The *Paying Taxes* report is a joint annual publication by PwC and the World Bank Group. This year marks the 12th year of the publication. The report is based on the World Bank Group’s *Paying Taxes* indicator within their *Doing Business* project and includes analysis and commentary by the World Bank and PwC.

The *Paying Taxes* indicator measures tax systems from the point of view of a domestic company complying with the different tax laws and regulations in 190 economies around the world. The case study company is a small to medium-size manufacturer and retailer with specific assumptions, deliberately chosen to ensure that its business can be compared worldwide on a like for like basis.

The *Doing Business* project, a World Bank Group annual publication which measures business regulations in 190 economies, has been collecting data on paying taxes for 13 years. Besides paying taxes, the *Doing Business* project provides measures of regulations in nine other areas: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, trading across borders, enforcing contracts, and resolving insolvency. It also looks at labour market regulation.

*Paying Taxes* has historically measured the Total Tax and Contribution Rate ("TTCR": the cost of all taxes borne, as a % of commercial profit), the time needed to comply with the major taxes (profit taxes, labour taxes and mandatory contributions, and consumption taxes), and the number of tax payments. Last year, for the first time, the *Paying Taxes* study included a new sub-indicator – the post-filing index. Filing a tax return with the tax authority does not imply agreement of the final tax liability and post-filing processes can be some of the most challenging interactions that a business has with a tax authority and can vary markedly from one jurisdiction to another. The new post-filing index is equally weighted with the three existing sub-indicators in order to determine the overall *Paying Taxes* ranking.

The *Paying Taxes* indicator measures all taxes and contributions mandated by government at any level (federal, state, or local) as they apply to the standardised business. The TTCR sub-indicator measures the cost of taxes and contributions that are borne by the company. The taxes included can be divided into 5 categories: profit or corporate income tax, social contributions and labour taxes paid by the employer (for which all mandatory contributions are included, even if paid to a private entity such as a requited pension fund), property taxes, turnover taxes and other taxes (such as municipal fees and vehicle taxes). The two original compliance sub-indicators, on the time to comply and number of payments, measure taxes borne and taxes collected, and so include taxes and contributions withheld or collected, such as sales tax or value added tax (VAT). The post-filing index measures two processes based on four components—time to comply with a VAT refund (hours), time to obtain a VAT refund (weeks), time to comply with the correction of an inadvertent corporate income tax error and deal with any resulting audit/enquiry (hours) and the time to complete/resolve a corporate income tax audit/enquiry if required (weeks).
Some important points to note are that:

1. The sub-indicators are calculated by reference to a particular calendar year. The effect of any change that takes place part way through the year is pro-rated. The most recent data in this study, Paying Taxes 2018, relates to the calendar year ended 31 December 2016.

2. The ranking order is based on the World Bank’s distance to frontier (DTF) measure which is used by the World Bank Group to evaluate each economy's performance relative to the lowest and highest value of each sub-indicator rather than relative to the other economies. This means that economies can see how far they have progressed towards best practice, rather than simply looking at how they compare to other economies. A distance to frontier score is calculated for each of the four sub-indicators. The simple average of these four scores then gives the overall Paying Taxes distance to frontier. The distribution used to determine the distance to frontier score of the TTCR is non-linear. This means that movements in a TTCR that is already close to the lowest TTCR will have less of an impact on the DTF score. As in previous years, the lowest TTCR for the purposes of the ranking calculation is set at the 15th percentile of the overall distribution for all years included in the analysis up to and including Doing Business 2016, which is 26.1%. Economies with a TTCR below this value will therefore not be closer to the frontier than an economy with a TTCR equal to this value.

3. If in the course of collecting and analysing the data for 2016 it became apparent that data for previous years was incorrect, the necessary adjustments have been made and the sub-indicators recalculated for prior years. Rankings are only corrected for the immediate prior year. Any data that refers to 2015 and earlier years is therefore stated after such corrections have been made and so may differ from the data published in previous editions of this study including the global and regional averages.

The key themes and findings are:

- On average it takes our case study company 240 hours to comply with its taxes, it makes 24 payments and has an average Total Tax and Contribution Rate (TTCR) of 40.5%.

- The global average TTCR has increased by 0.1 percentage point. The small increase in the TTCR results from 52 economies increasing taxes while 36 recorded a reduction. It also represents a combination of a decrease in labour taxes offset by small increases in ‘other taxes’ while profit taxes remained constant.

- The time to comply has fallen by 5 hours to 240 hours since last year and the number of payments by almost one payment to 24 payments. These reductions are largely driven by the increased use of technology both by taxpayers and by tax authorities.

- In 2016, the largest decrease in time to comply is 90 hours in Palau due to improvements in the electronic filing system. Uzbekistan had the biggest improvement in the number of payments with a reduction of 48 as a result of developments in online filing and payments.

- 162 economies had a VAT system in 2016. In 51 of these no VAT refund is available to our case study company and 4 economies are not scored as VAT does not apply to capital purchases. In 107 of the 162 economies, it would be able to receive VAT refund.

- For those economies where a VAT refund is available, on average it takes our case study company 18.4 hours to comply with the necessary administration, and 27.8 weeks to receive the refund.

- If the likelihood of the VAT refund leading to an audit is less than 50%, the global average time to obtain a VAT refund is almost 16 weeks. If the likelihood of audit is more than 50%, it is just over 33 weeks.

- On average it takes less time to comply with a VAT refund in high income economies, (about 8.5 hours) than in low income economies (almost 43 hours).

- In high income economies, our case study company will on average obtain a VAT refund more quickly (just over 19 weeks) than in low income economies (almost 40 weeks).

- 180 economies levied corporate income tax in 2016. The post-filing index shows that in 81 economies there is a greater than 25% likelihood that correcting a corporate income tax return will lead to an audit
(or enquiry from the tax authority). For these 81 economies, the time taken up by the audit is included in the time to comply with and complete a corporate income tax audit.

- On average, it takes the case study company 16 hours to correct the error in the corporate income tax return, including responding to an audit if one is triggered. If there are further interactions with tax authorities (including audits) after correcting the error, these last on average 27.3 weeks.

- On average, businesses spend 4.8 hours correcting an error in a corporate income tax return provided the tax authorities request no further information once the correction has been filed. This increases to 29.5 hours if the time for responding to further information requests from the tax authorities, including audits, are taken into account.

- In 62% of low income economies the correction of the corporate income tax error is expected to lead to an audit in more than 25% of cases, compared with 32% of high income economies.

- On average, in high income economies the time to correct a corporate income tax error and comply with any resulting audit is just over 13 hours compared to 24 hours in low income economies.

- Audits resulting from the correction of the corporate income tax error last on average just over 20 weeks in low income economies but more than 33 weeks in high income economies.

- The EU & EFTA region performs the best, on average, across the post-filing index with just over 7 hours to claim a VAT refund, just over 16 weeks to receive the refund, and just over 7 hours to correct a corporate income tax return and comply with any resulting audit. If a corporate income audit takes place, it will last just over 26 weeks. In 69% of the economies in the EU & EFTA region, the correction is expected to trigger an audit in less than a quarter of cases.
Regional details – Central Asia & Eastern Europe

- In 2016, in the Central Asia & Eastern Europe region, the average Total Tax & Contribution Rate was 33.4%. It took the case study company 230 hours to comply with its taxes and it made 16.2 tax payments.

- All three original sub-indicators for the Central Asia & Eastern Europe region are below the world average and have continued to fall. Central Asia & Eastern Europe continues to be the most reformed region since the start of the study.

- The post-filing index score for the region is 61.97 (on a scale of 1 – 100) which is above the world average of 59.51. Central Asia & Eastern Europe performs better than most regions on average coming third after the EU & EFTA and North America regions. All four components of the post-filing index take less time than the global average.

- Between 2015 and 2016, the three original sub-indicators for the Central Asia & Eastern Europe region have decreased; the TTCR by 0.7 percentage points, the time to comply by 4 hours, and the number of payments sub-indicator by 2.9 payments.

- At 33.4%, the average TTCR for the region is below the world average of 40.5% and is the second lowest across the regions in 2016 after the Middle East with an average TTCR of 24.0%.

- In 2016, out of the 19 economies in the region, the TTCR increased for seven economies while three economies experienced a decrease in their TTCRs. The greatest reduction in the TTCR was in Ukraine, by 14.5 percentage points to 37.8%, largely due to a new reduced flat rate for social security contributions.

- In the majority of the economies in the region, labour taxes and mandatory contributions paid by employers account for the most significant portion of the TTCR. Of the region’s average TTCR, they comprise 53%.

- In 2016, the Central Asia & Eastern Europe region’s average time to comply of 230 hours is 10 hours below the world average of 240 hours.

- There are five economies out of the 19 in the region that have a number of payments sub-indicator higher than the world average (24 payments). The average reduction of 2.8 payments between 2015 and 2016 is driven by Uzbekistan. The country introduced a new portal that enabled taxpayers to carry out online payments of taxes decreasing the number of payments from 48 to 10.

- Serbia continues to have the most efficient post-filing processes in Central Asia & Eastern Europe with a post-filing index score of 91.1. The Kyrgyz Republic has the least efficient post-filing processes in the region with a post-filing index score of 37.4 as no VAT refund is available to the case study company and correcting the corporate income tax return would trigger an audit.

- All 19 economies in the Central Asia & Eastern Europe region have a VAT system, however in 7 of these a VAT refund is not available to the case study company.

- The average time to comply with a VAT refund for the region is 16.8 hours, which is below the world average of 18.4 hours. Serbia and Montenegro are the most efficient in time to comply with a VAT refund of 4 hours.

- In the Central Asia & Eastern Europe region, on average it takes 24.0 weeks to obtain a VAT refund. This ranges from 10.2 weeks in Georgia to 40.0 weeks in Israel.

- All economies in the region levy corporate income tax. In 42% of them the correction of a corporate income tax return is expected to lead to an audit of the case study company.

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1 The following 19 economies are included in our analysis of Central Asia & Eastern Europe: Albania; Armenia; Azerbaijan; Belarus; Bosnia and Herzegovina; Georgia; Israel; Kazakhstan; Kosovo; Kyrgyz Republic; Macedonia, FYR; Moldova; Montenegro; Russian Federation; Serbia; Tajikistan; Turkey; Ukraine; Uzbekistan.

2 Note that when reviewing trend data, we only include economies and cities for which we have data for every year of the study. As such there are only 174 economies included in the global trend data. 15 economies and 11 cities have joined the study since its inception and so are not included in the 12 year trends. For Central Asia & Eastern Europe, 17 economies are included in the historical dataset.
In the Central Asia & Eastern Europe region it would take the case study company on average 9.3 hours to correct an error in the corporate income tax return and deal with any subsequent audit. The most efficient economies were Georgia and Belarus, where the audit likelihood is less than 25% and it takes only takes 1.0 hours to correct the tax return. In Bosnia and Herzegovina it would take 30.0 hours to comply with a corporate income tax audit, which is the most time consuming in the region.

In the region, correcting the corporate income tax return would result in a greater than 25% likelihood of triggering an audit in 42% of economies and it would take 13.2 weeks on average to complete the audit. This ranges from 5.3 weeks in Kyrgyz Republic to 19.0 weeks in Montenegro.

For more information about Paying Taxes, visit www.pwc.com/payingtaxes.
For more information about the Doing Business report series, visit www.doingbusiness.org.
About the Doing Business report series

The Doing Business project provides objective measures of business regulations and their enforcement across 190 economies and selected cities at the subnational and regional level. The Doing Business project, launched in 2002, looks at domestic small and medium-size companies and measures the regulations applying to them through their life cycle. By gathering and analyzing comprehensive quantitative data to compare business regulation environments across economies and over time, Doing Business encourages economies to compete towards more efficient regulation; offers measurable benchmarks for reform; and serves as a resource for academics, journalists, private sector researchers and others interested in the business climate of each economy. In addition, Doing Business offers detailed subnational reports, which exhaustively cover business regulation and reform in different cities and regions within a nation. These reports provide data on the ease of doing business, rank each location, and recommend reforms to improve performance in each of the indicator areas. Selected cities can compare their business regulations with other cities in the economy or region and with the 190 economies that Doing Business has ranked. The first Doing Business report, published in 2003, covered 5 indicator sets and 133 economies. This year’s report covers 11 indicator sets and 190 economies. Most indicator sets refer to a case scenario in the largest business city of each economy, except for 11 economies that have a population of more than 100 million as of 2013 (Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, the Russian Federation and the United States) where Doing Business, also collected data for the second largest business city. The data for these 11 economies are a population-weighted average for the 2 largest business cities. The project has benefited from feedback from governments, academics, practitioners and reviewers. The initial goal remains: to provide an objective basis for understanding and improving the regulatory environment for business around the world.

About the World Bank Group

The World Bank Group plays a key role in the global effort to end extreme poverty and boost shared prosperity. It consists of five institutions: the World Bank, including the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA); the International Finance Corporation (IFC); the Multilateral Investment Guarantee Agency (MIGA); and the International Centre for Settlement of Investment Disputes (ICSID). Working together in more than 100 countries, these institutions provide financing, advice, and other solutions that enable countries to address the most urgent challenges of development. For more information, please visit www.worldbank.org, www.miga.org, and ifc.org.

About PwC

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