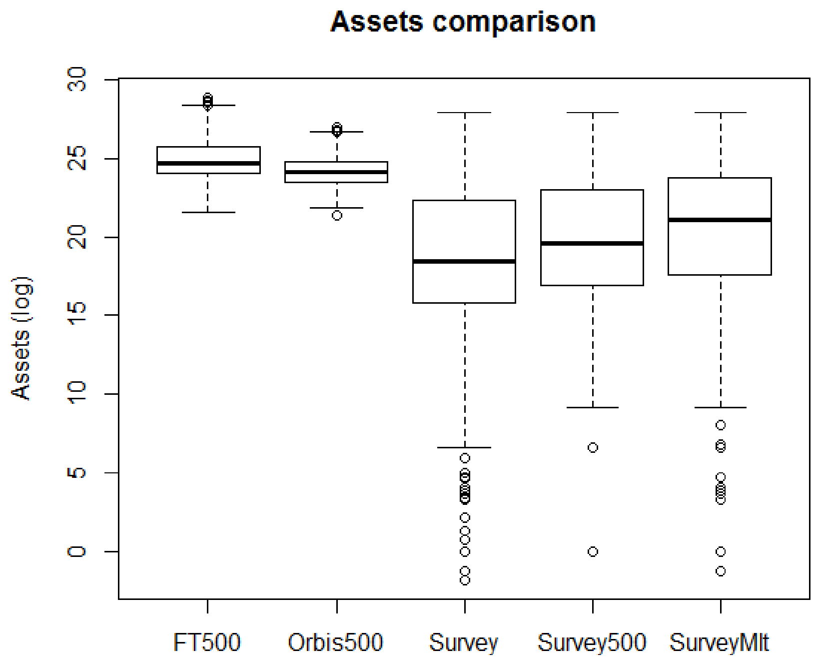
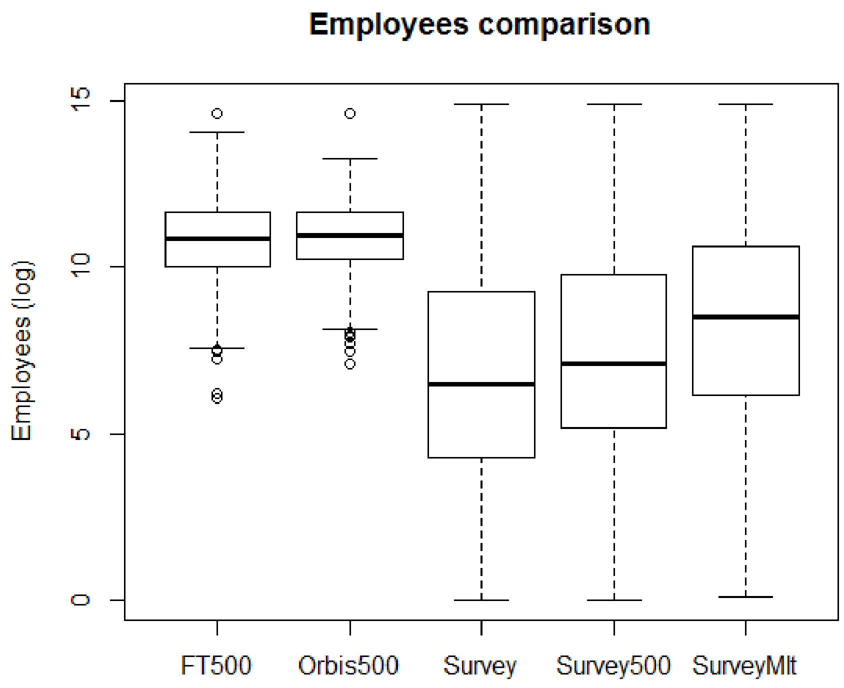


Figure 3.B Employees distribution of FT Global 500, ORBIS and survey sample



Sector

Firms in the survey come from 18 different sectors with the top 5 sectors[59] in terms of respondents being: Manufacturing (32%), Financial and Insurance activities (13%), Wholesale and Retail Trade (13%), Professional, Scientific and Technical Activities (8%) and Information and Communication (6%). 7% of the respondents did not indicate the sector of their firm (Table 9.B).

Table 9.B: Respondents by primary sector

Sector	No. of firms	Percentage
MANUFACTURING	232	32.04%
FINANCIAL AND INSURANCE ACTIVITIES	94	12.98%
WHOLESALE AND RETAIL TRADE	91	12.57%
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	57	7.87%
INFORMATION AND COMMUNICATION	45	6.22%
TRANSPORTATION AND STORAGE	32	4.42%
ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	27	3.73%
MINING AND QUARRYING	20	2.76%
ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	19	2.62%
CONSTRUCTION	15	2.07%
REAL ESTATE ACTIVITIES	8	1.10%
HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	8	1.10%
AGRICULTURE, FORESTRY AND FISHING	7	0.97%
ACCOMMODATION AND FOOD SERVICE ACTIVITIES	5	0.69%
ARTS, ENTERTAINMENT AND RECREATION	3	0.41%
WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	1	0.14%
OTHERS	12	1.66%
MISSING	48	6.63%
Total number of respondents	724	100%

This table reports the results for the following question: "Please select your firm's main sector from the below list" The respondents could choose from a drop-down list of the sectors.

Number of operating jurisdictions

Slightly more than half of the respondents are classified as multinational companies with around 38% of total respondents operating in more than 10 jurisdictions and 12% operating in 10 jurisdictions or less (Table 10.B). Around 37% of the respondents are domestic companies operating in only one jurisdiction.[60] 12% of the respondents did not provide information on their structure.

59 The respondents were asked to indicate their main sector and secondary sector, if any. The NACE code is used as a means of classifying business establishments by the type of economic activity. The NACE code is the Statistical Classification of Economic Activities in the European Community, commonly referred to as "nomenclature statistique des activités économiques dans la Communauté européenne" in French.

60 Of 270 domestic companies, 199 (74%) are headquartered in Bulgaria.

Table 10.B: Respondents by number of operating jurisdictions		
Number of operating jurisdictions	No. of firms	Percentage
A multinational company operating in more than 10 jurisdictions	274	37.85%
A multinational company operating in less than or equal to 10 jurisdictions	90	12.43%
Total number of the multinational companies	364	50.28%
A domestic company operating in only one jurisdiction	270	37.29%
Missing	90	12.43%
Total number of respondents	724	100.00%

This table reports the results for the following question: "Please indicate whether your firm is" The respondents could choose from the above three options of 1)a multinational company operating in more than 10 jurisdictions, 2)a multinational company operating in less than or equal to 10 jurisdictions and 3)a domestic company operating in only one jurisdiction .

D. Economic and tax factors and their importance for investment and location decisions

Investment and location decisions are driven by many economic factors of which the tax system is only one. To understand which economic factors influence business behaviour and the relative importance of taxation, respondents were invited to select from a list of 20 factors and to assess their importance for investment and location decisions. The question asked in the survey was the following:

"Based on your experience, please assess the importance of each of the following factors for your firm's investment and location decisions. Please use a scale from 5 to 1, where 5 is extremely important and lower numbers indicate that the factor is progressively less important. If a factor is not at all important, select 1. If you have no experience or you do not know, select n/a."

Table 11.B summarises the results in two ways. The mean is the average rating for each factor where a score of 1 implies that the factor is not important and a score of 5 implies that the factor is extremely important for investment and location decisions. The second measure is the proportion of responses rating a specific factor with either 4 or 5. This latter measure is a useful tool as there is a tendency for responses to concentrate on a rating of 3, which is the middle value of the evaluation scale.

On both measures, the five most important factors, in order of highest importance, were "*corruption*", "*political certainty*", the "*overall tax environment*", "*current and expected macroeconomic conditions in the country*", and "*labour costs*". The overall tax environment was ranked as the third most significant factor: over half of the respondents rated it as 4 or 5. Given that the survey was clearly promoted as a survey on taxation and it was mainly disseminated throughout the tax community and completed by tax experts (i.e., 40% of the respondents identified as working in the tax department), this is likely to explain why the importance of tax factors for investment and location decisions ranks as high as it does.

To further check the sensitivity of our results with respect to the type of respondents in the survey, we investigate the results by the role of respondents (Table 12.B). The results here are perhaps surprising because the overall tax environment was ranked as the most important factor by the respondents working in finance, senior management, accounting, law/ advisory firm and other roles in their firms. The respondents working in the tax department ranked the overall tax environment with the lowest average score of 3.6, after corruption, political certainty and current and expected macroeconomic conditions in the country.

The availability of highly skilled labour is ranked as the sixth most important factor, just after the cost of labour. The cost of complying with regulations was also considered a very important factor for 39% of the respondents, followed by the availability and quality of the digital infrastructure. The next most important factor related to the presence of a large and sophisticated market for the products and services of the firm, and this was followed by security concerns. The next most important factors also related to trading, such as exchange rate risk, ease of trade with the wider world, general ease of trade with neighbouring countries, and a large and sophisticated customer base in the broader region. The quality of public goods such as education, healthcare and general infrastructure were considered very or extremely important for investment by about 30% of the respondents. Agglomeration economies such as the proximity to other parts of the business, to suppliers and competitors were ranked the next most important factors. Finally, efficient financial markets in the jurisdiction and transport links were considered somewhat less important than other factors. The factor rated with the lowest score was the presence of natural resources with only 16% of the respondents rating it as very or extremely important, about 10 percentage points below the next lower rated factor (i.e. efficient transport links to neighbouring countries).

The importance of different economic factors could vary according to the type and the size of the business. Table 13.B displays the results according to whether the firm is a domestic company, a multinational operating in 10 or less jurisdictions and a multinational operating in more than 10 jurisdictions. Although the order varies slightly, the top four factors across all types of firms remain corruption, political uncertainty, the overall tax environment and the macroeconomic environment. While corruption remains the most important factor for all multinationals, it is ranked third for domestic firms. Overall, the higher the number of jurisdictions in which the firm operates, the lower the importance of the tax environment and the higher the importance of political uncertainty and corruption.

Table 11.B: Importance of business factors for investment and location decisions

	Mean	% 4 and 5	Obs.
Corruption	3.9	56.8	644
Political Certainty	3.8	56.1	658
The overall tax environment	3.8	55.9	669
Current and expected macroeconomic conditions in the country	3.8	54.8	660
Labour costs	3.5	42.3	659
Availability of highly skilled labour	3.4	41.2	653
Cost of complying with regulations	3.4	38.7	656
Availability and quality of digital infrastructure	3.4	39.2	645
Large and or sophisticated local customer base for the products services of the firm	3.3	36.7	635
Security Crime risk	3.3	33.2	647
Exchange rate risk	3.1	33.1	649
Ease of trade with the wider world	3.1	32.7	637
Proximity to other parts of the business to suppliers and or to competitors	3.1	28.0	647
Quality of local education system healthcare system and or general infrastructure	3.1	29.9	633
Large and or sophisticated customer base in the broader region	3.1	30.4	621
General ease of trading with neighbouring countries tariffs and non-tariffs considerations such as similar regulations similar infrastructure	3.1	30.7	638
Efficient financial markets	3.0	29.4	646
Efficient transport links to global markets	2.9	29.3	625
Efficient transport links to neighbouring countries	2.9	25.8	628
Presence of natural resources locally or in the broader region	2.4	15.7	594

This table reports the results for the following question: "Based on your experience, please assess the importance of each of the following factors for your firm's investment and location decisions. Please use a scale from 5 to 1, where 5 is extremely important and lower numbers indicate that the factor is progressively less important. If a factor is not at all important, select 1. If you have no experience or you do not know, select n/a"

Table 12.B: Importance of business factors for investment and location decisions, by the role of the respondents

	By Respondents working in the tax department		By Respondents working in the finance office		By Respondents working as part of the senior management		By Respondents working for law/accounting/advisory firms		By Respondents working in other role	
	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5
Corruption	4	62.2	3.6	46.4	3.8	53.6	4	63.2	4	60
Political Certainty	3.9	59.6	3.7	49.3	3.9	56.9	3.8	55.1	4	60
Tax environment	3.6	48.6	3.9	60.1	3.9	58.9	4.2	71.8	4.1	70
Macroeconomic conditions	3.8	56.4	3.8	58.5	3.7	49.3	3.7	49.4	4.1	70
Labour costs	3.5	44.5	3.6	47.3	3.4	36.0	3.5	41.6	3.5	40
Availability of highly skilled labour	3.3	36.9	3.6	51	3.3	37.0	3.7	49.3	3.9	60
Cost of complying with regulations	3.4	35.4	3.4	38.5	3.4	41.0	3.7	51.3	4	50
Availability & quality of digital infrastructure	3.3	37	3.4	41.7	3.4	39.0	3.5	47.3	3.9	50
Local customer base for the products/services	3.5	43.7	3.1	27.3	3.2	36.4	3.2	33.8	3.1	25
Security/Crime risk	3.3	34.7	3.2	31.3	3.3	32.6	3.3	34.2	3.6	40
Exchange rate risk	3.1	31.5	3.3	38.9	3.1	32.4	2.9	33.3	3.2	20
Ease of trade with the wider world	3.2	35.1	3.1	32.6	3.1	30.6	3.1	28.4	3.8	44
Proximity to other parts of the business, to suppliers and/or to competitors	3.1	30.4	3.2	27.7	3.1	27.7	3.1	22.7	3.1	20
Quality of local education, healthcare system and/or general infrastructure	2.9	22.8	3.1	34.6	3.2	30.1	3.5	48	3.7	4
Customer base in the broader region	3.2	38	2.9	25	2.9	23.4	3	26.4	3.7	44.4
General ease of trading with neighbouring countries (tariffs and non-tariffs considerations such as similar regulations, similar infrastructure)	3	29.7	3.2	40.7	2.9	22.4	3.1	31.5	3.7	44.4
Efficient financial markets	3	28.5	2.9	26.8	3.1	33.1	3.1	32.4	3.9	50.0
Efficient transport links to global markets	3	30.4	2.9	30.9	2.9	27.1	2.9	23.9	3.7	66.7
Efficient transport links to neighbouring countries	2.8	24.9	3	31.7	2.9	25.6	2.9	17.8	3.5	50.0
Presence of natural resources	2.3	18.7	2.3	9.9	2.4	16.8	2.2	13.0	3	22.2

Table 13.B: Importance of business factors for investment and location decisions, by type of firms

	Multinational company operating in more than 10 jurisdictions			Multinational company operating in equal to or less than 10 jurisdictions			Domestic Company operating in only 1 jurisdiction			Overall		
	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.
Corruption	3.9	59.8%	259	4.0	60.0%	85	3.8	54.9%	246	3.9	56.8%	644
Political Certainty	3.9	61.7%	264	3.9	56.3%	87	3.7	50.0%	254	3.8	56.1%	658
Current and expected macroeconomic conditions in the country	3.8	55.3%	264	3.7	53.6%	84	3.9	55.8%	258	3.8	54.8%	660
The overall tax environment	3.6	48.7%	269	3.8	58.6%	87	4.0	63.7%	259	3.8	55.9%	669
Large and or sophisticated local customer base for the products services of the firm	3.4	42.4%	257	3.3	41.0%	83	3.2	30.2%	245	3.3	36.7%	635
Labour costs	3.4	43.0%	265	3.5	41.4%	87	3.6	45.5%	255	3.5	42.3%	659
Cost of complying with regulations	3.4	37.0%	265	3.5	36.1%	83	3.5	43.9%	255	3.4	38.7%	656
Availability of highly skilled labour	3.3	36.6%	262	3.3	44.2%	86	3.6	48.6%	253	3.4	41.2%	653
Availability and quality of digital infrastructure	3.3	36.4%	261	3.2	39.3%	84	3.6	44.7%	253	3.4	39.2%	645
Security Crime risk	3.3	32.6%	261	3.2	32.9%	82	3.3	36.5%	252	3.3	33.2%	647
Large and or sophisticated customer base in the broader region	3.2	37.3%	255	3.2	38.3%	81	2.9	22.0%	236	3.1	30.4%	621
Ease of trade with the wider world	3.2	34.4%	259	3.2	35.8%	81	3.1	31.1%	244	3.1	32.7%	637
Proximity to other parts of the business to suppliers and or to competitors	3.2	32.3%	260	2.8	25.3%	83	3.1	26.2%	252	3.1	28.0%	647
Exchange rate risk	3.1	30.0%	263	3.1	31.3%	83	3.2	39.0%	251	3.1	33.1%	649
General ease of trading with neighbouring countries tariffs and non-tariffs considerations such as similar regulations similar infrastructure	3.1	33.3%	261	2.9	25.3%	83	3.1	32.6%	242	3.1	30.7%	638
Efficient financial markets	3.0	27.2%	261	2.9	22.9%	83	3.1	34.3%	251	3.0	29.4%	646
Efficient transport links to global markets	3.0	30.1%	259	3.0	33.7%	83	2.9	26.9%	234	2.9	29.3%	625
Efficient transport links to neighbouring countries	2.9	25.9%	259	2.8	22.0%	82	2.9	28.2%	238	2.9	25.8%	628
Quality of local education system healthcare system and or general infrastructure	2.8	22.0%	259	3.0	28.0%	82	3.4	40.1%	242	3.1	29.9%	633
Presence of natural resources locally or in the broader region	2.3	11.9%	244	2.5	17.9%	78	2.4	18.1%	227	2.4	15.7%	594

E. The impact of tax factors on investment and location decisions

After assessing the importance of various factors on investment and location decisions, the survey investigates the importance of specific tax factors. Respondents were invited to select from a list of 12 tax factors and to assess their importance. The question asked is the following:

"Which specific tax factors affect the investment and location decisions of your firm? Based on your experience, please assess the importance of each of the following factors. Please use a scale from 5 to 1, where 5 is extremely important and lower numbers indicate that the factor is progressively less important. If a factor is not at all important, select 1. If you have no experience or you do not know, select n/a."

On both the mean rating and the percentage of responses rating a specific tax factor with 4 or 5, the five most important factors are as follows (Table 14.B). First, uncertainty about the effective tax rate on profit was rated as the most important factor, followed by the anticipated effective level of the tax rate on profit. The third most important factor was uncertainty about input tax credits, refunds, place of supply issues for VAT/GST purposes and/or uncertainty about the tax burden of other consumption taxes (e.g. excises, sales taxes, customs duties). The fourth most important factor related to the neutrality of VAT (e. g., through the availability of input tax credits, refunds and other relief arrangements or the tax burden of other consumption taxes). The fifth most important element related to the existence of tax treaties.

Uncertainty about withholding taxes was ranked as the sixth most important factor, followed by uncertainty about and the magnitude of labour taxes. The factor considered as the least important among those presented in the survey was the presence of specific tax incentives, pointing to the fact that a predictable tax system where the corporate income tax, the VAT and withholding taxes work well is far more important to attract investment than the provision of specific tax incentives.

Two interesting observations can be made from Table 14.B. First, uncertainty about each type of tax ranks as more important than the burden of the tax itself. With the exception of labour taxes, this holds for profits taxes, VAT and other consumption taxes, withholding taxes and other taxes such as land and resources taxes. The same pattern can be observed across different types of firms: multinationals operating in more than 10 jurisdictions, multinationals operating in 10 jurisdictions or less and domestic companies (Table 15.B). This is consistent with the survey undertaken by the European Tax Policy Forum (ETPF) and the Oxford University Centre for Business Taxation (OUCBT) in early 2016.[61] It suggests that uncertainty surrounding the effective tax rate can outweigh a lower anticipated effective tax rate. The results could be driven by the fact that the survey is mainly about tax uncertainty and this could have biased responses towards indicating that uncertainty is indeed very important for investment and location decisions. Overall, the results in the survey should be taken as indicating that uncertainty is important, although it would not be correct to state that uncertainty is more important than the level of taxation.

Second, the two taxes ranked as affecting business decisions the most are the corporate income tax and VAT (or other consumption taxes). This holds for our three main types of firms with the only caveat being that the existence of tax treaties ranks as the second most important factor for

[61] Devereux (2016)

multinationals operating in more than 10 jurisdictions, after uncertainty in the corporate tax system and just before uncertainty in VAT and consumption tax systems.

Table 14.B: Importance of tax factors for investment and location decisions

	Mean	% 4 and 5	Obs.
Uncertainty about the effective tax rate on profit	3.9	60.8	635
The anticipated effective tax rate on profit	3.7	55.0	655
Uncertainty about input tax credits, refunds, place of supply issues for VAT/GST purposes and/or uncertainty about the tax burden of other consumption taxes (e. g. excises, sales taxes, custom duties)	3.6	48.0	639
The anticipated neutrality of VAT/GST (e.g., through the availability of input tax credit refund and other relief arrangements) or the tax burden of other consumption taxes (e. g., excises, sales taxes, custom duties)	3.6	46.1	651
Existence of tax treaties	3.5	46.5	643
Uncertainty about the ability to effectively obtain relief for withholding taxes	3.4	43.7	636
The anticipated effective tax rate on labour	3.3	39.7	634
Uncertainty about the effective tax rate on labour	3.3	41.9	626
The anticipated effective rate of withholding taxes	3.3	38.7	649
Specific tax incentives	3.2	35.7	639
Uncertainty about the effective tax rate of other taxes (e.g., land, resource, digital taxes and specific sector taxes)	3.2	34.0	624
The anticipated effective tax rate of other taxes (e.g., land, resource, digital taxes and specific sector taxes)	3.1	27.5	637

This table reports the results for the following question: "Which specific tax factors affect the investment and location decisions of your firm? Based on your experience, please assess the importance of each of the following factors." The respondents could choose from a scale from 5 to 1, where 5 is extremely important and lower numbers indicate that the factor is progressively less important.

Table 15.B: Importance of tax factors for investment and location decisions, by type of firms

	Multinational company operating in more than 10 jurisdictions			Multinational company operating in equal to or less than 10 jurisdictions			Domestic Company operating in only 1 jurisdiction			Overall		
	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.
Uncertainty about the effective tax rate on profit	3.9	66.3%	258	3.8	54.9%	82	3.9	60.1%	243	3.9	60.8%	635
Existence of tax treaties	3.7	53.6%	261	3.5	44.0%	84	3.4	41.9%	246	3.5	46.5%	643
Uncertainty about input tax credits refunds place of supply issues for VAT GST purposes and or uncertainty about the tax burden of other consumption taxes e g excises sales taxes custom duties	3.7	50.8%	260	3.6	45.7%	81	3.6	48.2%	247	3.6	48.0%	639
The anticipated effective tax rate on profit	3.6	50.8%	264	3.7	55.3%	85	3.9	60.1%	253	3.7	55.0%	655
Uncertainty about the ability to effectively obtain relief for withholding taxes	3.6	50.0%	258	3.4	41.5%	82	3.3	38.4%	245	3.4	43.7%	636
The anticipated neutrality of VAT GST e g through the availability of input tax credit refund and other relief arrangements or the tax burden of other consumption taxes e g excises sales taxes custom duties	3.5	44.7%	264	3.5	45.2%	84	3.6	49.4%	253	3.6	46.1%	651
The anticipated effective rate of withholding taxes	3.4	41.8%	263	3.4	36.9%	84	3.3	37.2%	250	3.3	38.7%	649
Specific tax incentives	3.3	39.0%	259	3.2	33.7%	83	3.2	34.7%	245	3.2	35.7%	639
Uncertainty about the effective tax rate on labour	3.2	38.6%	251	3.5	45.0%	80	3.5	47.8%	245	3.3	41.9%	626
Uncertainty about the effective tax rate of other taxes land resource digital taxes and specific sector taxes	3.2	32.5%	252	3.2	37.3%	83	3.2	34.2%	240	3.2	34.0%	624
The anticipated effective tax rate on labour	3.1	30.1%	256	3.5	42.5%	80	3.6	51.4%	249	3.3	39.7%	634
The anticipated effective tax rate of other taxes land resource digital taxes and specific sector taxes	3.0	23.0%	257	3.0	27.4%	84	3.2	32.7%	245	3.1	27.5%	637

The next question explored how tax uncertainty can affect business operations. The respondents were asked to select from 13 ways in which business operations were affected and multiple selections were allowed. The vast majority of the respondents selected multiple options pointing to the fact that tax uncertainty seems to affect business operations in different ways (Table 16.B). The most selected item suggests that for many firms tax uncertainty implies additional resources and costs (including management time). This was followed by the fact that tax uncertainty led to less economical/profitable investments (310 selections). These factors were followed by the following selections: tax uncertainty reduced the size or changed location of investment (289 selections), led to a change in business structure (288 selections) and led to forgone investment opportunities (267 selections). For many respondents, tax uncertainty has also affected potential investment through an increased risk premium or tax rate assumption (i.e., hurdle rate), an item selected 239 times.

Table 16.B: How tax uncertainty affected business operations

	No. of selections
Additional resource expenditures (including management time) incurred to manage tax uncertainty	326
Led to less economical/profitable investments	310
Reduced or changed location of investment	289
Change in business structure	288
Forgone investment opportunities	267
Increased risk premium or tax rate assumption (hurdle rate) for potential investment	239
Relocation of facilities, employees, or intellectual property	188
Change in the location of the supply chain	177
Reduced or changed location of production	147
Forgone sales opportunities	135
Reduced or changed location of sales	126
The firm took advantage of tax uncertainty to reduce firm's tax liability in a country	59
Tax uncertainty provided some positive opportunities	19
No effect	78

This table reports the results for the following question: "In your experience, in which of the following ways has tax uncertainty affected business operations?" The respondents could choose as many as applicable.

F. Sources of Tax Uncertainty

A better understanding of how to increase certainty and foster predictability in the tax system can be based on an improved understanding of which specific factors create uncertainty for businesses. In this section, we draw upon the survey results to explore some of the distinct elements that have created or could create uncertainty for businesses in the tax system.

The survey asked respondents to rate a list of factors according to their importance in creating uncertainty. More specifically, the question asked:

"Please identify in your experience how important each of the below factors has been in increasing the overall uncertainty on tax issues in the countries you have selected. Again, please use a scale from 5 to 1; please use 5 when the factor is extremely important and lower numbers when it is progressively less important. If a factor is not at all important in a specific country, select 1. If you have not experienced a specific factor or you do not know, select n/a."

Respondents were invited to select from a list of 21 factors and rate each factor across four countries selected by the respondent. The factors were classified according to four dimensions: tax policy design and legislation, tax administration, dispute resolution and specific international dimensions. Table 17.B presents the overall results aggregating the responses across all the selected countries.

18 out of 21 factors were rated with a score of 3 or above, implying that such factors were deemed to be an important source of tax uncertainty. The factors selected as the overall most important in creating uncertainty generally fell within the tax administration dimension. In particular, "*Considerable bureaucracy to comply with tax legislation, including documentation requirements*" and "*Unpredictable or inconsistent treatment by the tax authority*" were ranked as the 2 most important sources of tax uncertainty with an overall mean score of 3.5 for both items and 49% and 48% of respondents rating them as very important (4) or extremely important (5), respectively.

The next three most important factors related to the international dimension of the tax system, dispute resolution and tax policy design and legislation.

In the international taxation area, "*Inconsistencies or conflicts between tax authorities on their interpretations of international tax standards (e.g., on transfer pricing or VAT/GST)*" received an overall rating of 3.4 and about 43% of respondents rated it 4 or 5.

In the dispute resolution area, the factor "*Lengthy decision making of the courts tribunals or other relevant bodies*" and the factor "*Unpredictable and inconsistent treatment by the courts*" received an average score of 3.34 and 3.26 respectively with about 41% of the respondents rating them with 4 or 5.

In tax policy design and legislation, "*Complexity in the tax legislation (e.g. different definition of permanent establishment for VAT/GST and CIT purposes)*" and "*Unclear, poorly drafted tax legislation*" also received an average score of 3.3 and 3.25 respectively with 37.5% and 35.8% of the respondents rating them with 4 or 5 respectively.

Only 3 factors scored an overall mean of less than 3. In the context of tax policy design and legislation, the "*Lack of statute limitations*" had a mean score of 2.6, the lowest in the entire question with only about 21% of respondents rating such factor with a 4 or 5 (very important or extremely important). In the context of tax administration, the "*General poor relationship with the tax authority*" had a mean score of 2.9 with 29% of respondents rating it with a 4 or 5. In dispute resolution, the "*Corruption in the adjudication system*'' had a mean score of 2.9, but slightly more than one third of respondents stated that corruption was very important in creating uncertainty. This factor relates specifically to corruption in the adjudication system and it is different from the broader idea of corruption in a country and discussed in Table 11.B. This could explain why on average the two types of corruption are ranked in differently by the respondents.

Table 17.B: Important of each of the factors in increasing tax certainty			
	Mean	**% of 4 & 5**	**Obs.***
Tax Policy Design and Legislation			
Complexity in the tax legislation (e.g. different definition of permanent establishment for VAT/GST and CIT purposes)	3.30	37.5	1144
Unclear, poorly drafted tax legislation	3.25	35.8	1143
Frequent changes in the statutory tax system (rates, deductions, credits, new taxes, etc..), regulations and guidance	3.18	34.4	1115
Uncertainty about the ability to obtain withholding tax relief (e.g. for withholding taxes on portfolio investment) or claim VAT/GST input tax credits or refunds	3.11	34.7	1071
Retroactive changes to tax law	3.05	34.5	1055
Lack of statute of limitations	2.63	20.8	915
Tax Administration			
Considerable bureaucracy to comply with tax legislation, including documentation requirements	3.54	49.0	1125
Unpredictable or inconsistent treatment by the tax authority	3.53	48.3	1110
Inability to achieve early certainty pro-actively through rulings or other similar mechanisms (e.g. Advance Pricing Arrangement)	3.20	37.4	1019
Incentive structure of tax administration not aligned with a fair treatment of taxpayers	3.04	33.1	1006
Corruption in the tax system	3.02	36.1	973
General poor relationship with the tax authority	2.91	28.9	1045
Dispute Resolution			
Lengthy decision making of the courts tribunals or other relevant bodies	3.34	41.5	991
Unpredictable and inconsistent treatment by the courts	3.26	41.1	964
Lack of published decisions clarifying interpretation	2.99	31.7	987
Corruption in the adjudication system	2.95	33.9	870
Specific International Dimensions			
Inconsistencies or conflicts between tax authorities on their interpretations of international tax standards (e.g. on transfer pricing or VAT/GST)	3.38	42.6	1049
Tax legislation not in line with the evolution of new business models	3.26	38.2	1024
Lack of expertise in tax administration on aspects of international taxation	3.22	38.1	1044
Lack of understanding of international business	3.19	37.5	1033
Conflicts between international standards (e.g. as a result of difference between the OECD and UN model tax convention)	3.08	33.5	963

This table reports the results for the following question: "Please identify in your experience how important each of the below factors has been in increasing the overall uncertainty on tax issues in the countries you have selected?" The respondents could choose from a scale from 5 to 1, where 5 is extremely important and lower numbers indicate that the factor is progressively less important.

** The question represented in this table was asked separately for each country selected by the respondents. Each respondent could select a maximum of 4 countries. This explains why the total number of observations is larger than the number of respondents.*

G. ***Tools that have enhanced or could enhance tax certainty***

Finally, the survey attempts to identify how tax certainty could be enhanced by asking respondents to rate a list of tools which have or could have a positive impact on predictability in the tax system. The specific question asked is:

"Which of the following tools have enhanced or could enhance certainty in the tax system? Again, please use a scale from 5 to 1, please use 5 when the specific tool has increased or could increase certainty substantially and lower numbers when the tool is progressively less important. If a tool is not at all important, select 1. If you do not know, select n/a."

Respondents were invited to select from a list of 25 tools. As for the list of sources of tax uncertainty, the tools related to four dimensions: tax policy design and legislation, tax administration, dispute resolution and specific international dimensions. Table 18.B shows the results.

Tools under tax policy design and legislation take up 7 of the top 10 places in the respondents' assessment. Such tools are ''*Reduced frequency of changes in the tax legislation*" (with a mean of 4.1 and 67% of respondents rating it as 4 or 5), "*Reduction of bureaucracy to comply with tax legislation*" (with a mean of 4 and 64.2% of respondents rating it as 4 or 5), "*Detailed guidance in tax regulations*'' (with a mean of 3.9 and 60.6% of respondents rating it as 4 or 5), "*Changes in statutory tax system announced in advance*" (with a mean of 3.9 and 59% of respondents rating it as 4 or 5), "*Reduced length and complexity of the tax legislation*" (with a mean of 3.8 and 56 of respondents rating it as 4 or 5) and ''*Domestic tax legislation in line with international taxation standards*'' (with a mean of 3.8 and 57% of respondents rating it as 4 or 5), "*Timely consultation with taxpayers when changes are introduced*" (with a mean of 3.8 and 55% of respondents rating it as 4 or 5).

Even though outside of the top ten, other tools in tax policy design and legislation were rated very important for the resolution of uncertainty. "*International consensus on general principles for tax certainty*" has an average score of 3.7 with 52% of the respondents rating it as very or extremely important. "*Streamlined and effective withholding tax relief reclaim systems*" and "*The use of bright line rules, e.g. transfer pricing based on sector specific profit margins*" were also considered very important tools for 47% and 43% of the respondents, respectively. These figures increase to 59% and 55% for the respondents from the financial and insurance sector (Table 19.B).

Tax administration was identified as the area of most concerns for the creation of tax uncertainty. In the area of tax administration, "*Increased transparency from tax administrations in relation to their compliance approaches*" and ''*Efficient communication between taxpayers and administration, e.g., by digital means*" appear in the group of 10 most important tools for reducing tax uncertainty with a score of 3.8 for both and a percentage of respondents rating them as a 4 or a 5 equal to 54% and 56%, respectively.

Other important tools which seem to be very important to reduce uncertainty for at least a third of the respondents are "*Timely communication of tax authority during tax audits*", "*Increased transparency from tax administrations in relation to their risk assessment protocols*", "*The existence of simplified approaches for tax compliance, e. g., safe harbours*'', "*Co-operative compliance* *programmes in a single jurisdiction*'', "*Advance pricing arrangement APA in a single jurisdiction*", and "*Capacity Building Programmes for tax authorities*".

In the area of dispute resolution, "*Effective domestic dispute resolution regimes*" featured among the top 10 most important tools for enhancing tax certainty with a score of 3.9 with 58% of respondents rating it as 4 or 5. With a slightly lower average score (3.7) but with 50% of the respondents considering it a very important tool, "*Mutual Agreement Procedure (MAP)*" had been identified as a key tool to support tax certainty. "*Mandatory binding arbitration*" scores slightly lower with 44% of the respondents considering it very important.

The survey also asked respondents to rate tools related to the international dimension of tax systems and in particular, "Multilateral APAs in collaboration with other jurisdictions", "Multilateral co-operative compliance programmes in collaboration with other jurisdictions" and "Multilateral audits in collaboration with other jurisdictions". These tools are more relevant for multinational firms with their activities occurring across borders. Additionally, these tools are innovative and have not been in existence before or have only been employed very recently and in a limited number of cases. This explains the lower overall rating for these tools, however, it is striking to note that even in these circumstances, both multilateral APAs and multilateral co-operative compliance programmes were rated as very or extremely important in enhancing tax certainty by more than 30% of all respondents. In this context, it is useful to look at the results disaggregated by type of firms (Table 20.B). With respect to the overall sample, the importance of multilateral APAs was substantially higher for multinationals operating in more than 10 jurisdictions. The mean score was 3.5 (versus 3.3 in the overall sample) and 44% (versus 36% in the overall sample) of the multinational respondents considered it as a very or extremely important tool. The figures for multinationals operating in less than 10 jurisdictions were more closely aligned with the overall results.

The same approach can be applied in relation to multilateral cooperative compliance programmes. For multinationals operating in more than 10 jurisdictions, the mean score was 3.3 (versus 3.2 in the overall sample) and 36% (versus 31% in the overall sample) of the multinational respondents considered it as very or extremely important. The figures for multinationals operating in less than 10 jurisdictions are instead in line with the overall results.

Finally, for multilateral audits, the mean score for multinationals operating in more than 10 jurisdictions was 3, which was the same as the overall sample. 24.4% (versus 25% in the overall sample) of the multinational respondents considered it to be a very or extremely important tool. Multinationals operating in less than 10 jurisdictions instead rated multilateral audits with a higher mean score of 3.2 and a higher percentage of respondents stating they were a very or extremely important tool in increasing tax certainty (30.4%).

In the context of international taxation, it is worth noting that inconsistencies or conflicts between tax authorities on their interpretations of international tax standards (e.g. on transfer pricing or VAT/GST) was ranked as the third most important source of tax uncertainty. Also, over 50% of the respondents rated international consensus on general principles for tax certainty with score 4 and 5.

Table 18.B: Importance of various tools to enhance tax certainty			
	Mean	**% 4 and 5**	**Obs.**
Tax Policy Design and Legislation			
Reduced frequency of changes in the tax legislation	4.1	66.7	636
Reduction of bureaucracy to comply with tax legislation	4.0	64.2	634
Detailed guidance in tax regulations	3.9	60.6	635
Changes in statutory tax system announced in advance	3.9	58.6	633
Reduced length and complexity of the tax legislation	3.8	56.1	633
Domestic tax legislation in line with international taxation standards	3.8	56.8	632
Timely consultation with taxpayers when changes are introduced	3.8	55.4	625
International consensus on general principles for tax certainty	3.7	52.0	623
Streamlined and effective withholding tax relief reclaim systems	3.6	47.2	612
The use of bright line rules e g transfer pricing based on sector specific profit margins	3.4	43.4	581
Tax Administration			
Increased transparency from tax administrations in relation to their compliance approaches	3.8	53.5	632
Efficient communication between taxpayers and administration e g by digital means	3.8	55.7	621
Timely communication of tax authority during tax audits	3.7	48.5	612
Increased transparency from tax administrations in relation to their risk assessment protocols	3.6	48.9	616
The existence of simplified approaches for tax compliance e g safe harbours	3.5	44.2	606
Co-operative compliance programmes in a single jurisdiction	3.3	36.4	588
Advance pricing arrangement APA in a single jurisdiction	3.3	36.3	571
Capacity Building Programmes for tax authorities	3.2	31.2	552
Other rulings regimes	3.1	28.2	528
Dispute Resolution			
Effective domestic dispute resolution regimes	3.9	57.6	606
Mutual agreement procedure MAP	3.7	50.0	580
Mandatory Binding Arbitration	3.5	43.6	560
Specific International Dimensions			
Multilateral APAs in collaboration with other jurisdictions	3.3	35.9	537
Multilateral co-operative compliance programmes in collaboration with other jurisdictions	3.2	31.4	545
Multilateral audits in collaboration with other jurisdictions	3.0	25.0	537

This table reports the results for the following question: "Which of the following tools has enhanced or could enhance certainty in the tax system?" The respondents could choose from a scale from 5 to 1, where 5 is the specific tool has increased or could increase certainty substantially and lower numbers when the tool is progressively less important.

Table 19.B: Importance of tools to enhanced tax certainty, by top 5 sectors

	Manufacturing		Financial & Insurances activities		Wholesale & Retail Trade		Professional, Scientific and Technical activities		Information & Communication	
	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5
Tax Policy Design and Legislation										
Reduced frequency of changes in the tax legislation	4.0	68.7%	4.1	68.2%	4.0	60.0%	4.0	65.4%	3.9	64.3%
Reduction of bureaucracy to comply with tax legislation	4.0	65.6%	4.0	63.6%	4.0	63.5%	4.0	64.7%	3.8	59.5%
Detailed guidance in tax regulations	3.9	59.0%	4.2	68.2%	3.9	60.0%	4.0	68.6%	3.8	65.9%
Changes in statutory tax system announced in advance	3.9	58.6%	4.1	65.9%	3.9	55.3%	4.1	66.7%	4.0	69.0%
Reduced length and complexity of the tax legislation	3.8	57.1%	3.8	54.5%	3.8	52.9%	3.8	54.9%	3.9	61.9%
Domestic tax legislation in line with international taxation standards	4.0	66.8%	3.7	51.7%	3.8	52.9%	3.8	51.0%	3.9	62.8%
Timely consultation with taxpayers when changes are introduced	3.7	52.9%	3.9	56.3%	3.9	61.2%	3.8	54.9%	3.7	54.8%
International consensus on general principles for tax certainty	3.8	57.1%	3.7	50.0%	3.6	45.8%	3.6	50.0%	3.7	53.5%
Streamlined and effective withholding tax relief reclaim systems	3.6	46.8%	3.9	58.6%	3.6	45.1%	3.4	41.7%	3.5	50.0%
The use of bright line rules e g transfer pricing based on sector specific profit margins	3.5	41.2%	3.7	54.8%	3.4	41.9%	3.4	37.5%	3.4	55.0%
Tax Administration										
Increased transparency from tax administrations in relation to their compliance approaches	3.7	49.0%	4.0	58.4%	3.8	50.6%	4.1	66.7%	3.7	48.8%
Efficient communication between taxpayers and administration e g by digital means	3.7	51.0%	3.9	58.6%	4.0	61.3%	3.9	56.9%	3.6	57.1%
Timely communication of tax authority during tax audits	3.6	46.3%	3.6	51.2%	3.7	48.8%	3.5	47.9%	3.6	46.3%
Increased transparency from tax administrations in relation to their risk assessment protocols	3.6	46.6%	3.7	48.3%	3.6	42.2%	3.8	63.3%	3.6	52.5%
The existence of simplified approaches for tax compliance e g safe harbours	3.6	46.7%	3.6	46.0%	3.5	38.0%	3.7	48.0%	3.4	38.1%
Co-operative compliance programmes in a single jurisdiction	3.3	32.0%	3.4	36.9%	3.3	31.1%	3.6	50.0%	3.5	50.0%
Advance pricing arrangement APA in a single jurisdiction	3.3	34.6%	3.5	44.0%	3.1	28.6%	3.7	51.0%	3.2	35.9%
Capacity Building Programmes for tax authorities	3.2	30.7%	3.2	34.1%	3.2	26.5%	3.1	30.4%	3.0	27.5%
Other rulings regimes	3.0	24.4%	3.2	28.8%	3.0	17.7%	3.4	41.7%	3.2	34.3%
Dispute Resolution										
Effective domestic dispute resolution regimes	4.0	60.1%	4.0	59.8%	3.7	48.0%	4.1	70.6%	3.9	58.5%
Mutual agreement procedure MAP	3.8	54.2%	3.6	48.8%	3.7	46.5%	3.9	64.6%	3.5	46.2%
Mandatory Binding Arbitration	3.7	47.6%	3.3	34.9%	3.4	40.9%	3.6	50.0%	3.6	54.1%
Specific International Dimensions										
Multilateral APAs in collaboration with other jurisdictions	3.5	41.0%	3.2	37.5%	3.2	23.7%	3.4	34.1%	3.3	40.0%
Multilateral co-operative compliance programmes in collaboration with other jurisdictions	3.4	35.4%	3.2	34.6%	3.2	23.4%	3.1	27.3%	3.2	36.1%
Multilateral audits in collaboration with other jurisdictions	3.1	26.7%	2.9	20.3%	2.9	15.9%	3.1	25.6%	2.9	17.1%

Table 20.B: Importance of tools to enhanced tax certainty, by type of firms

	Multinational company operating in more than 10 jurisdictions			Multinational company operating in equal to or less than 10 jurisdictions			Domestic Company operating in only 1 jurisdiction			Overall		
	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.
Tax Policy Design and Legislation												
Domestic tax legislation in line with international taxation standards	4.0	67.8%	261	4.0	66.7%	81	3.6	43.2%	241	3.8	56.8	632
Reduced frequency of changes in the tax legislation	4.0	69.0%	258	4.1	63.9%	83	4.1	65.3%	245	4.1	66.7	636
Detailed guidance in tax regulations	4.0	65.6%	259	3.9	57.8%	83	3.9	57.4%	242	3.9	60.6	635
Changes in statutory tax system announced in advance	4.0	62.8%	258	3.9	60.2%	83	3.8	53.3%	242	3.9	58.6	633
Reduction of bureaucracy to comply with tax legislation	3.9	62.0%	258	4.1	68.2%	85	4.1	65.3%	242	4.0	64.2	634
International consensus on general principles for tax certainty	3.8	60.1%	258	3.6	47.0%	83	3.6	42.7%	234	3.7	52.0	623
Reduced length and complexity of the tax legislation	3.8	56.2%	258	3.8	56.6%	83	3.9	57.2%	243	3.8	56.1	633
Timely consultation with taxpayers when changes are introduced	3.7	54.9%	255	3.8	59.8%	82	3.8	54.4%	239	3.8	55.4	625
Streamlined and effective withholding tax relief reclaim systems	3.7	48.6%	253	3.7	54.9%	82	3.6	43.9%	230	3.6	47.2	612
The use of bright line rules (e. g., transfer pricing based on sector specific profit margins)	3.5	46.7%	242	3.5	46.2%	78	3.4	41.7%	216	3.4	43.4	581
Tax Administration												
Increased transparency from tax administrations in relation to their compliance approaches	3.8	55.6%	259	3.8	53.6%	84	3.9	52.7%	239	3.8	53.5	632
Timely communication of tax authority during tax audits	3.7	48.4%	250	3.6	45.1%	82	3.6	47.0%	234	3.7	48.5	612
Increased transparency from tax administrations in relation to their risk assessment protocols	3.7	49.6%	254	3.6	50.6%	83	3.7	48.3%	232	3.6	48.9	616
Efficient communication between taxpayers and administration e g by digital means	3.6	47.4%	251	3.9	63.1%	84	3.9	61.1%	239	3.8	55.7	621
The existence of simplified approaches for tax compliance e g safe harbours	3.6	46.6%	253	3.7	53.8%	78	3.5	36.1%	227	3.5	44.2	606
Co-operative compliance programmes in a single jurisdiction	3.3	38.3%	243	3.4	38.7%	75	3.3	32.9%	222	3.3	36.4	588
Advance pricing arrangement APA in a single jurisdiction	3.3	38.7%	248	3.3	33.3%	72	3.3	32.8%	204	3.3	36.3	571
Other rulings regimes	3.2	34.5%	238	3.0	24.6%	65	3.0	21.9%	183	3.1	28.2	528
Capacity Building Programmes for tax authorities	3.2	29.8%	225	3.2	32.9%	76	3.2	29.6%	206	3.2	31.2	552
Dispute Resolution												
Effective domestic dispute resolution regimes	4.0	64.8%	253	3.8	54.7%	75	3.8	50.4%	230	3.9	57.6	606
Mutual agreement procedure MAP	3.8	57.2%	243	3.6	43.8%	73	3.6	42.0%	219	3.7	50.0	580
Mandatory Binding Arbitration	3.7	50.6%	241	3.3	39.7%	68	3.4	34.0%	206	3.5	43.6	560
Specific International Dimensions												
Multilateral APAs in collaboration with other jurisdictions	3.5	44.4%	241	3.3	35.7%	70	3.1	24.0%	183	3.3	35.9	537
Multilateral co-operative compliance programmes in collaboration with other jurisdictions	3.3	35.9%	237	3.3	30.1%	73	3.1	25.5%	192	3.2	31.4	545
Multilateral audits in collaboration with other jurisdictions	3.0	24.4%	238	3.2	30.4%	69	3.0	23.1%	186	3.0	25.0	537

D. Additional tables of interest

Table 21.B: Sources of tax uncertainty, by type of firms

	Multinational company operating in more than 10 jurisdictions			Multinational company operating in equal to or less than 10 jurisdictions			Domestic Company operating in only 1 jurisdiction			Overall		
	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.	Mean	% of 4 and 5	Obs.
Tax Policy Design and Legislation												
Complexity in the tax legislation (e.g. different definition of permanent establishment for VAT/GST and CIT purposes)	3.3	38.7%	608	3.2	36.6%	164	3.5	35.7%	277	3.3	37.5%	1144
Unclear, poorly drafted tax legislation	3.2	34.2%	599	3.2	34.3%	166	3.5	39.2%	286	3.3	35.8%	1143
Frequent changes in the statutory tax system (rates, deductions, credits, new taxes, etc..), regulations and guidance	3.1	34.6%	587	3.1	30.4%	161	3.4	36.7%	275	3.2	34.4%	1115
Uncertainty about the ability to obtain withholding tax relief (e.g. for withholding taxes on portfolio investment) or claim VAT/GST input tax credits or refunds	3.1	35.2%	562	3.1	34.8%	164	3.2	31.9%	260	3.1	34.7%	1071
Retroactive changes to tax law	3.0	34.2%	544	3.0	36.2%	163	3.3	35.0%	260	3.1	34.5%	1055
Lack of statute of limitations	2.5	19.5%	483	2.8	24.0%	129	2.9	22.6%	234	2.6	20.8%	915
Tax Administration												
Considerable bureaucracy to comply with tax legislation, including documentation requirements	3.5	50.6%	595	3.4	44.6%	168	3.6	50.4%	270	3.5	49.0%	1125
Unpredictable or inconsistent treatment by the tax authority	3.5	47.8%	596	3.3	42.9%	161	3.7	51.3%	263	3.5	48.3%	1110
Inability to achieve early certainty pro-actively through rulings or other similar mechanisms (e.g. Advance Pricing Arrangement)	3.2	41.2%	548	3.1	35.7%	154	3.3	29.1%	234	3.2	37.4%	1019
Incentive structure of tax administration not aligned with a fair treatment of taxpayers	2.9	31.8%	532	3.0	35.3%	150	3.2	33.5%	251	3.0	33.1%	1006
Corruption in the tax system	2.8	31.4%	493	3.0	35.0%	160	3.5	47.0%	249	3.0	36.1%	973
General poor relationship with the tax authority	2.8	27.6%	550	3.0	36.1%	158	3.1	30.2%	252	2.9	28.9%	1045
Dispute Resolution												
Lengthy decision making of the courts tribunals or other relevant bodies	3.3	42.3%	518	3.2	38.3%	149	3.5	43.1%	246	3.3	41.5%	991
Unpredictable and inconsistent treatment by the courts	3.2	39.8%	500	3.1	37.0%	146	3.5	46.1%	241	3.3	41.1%	964
Lack of published decisions clarifying interpretation	2.9	28.1%	530	2.9	31.5%	146	3.3	38.7%	238	3.0	31.7%	987
Corruption in the adjudication system	2.7	28.9%	429	2.8	30.4%	138	3.4	44.7%	235	2.9	33.9%	870
Specific International Dimensions												
Inconsistencies or conflicts between tax authorities on their interpretations of international tax standards (e.g. on transfer pricing or VAT/GST)	3.4	47.5%	570	3.4	41.0%	156	3.3	35.8%	243	3.4	42.6%	1049
Lack of expertise in tax administration on aspects of international taxation	3.2	40.3%	566	3.3	41.9%	155	3.3	31.8%	239	3.2	38.1%	1044
Tax legislation not in line with the evolution of new business models	3.2	37.6%	548	3.4	40.5%	153	3.4	39.6%	245	3.3	38.2%	1024
Lack of understanding of international business	3.2	39.8%	560	3.2	35.1%	151	3.3	33.6%	238	3.2	37.5%	1033
Conflicts between international standards (e.g. as a result of difference between the OECD and UN model tax convention)	3.1	38.3%	530	2.8	24.4%	135	3.1	26.9%	219	3.1	33.5%	963

Table 22.B: Importance of business factor for investment and location decisions, by top 5 sectors

	Manufacturing		Financial & Insurances activities		Wholesale & Retail Trade		Professional, Scientific and Technical activities		Information & Communication		Overall	
	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5
Corruption	3.8	53.3%	4.0	59.1%	3.8	50.0%	4.1	70.4%	4.0	65.9%	3.9	56.8%
Political Certainty	3.8	54.3%	4.0	62.9%	3.8	51.2%	3.7	50.9%	3.9	64.4%	3.8	56.1%
The overall tax environment	3.7	52.9%	3.7	52.7%	3.8	58.1%	4.1	67.3%	3.7	53.3%	3.8	55.9%
Current and expected macroeconomic conditions in the country	3.7	51.4%	3.9	56.0%	3.8	58.3%	3.7	49.1%	3.7	53.3%	3.8	54.8%
Labour costs	3.7	50.9%	3.2	34.1%	3.5	39.5%	3.5	46.3%	3.3	37.2%	3.5	42.3%
Availability of highly skilled labour	3.4	42.8%	3.4	41.9%	3.4	38.4%	3.7	52.8%	3.5	39.5%	3.4	41.2%
Cost of complying with regulations	3.2	32.0%	3.8	52.3%	3.3	34.9%	3.7	51.9%	3.5	45.5%	3.4	38.7%
Availability and quality of digital infrastructure	3.1	25.5%	3.7	51.7%	3.4	39.3%	3.7	51.9%	4.3	79.5%	3.4	39.2%
Large and or sophisticated local customer base for the products services of the firm	3.3	37.0%	3.4	39.5%	3.5	42.7%	3.3	34.6%	3.5	50.0%	3.3	36.7%
Security Crime risk	3.2	30.0%	3.6	46.6%	3.1	24.7%	3.2	29.6%	3.3	34.1%	3.3	33.2%
Exchange rate risk	3.2	30.9%	3.4	47.7%	3.4	44.7%	2.8	25.9%	3.0	25.6%	3.1	33.1%
Ease of trade with the wider world	3.4	39.0%	2.8	23.8%	3.4	36.5%	3.0	19.2%	3.1	36.6%	3.1	32.7%
Proximity to other parts of the business to suppliers and or to competitors	3.3	37.4%	2.8	18.8%	3.2	29.1%	3.0	15.1%	2.7	18.6%	3.1	28.0%
Quality of local education system healthcare system and or general infrastructure	3.1	28.5%	3.1	37.0%	3.2	25.0%	3.3	37.7%	3.1	30.2%	3.1	29.9%
Large and or sophisticated customer base in the broader region	3.3	38.0%	2.9	26.5%	2.9	26.6%	3.1	24.0%	3.1	34.2%	3.1	30.4%
General ease of trading with neighbouring countries tariffs and non-tariffs considerations such as similar regulations similar infrastructure	3.3	41.6%	2.8	20.5%	3.3	34.9%	2.9	19.6%	2.7	19.0%	3.1	30.7%
Efficient financial markets	2.8	19.7%	4.0	65.6%	3.0	26.5%	3.0	27.5%	3.0	32.6%	3.0	29.4%
Efficient transport links to global markets	3.3	42.9%	2.4	8.1%	3.1	26.5%	2.7	20.0%	2.3	11.6%	2.9	29.3%
Efficient transport links to neighbouring countries	3.3	37.9%	2.3	9.7%	3.3	34.9%	2.6	13.7%	2.1	2.3%	2.9	25.8%
Presence of natural resources locally or in the broader region	2.4	14.5%	1.9	9.7%	2.3	15.1%	2.2	11.8%	1.6	0.0%	2.4	15.7%

Table 23.B: Importance of tax factor for investment and location decisions, by top 5 sectors

	Manufacturing		Financial & Insurances activities		Wholesale & Retail Trade		Professional, Scientific and Technical activities		Information & Communication		Overall	
	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5	Mean	% of 4 and 5
Uncertainty about the effective tax rate on profit	3.9	61.1%	3.9	57.6%	3.7	52.4%	4.1	71.4%	4.2	76.7%	3.9	60.8%
The anticipated effective tax rate on profit	3.7	55.0%	3.8	56.2%	3.7	55.3%	3.9	63.6%	3.9	65.1%	3.7	55.0%
Uncertainty about input tax credits refunds place of supply issues for VAT GST purposes and or uncertainty about the tax burden of other consumption taxes (e. g., excises, sales taxes, custom duties)	3.7	52.3%	3.5	40.2%	3.6	50.6%	3.7	52.7%	3.6	40.5%	3.6	48.0%
The anticipated neutrality of VAT GST e g through the availability of input tax credit refund and other relief arrangements or the tax burden of other consumption taxes (e. g., excises, sales taxes, custom duties)	3.6	50.0%	3.1	26.7%	3.6	51.2%	3.7	50.9%	3.6	41.9%	3.6	46.1%
Existence of tax treaties	3.5	46.3%	3.6	50.0%	3.2	32.5%	3.8	63.6%	3.5	50.0%	3.5	46.5%
Uncertainty about the ability to effectively obtain relief for withholding taxes	3.4	40.7%	3.4	43.8%	3.1	35.4%	3.9	61.8%	3.9	59.5%	3.4	43.7%
The anticipated effective tax rate on labour	3.3	37.9%	3.3	41.0%	3.6	42.4%	3.6	49.1%	3.2	34.9%	3.3	39.7%
Uncertainty about the effective tax rate on labour	3.3	44.2%	3.2	38.6%	3.4	39.0%	3.7	49.1%	3.5	48.8%	3.3	41.9%
The anticipated effective rate of withholding taxes	3.3	35.6%	3.3	38.2%	3.1	32.5%	3.8	54.5%	3.7	48.8%	3.3	38.7%
Specific tax incentives	3.4	42.5%	2.9	23.5%	3.1	28.4%	3.4	40.0%	3.2	36.6%	3.2	35.7%
Uncertainty about the effective tax rate of other taxes (e.g., land, resource, digital taxes and specific sector taxes)	3.2	33.2%	3.1	30.0%	2.9	30.0%	3.5	45.5%	3.4	41.9%	3.2	34.0%
The anticipated effective tax rate of other taxes (e.g., land, resource, digital taxes and specific sector taxes)	3.0	23.1%	3.0	22.4%	3.0	29.6%	3.4	35.2%	3.2	34.1%	3.1	27.5%

Appendix C
The Tax Administration Survey[62]

In January 2017, the Forum on Tax Administration (FTA) launched a tax administration survey to gather the views of tax authorities on the sources of tax uncertainty and on possible solutions to foster greater certainty in the tax system. The survey was completed, on a confidential basis, by 25 tax authorities from predominantly OECD and G20 countries. This Appendix presents the main results.

Priority to enhance tax certainty

Respondents were asked: *"To what extent is enhancing tax certainty a current priority for your country's tax administration?"* Respondents were invited to select from a scale from 5 to 1, where 5 is high priority and 1 is low priority.

84% of the respondents rated it as 4 or 5 and the mean score was 4.2. A large majority of tax administrations noted that tax certainty is a high priority in their country.

Importance of tax certainty for business taxpayers

The survey asked: *"In your view, how important is tax certainty for business taxpayers in your country?"* Respondents were asked to select from a scale from 5 to 1, where 5 is extremely important and 1 is not important.

88% of the respondents rated it as 4 or 5 and the mean score was 4.6. The tax authorities consider that tax certainty is a very or extremely important issue for business taxpayers.

Sources of Tax Uncertainty

The survey asked respondents to rate a list of factors according to their importance in causing uncertainty, regardless of whether or not the factors are within the control of the tax administration. More specifically, the question asked:

"The following factors (legal systems, tax administration, dispute resolution, and specific international dimensions) have been identified as increasing the overall uncertainty on tax issues. Please identify from your tax administration's perspective the extent to which you believe each of these factors contributes to tax uncertainty for business taxpayers in your country's tax system, regardless of whether or not the factors are within the control of the tax administration to influence. Please use a scale from 5 to 1, please use 5 when the factor is a significant cause of uncertainty and lower numbers when it is progressively less important. If a factor is not at all important as a cause of uncertainty, select 1."

Respondents were invited to select from a list of 21 factors across four categories (i.e., legal systems, tax administration, dispute resolution, and specific international dimension). Table 1.C shows the results on which Figure 7 in the main text is based.

[62] The appendix was prepared by the OECD.

Table 1.C: Importance of each of the factors in increasing tax uncertainty		
	Mean	**% of 4 & 5**
Tax Policy Design & Legislation		
Complexity in the tax legislation (e.g. different definition of permanent establishment for VAT/GST and CIT purposes)	3.12	36
Unclear, poorly drafted tax legislation	2.80	20
Frequent changes in the statutory tax system (rates, deductions, credits, new taxes, etc..), regulations and guidance	2.76	36
Uncertainty about the ability to obtain withholding tax relief (e.g. for withholding taxes on portfolio investment) or claim VAT/GST input tax credits or refunds	2.08	8
Retroactive changes to tax law	2.04	24
Lack of statute of limitations	1.64	12
Tax Administration		
Considerable bureaucracy to comply with tax legislation, including documentation requirements	2.48	12
Inability to achieve early certainty pro-actively through rulings or other similar mechanisms (e.g., Advance Pricing Arrangement)	2.20	12
Corruption in the tax system	1.96	24
General poor relationship with the tax authority	1.92	12
Incentive structure of tax administration not aligned with a fair treatment of taxpayers	1.80	8
Dispute Resolution		
Lengthy decision making of the courts tribunals or other relevant bodies	3.00	32
Unpredictable and inconsistent treatment by the courts	2.48	28
Lack of published decisions clarifying interpretation	2.32	20
Corruption in the adjudication system	1.88	20
Specific International Dimensions		
Inconsistencies or conflicts between tax authorities on their interpretations of international tax standards (e.g. on transfer pricing or VAT/GST)	2.64	24
Lack of understanding of international business	2.44	8
Tax legislation not in line with the evolution of new business models	2.40	12
Lack of expertise in tax administration on aspects of international taxation	2.20	8
Conflicts between international standards (e.g., as a result of difference between the OECD and UN model tax convention)	2.18	12

Within the control/Ability of the tax administration to reduce tax uncertainty

The survey asked:

"Based on your responses to question 3, to what extent do you think your tax administration has the ability to reduce tax uncertainty in your country, meaning those factors rated as 4 or 5 are within the control of the tax administration to address? Please use a scale from 5 to 1, please use 5 when the factors are largely within the control of the tax administration to address and lower numbers when it is progressively less control. If the factors are largely outside the control of the tax administration to address, select 1."

8% of the respondents rated it with 4 or 5 (factors largely within the control of the tax administration to address) and the overall mean score was 2.6.

Tools that have enhanced or could enhance tax certainty

The survey asked:

"The following tools have been identified as potential solutions to enhancing certainty in the tax system in regard to legal systems, tax administration, dispute resolution, and specific international dimensions. Please identify from your perspective the extent to which you think each tool could enhance tax certainty in your country's tax system, regardless of whether or not the tools are within the control of the tax administration. Please use a scale from 5 to 1, please use 5 when the specific tool has increased or could increase certainty substantially and lower numbers when the tools is progressively less relevant or useful. If the specific tool is not that relevant or useful, select 1."

Respondents were invited to select from a list of 25 tools. As for the list of sources of tax uncertainty, the tools related to four categories: tax policy design & legislation, tax administration, dispute resolution and specific international dimensions. Table 2.C shows the results on which Figure 8 in the main text is based.

Table 2.C: Importance of various tools to enhance tax certainty		
	Mean	% 4 and 5
Tax Policy Design & Legislation		
Detailed guidance in tax regulations	4.24	84
International consensus on general principles for tax certainty	4.04	72
Changes in statutory tax system announced in advance	4.00	76
Reduced length and complexity of the tax legislation	4.00	76
Domestic tax legislation in line with international taxation standards	3.88	68
Reduced frequency of changes in the tax legislation	3.80	64
Streamlined and effective withholding tax relief reclaim systems	3.68	60
Timely consultation with taxpayers when changes are introduced	3.56	56
Reduction of bureaucracy to comply with tax legislation	3.16	44
The use of bright line rules e.g., transfer pricing based on sector specific profit margins	3.08	36
Tax Administration		
Timely communication of tax authority during tax audits	4.04	72
Efficient communication between taxpayers and administration e g by digital means	3.91	76
Increased transparency from tax administrations in relation to their compliance approaches	3.72	64
Capacity Building Programmes for tax authorities	3.48	60
The existence of simplified approaches for tax compliance e g safe harbours	3.39	48
Other rulings regimes	3.39	60
Co-operative compliance programmes in a single jurisdiction	3.35	52
Increased transparency from tax administrations in relation to their risk assessment protocols	3.32	52
Advance pricing arrangement APA in a single jurisdiction	2.91	40
Dispute Resolution		
Effective domestic dispute resolution regimes	4.09	76
Mutual agreement procedure MAP	4	76
Mandatory Binding Arbitration	3.65	56
Specific International Dimensions		
Multilateral APAs in collaboration with other jurisdictions	3.78	60
Multilateral audits in collaboration with other jurisdictions	3.52	44
Multilateral co-operative compliance programmes in collaboration with other jurisdictions	3.39	48

Effectiveness of the tools to enhance tax certainty (in tax administration, dispute resolution or specific international dimensions)

In this section, the survey asked:

"Which tax administration, dispute resolution or specific international solutions have you found to be most effective at enhancing certainty in you tax system? Please use a scale from 5 to 1, please use 5 when the specific tool is highly effective and lower numbers when the tool is progressively less effective. If a tool is not very effective, select 1. "

Respondents were invited to select from a list of 15 factors in three categories: tax administration, dispute resolution, and specific international dimension. Table 3.C presents the overall results.

Table 3.C: Effectiveness of each of the factors in increasing tax certainty

	Mean	% of 4 & 5
Tax Administration		
Efficient communication between taxpayers and administration e g by digital means	4.50	92
Timely communication of tax authority during tax audits	4.40	92
Increased transparency from tax administrations in relation to their compliance approaches	4.35	74
Other rulings regimes	4.10	77
Advance pricing arrangement APA in a single jurisdiction	3.90	72
Capacity Building Programmes for tax authorities	3.90	71
The existence of simplified approaches for tax compliance e g safe harbours	3.80	72
Co-operative compliance programmes in a single jurisdiction	3.70	61
Increased transparency from tax administrations in relation to their risk assessment protocols	3.70	50
Dispute Resolution		
Effective domestic dispute resolution regimes	4.30	83
Mutual agreement procedure MAP	4.10	82
Mandatory Binding Arbitration	3.80	69
Specific International Dimensions		
Multilateral APAs in collaboration with other jurisdictions	3.80	65
Multilateral audits in collaboration with other jurisdictions	3.60	39
Multilateral co-operative compliance programmes in collaboration with other jurisdictions	3.40	38

Availability of the tax administration tools to enhance tax certainty

Three tax administration solutions: "Transparency from tax administration in relation to their compliance approaches", "Efficient communication between taxpayers and administration" and "Transparency from tax administration in relation to their risk assessment protocols" were identified as the most effective in resolving uncertainty in the business survey. In response to this, tax administrations were asked to react to each of the three tax administration tools by responding to the following three questions:

i. Is this tool/practice currently available in your tax administration?

ii. If yes, to what extent is this tool/practice utilised?

iii. If no, are there plans to introduce this tool/practice?

In "Transparency from tax administration in relation to their compliance approaches":

- 88% of the respondents indicated this tool/practice is currently available. 50% of these respondents indicated that this tool/practice were utilised sometimes. 45% indicated the tool was frequently utilised and the remaining 5% indicated it was rarely utilised.
- 12% of the respondents specify this tool/practice is currently not available. 67% of these respondents indicated that there are plans to introduce this tool/practice.

In "Efficient communication between taxpayers and administration":

- All respondents indicated that this tool/practice is currently available. 65% of respondents specified this tool/practice is frequently utilised and 35% of the respondents indicated the tool is sometimes utilised. No respondents have indicated that the tool is rarely utilised.

In "Transparency from tax administration in relation to their risk assessment protocols":

- 61% of the respondents specified this tool/practice is currently available. 50% of these respondents indicated this tool/practice is utilised sometimes. 42% of the respondents specified the tool is frequently utilised and the remaining 8% of the respondents indicated that the tool is rarely utilised.
- 39% of the respondents said that this tool/practice is currently not available. 63% indicated that there are plans to introduce this tool/practice.

Tax administrations were also asked: "Do you believe that the benefits of further actions you could take to improve tax certainty would outweigh their costs and other possible disadvantages?"

79% of the tax authorities responded that the benefit would outweigh the costs and other possible disadvantages.

Willingness of business to utilise the tax administration tools to enhance tax certainty

The survey also asked:

From your experience, how willing has business been to utilise the following tools in your country, if available? Please use a scale from 5 to 1, please use 5 when the business is very willing and lower numbers when the business is progressively less willing. If the business is not willing, select 1.

- *"Cooperative compliance programmes in a single jurisdiction"*
- *"Advanced pricing arrangement (APA) in a single jurisdiction"*
- *"Other rulings regimes"*

All the above tax administration tools were rated with a mean score above 3.

Effect of business behaviour on tax certainty

The survey finally asked:

In your tax system, what business behaviours or practices may contribute to tax uncertainty for the tax administration (e.g. aggressive tax planning practices)? You may list up to three behaviours or practices.

A large number of respondents indicated that business behaviour is an important source of uncertainty. In this context, the two major sources of uncertainty related to firms' behaviour were aggressive tax planning and lack of cooperation with the tax administration.

Appendix D
Summary Statistics for Narrative Analysis[63]

Implementation Period by Type of CIT Change

	All	'Unanticipated'	'Anticipated'	All	'Unanticipated'	'Anticipated'
		Frequency			*in % of total*	
All measures						
All	201	67	134	100.0	33.3	66.7
Increase	54	14	40	100.0	25.9	74.1
Decrease	147	53	94	100.0	36.1	63.9
Rate measures						
All	77	24	53	100.0	31.2	68.8
Increase	14	3	11	100.0	21.4	78.6
Decrease	63	21	42	100.0	33.3	66.7
Base measures						
All changes	124	43	81	100.0	34.7	65.3
Increase	40	11	29	100.0	27.5	72.5
Decrease	84	32	52	100.0	38.1	61.9

[63] This appendix was prepared by the IMF.

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