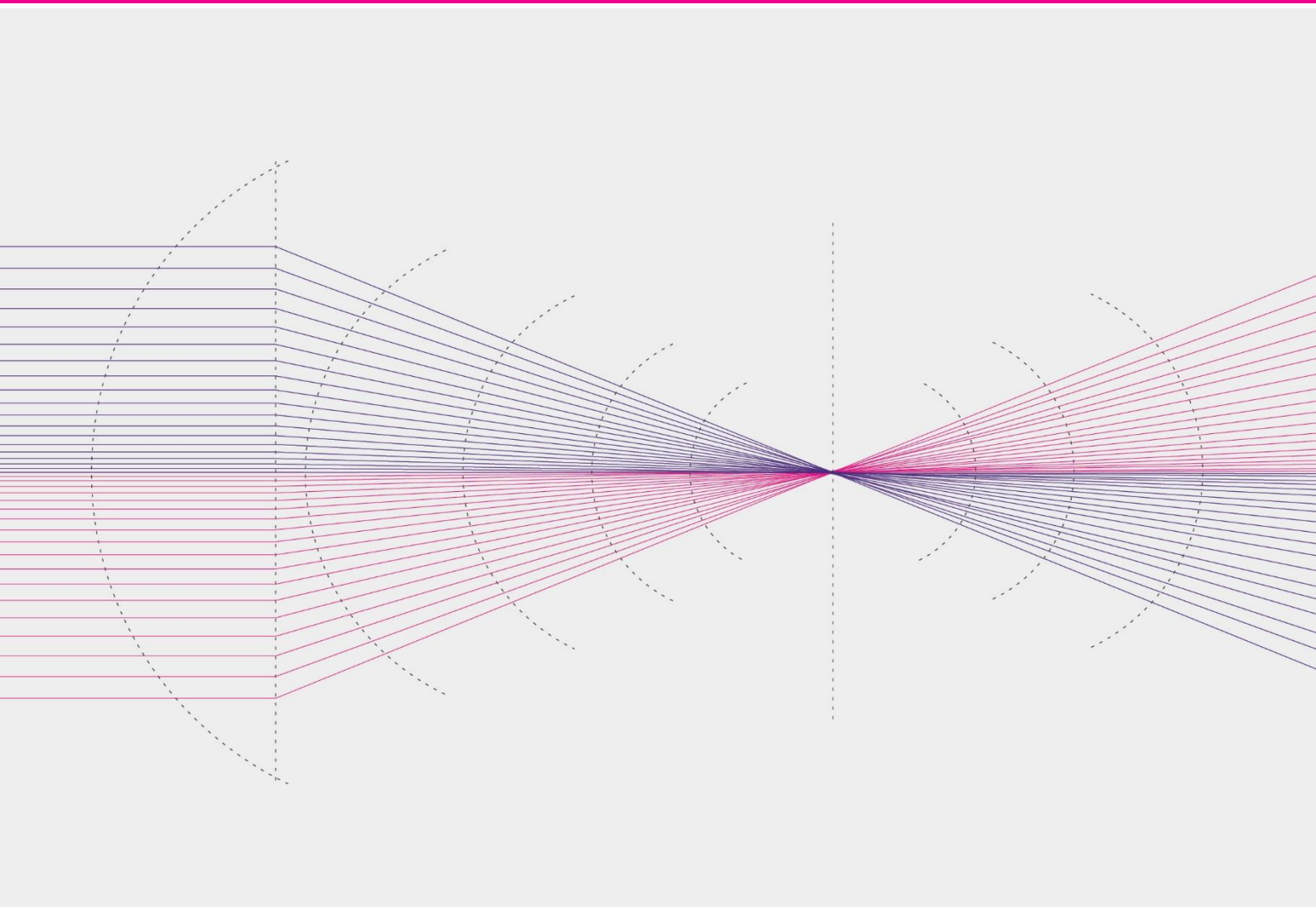


A Taxing Problem: the impact of tax on small businesses

May 2018

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About Plum

Plum is an independent consulting firm, focused on the telecommunications, media, technology, and adjacent sectors. We apply extensive industry knowledge, consulting experience, and rigorous analysis to address challenges and opportunities across regulatory, radio spectrum, economic, commercial, and technology domains.

About this study

This study for Sage looks at the impact on small and medium-sized enterprises of the direct and indirect costs of tax. Analysing a survey of over 3000 companies across 11 countries, we seek to understand the scale of the problem, the ways it affects companies, and where there may be remedies to the issues.

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Foreword by Stephen Kelly

I remember an ad from the UK's tax agency, HMRC – its strapline was 'Tax doesn't have to be taxing'. Sadly, this report shows the reality fails to match the rhetoric and it is killing small businesses.

The data tells us that the Entrepreneurs are paying up to 10% more tax as a percentage of profits compared to big business, and the newer a company is, the more it pays in tax which stifles the 'start-up' culture. While many governments do offer some tax relief for businesses on the smaller end of the scale, many still face an identical tax regime compared to large businesses. Spare a thought for a business started in Brazil where tax as a percentage of profits hurtles towards a massive 70%.

So, what does this all mean?

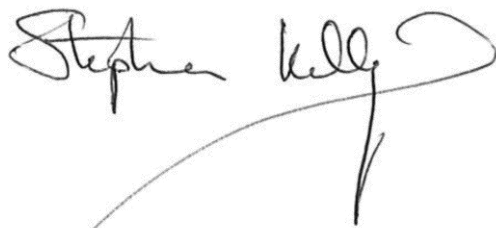
Despite many governments paying lip service to small businesses, the evidence suggests that tax regimes the world over favour larger corporations. Take the UK's archaic business rates tax as an example. This tax – which unbelievably was created in Shakespeare's day 400 years ago – creates a warped hierarchy where an independent high-street bookshop ends up paying this tax at a far higher percentage of their annual turnover than the global online e-commerce giants, who minimise their own business rates as they have no physical shopfront and low cost warehousing. Compound this with big companies creating exotic structures to minimise tax further.

This jarring disconnect means that Small & Medium Businesses – the heroes of all economies who create two-thirds of all jobs, the engine of prosperity and social cohesion in communities – face another giant hurdle in tax when it comes to their size. Limited resources and large payments such as annual tax bills only contribute to cashflow problems and operational inefficiencies.

On top of the impact of unproductive hours Small & Medium Businesses log every year dealing with burdensome admin, these areas are all hindering the progress of the world's entrepreneurs. Governments must take responsibility for smashing these barriers that are holding these Entrepreneurial Heroes back.

At Sage, we have the honour of serving three million customers. And our responsibility is to champion the Entrepreneur's Noble Cause. We want to use our voice to uncover the real issues and injustices the Heroes face daily, and put pressure on governments to replace the rhetoric with action. Big Business should act responsibly and pay their dues in all the countries where they operate.

We hope that you find this report to be informative, and that governments the world over will sit up and enact change to put an end to stifling, archaic tax straightjacket. It's imperative for the health of the global economy, because when business builders do well, we all do.

A handwritten signature in black ink that reads "Stephen Kelly". The signature is fluid and cursive, with a long, sweeping underline that extends from the end of the name.

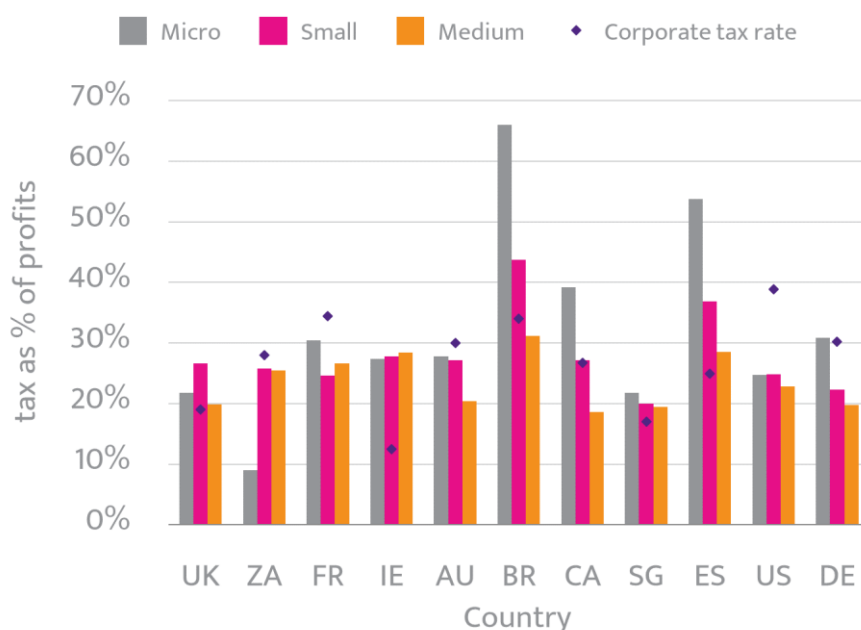
Stephen Kelly, CEO, Sage

Summary

Following our previous reports on the total cost of administration¹ to small and medium enterprises (SMEs), and the impact of late payments², this study examines the issue of taxation on SMEs. For many new and small companies, profit margins can be very low, particularly when the cost of finance and building up stock is taken into account. Taxation – in all its forms – can have a significant impact on the continued viability of a company, and can represent a huge barrier to entry or growth. For governments who wish to encourage small businesses, the imposition of taxes seems unintuitive.

Across the eleven countries surveyed, we find that there is a very strong inverse relationship between the size of a company and the (proportionate) size of its tax bill – that is, the smaller a company, the greater a percentage of its profits is paid in tax. To some extent this might be expected; not all taxes are entirely reliant on profit, and taxes on employment or land use can impact smaller companies more. However, the scale of the difference in some countries is remarkable – as can be seen in Figure 1 below, in Brazil medium-sized companies pay half the tax rate of micro companies.

Figure 1: Effective tax rates for SMEs against corporate tax rates



In all countries, there is a significant relationship between size of company and tax bill, although the total tax paid does not always align to the headline corporation tax rates in each country. This may be due to government incentives or tax breaks, or general losses being brought forward and offset against the most recent tax bills. In any case, the key point – that smaller companies pay proportionally more tax – remains valid, and this will prevent these firms competing on a level playing field with larger companies.

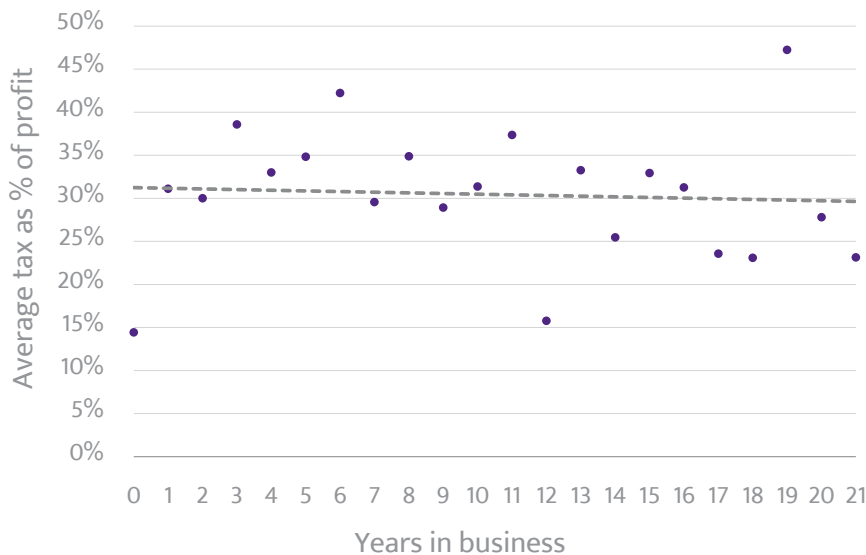
There is a much weaker relationship between the age of a company and the amount of tax paid. While it is true that younger companies pay proportionally more tax, it is not clear that policies aimed only at young companies

¹ Plum Consulting (2017a): ‘Sweating the Small Stuff: the impact of the bureaucracy burden’

² Plum Consulting (2017a): ‘The Domino Effect: the impact of late payments’

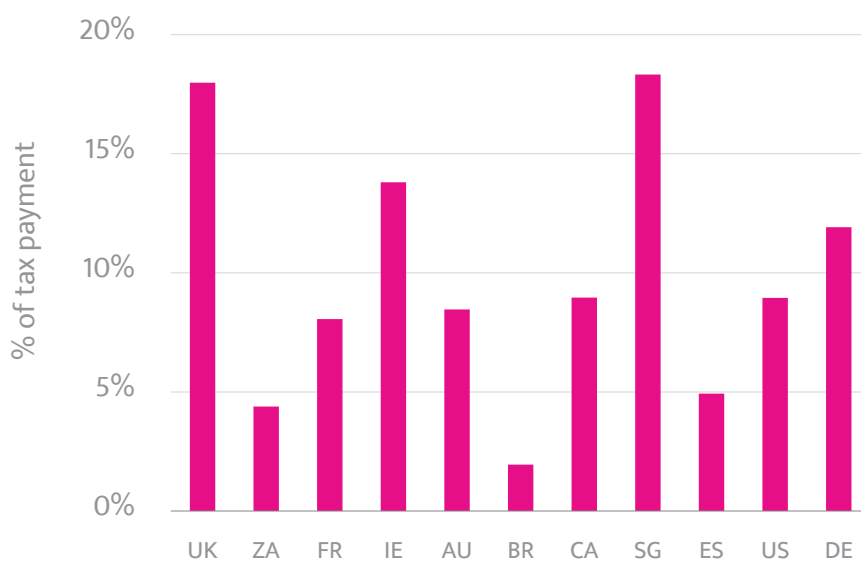
will have the required impact. Instead, any change in government strategy should be focussed on the smallest companies, no matter their age.

Figure 2: Effective tax rates for SMEs by age of company



Finally, drawing on our report into administrative burden, we have considered whether the cost of administering tax is disproportionate to the amount paid in tax. Figure 3 below demonstrates that in most countries, SMEs incur costs of less than 10% of the total tax payment; in the UK and Singapore this is around 15% although this may reflect the lower taxes paid in those countries.

Figure 3: Relative cost of tax administration



This is not to say, however, that tax administration is cheap; instead, this reflects the proportionally high tax costs of SMEs. While companies can try to manage their tax processes more effectively, moving to digitisation of accounting systems, this will have a minor impact compared to any policy change which reduces the overall tax burden on the smallest companies.

1 Introduction

This study has been prepared by Plum Consulting for Sage, to examine the situation in relation to taxation on small and medium enterprises (SMEs). SMEs make a significant contribution to the national and global economies. For the 11 countries that we examine in this report, their contribution to the total GDP ranges from around 40% to 60%. SMEs also contribute to between 45% to 70% of the total employment in these countries. Governments should, therefore, create an environment that makes it attractive for entrepreneurs to set up small companies as well as one that is conducive to the success of SMEs in the long run.

One way of creating a fostering environment for SMEs is through a favourable tax system. A corporate tax regime that leads to new or small companies being taxed at an effective marginal rate that is higher than the market's average could deter potential entrepreneurs from starting a business. This is because the gains from doing so may be too low to tempt them to make a switch from their current economic activity. This could result in a smaller pool of SMEs in the long run.

In addition, a high tax burden can also put extra financial pressure on established SMEs. Companies have to pay their tax to a deadline or risk being fined, which would increase their tax bill. However, making a tax payment could also reduce the company's cashflow further. This can be a problem if the tax payment schedule coincides with a period of low cashflow. Cashflow could become negative creating negative impacts on the company's operation.

In our previous report, 'The Domino Effect: the impact of late payments', the impacts of late payments to SMEs are examined. It was found that when companies are paid late, which can result in cashflow problems, they resort to measures that potentially have negative impacts in the long run. These include reducing future investment, cutting annual bonus and staff pay, all of which adversely affect their growth prospect and ability to attract talents. Being saddled with a high tax bill at a time when cashflow is low would further increase the likelihood of these measures being implemented.

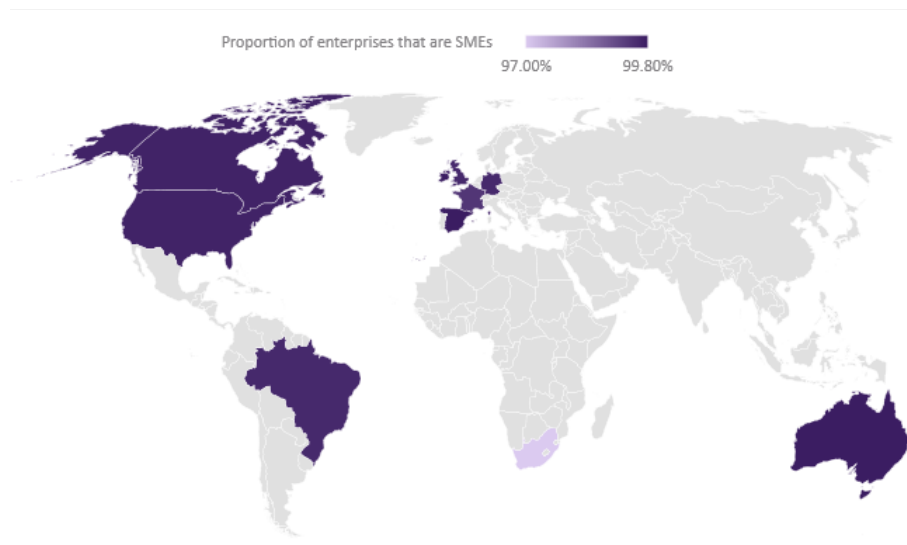
The remainder of this study is structured as follows:

- Section 3 provides an overview of corporate taxes in the different jurisdictions that are analysed in this report
- Section 4 outlines the survey that has been commissioned for analysis.
- Section 5 sets out the hypotheses for analysis, and how the results of the survey support or refute these. In particular:
 - Section 5.1 investigates whether small companies are disproportionately affected by taxation;
 - Section 5.2 analyses whether there is an inverse correlation between the tax burden and company's age;
 - Section 5.3 examines the magnitude of the cost of filing tax return for SMEs; and
 - Section 5.4 explores if and how intervention could help.

2 The importance of SMEs

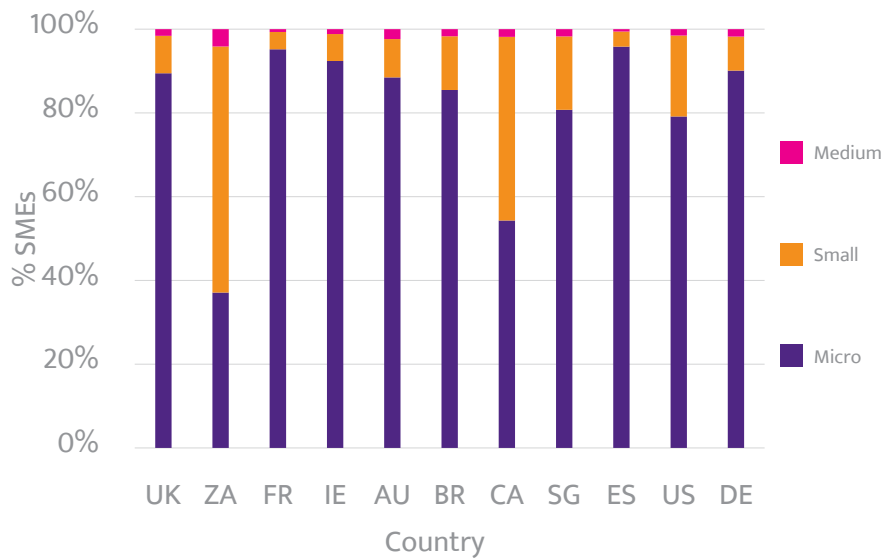
A complementary work to this report is ‘The Importance of Small and Medium Enterprises’, published by FTI Consulting³. The report evaluates the overall impact of SMEs across the same eleven countries analysed here. It also provides details of how SMEs contribute to employment, GDP (or GVA), and tax receipts both in total and across different sectors. A high-level overview of this work can be found in Appendix A of this paper.

Figure 2-1: Size of SME economy



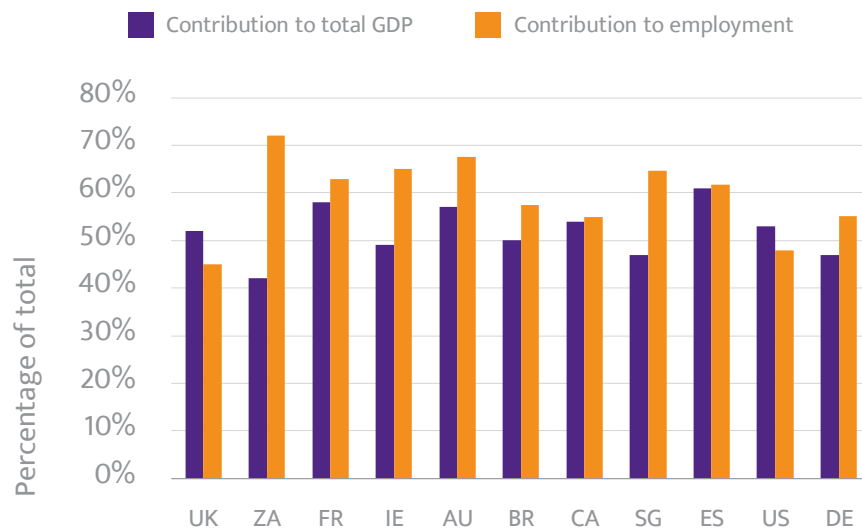
The number of SMEs substantially outweighs the number of large firms in all eleven study countries; our analysis shows that the biggest proportion of large firms is found in South Africa, but even there 97% of enterprises are SMEs – and this is likely to be an understatement since not all micro companies will be registered with authorities.

³ This will be referred to as ‘FTI Consulting (2017)’.

Figure 2-2: Composition of SME economies⁴

Moreover, the contribution to GDP and employment varies considerably. In particular, SMEs appear to be significantly less efficient than larger firms in South Africa; over 70% of the workforce is employed by SMEs, but they contribute less than 45% of GDP. By contrast, in the UK and the US SMEs produce over half of GDP but account less than half of all employees.

Figure 2-3: Contribution of SMEs in each country



⁴ Note that the breakdown of SMEs in Singapore has been estimated, using an average of other countries, as no official data is available.

3 Corporate tax regimes

One major determinant of how much tax a company pays is the corporate income tax regime in its country of residence. The national government sets a central corporate income tax rate in all countries. However, this tax may also be supplemented with other rates. Corporate income tax is generally levied on the company's operating profits, which consist of trading income, passive income and capital gains. The corporate tax rates shown in Figure 3-1 are the average effective rates in 2017.⁵ They range from 12.50% in Ireland to 38.91% in the USA.

Figure 3-1: Effective tax rates for the eleven study countries

Country	Corporate income tax rate (2017)
United Kingdom	19.00%
South Africa	28.00%
France	34.43%
Ireland	12.50%
Australia	30.00%
Brazil	34.00%
Canada	26.70%
Singapore	17.00%
Spain	25.00%
USA	38.91%
Germany	30.18%

Tax regimes vary greatly by country, and resident corporations can be charged multiple income tax rates by different governmental bodies. Some of the study countries impose sub-national taxes on top of the overall corporate income tax rate. The result is that the effective tax rate can be nearly double the central tax rate in these countries. If the central tax rate were only considered for these countries, corporate tax rate would be comparable to the effective rates in countries with relatively low income tax rate such as Ireland and Singapore.

Germany and Canada are two study countries that collect regional and local tax in addition to the central tax rate. In Germany, there is also the regional trade tax (Gewerbesteuer), which ranges from 14% to 17%, and is added to the central corporate tax rate of 15% (15.825% when the solidarity surcharge is added). This means that companies pay somewhere between 30% and 33% in corporate income tax. Canada collects provincial and territorial general corporate income tax (11.5%-16%) in addition to the federal general corporate income tax (15%).

Some countries impose surtax either on taxable income that exceeds a certain level or otherwise on the tax amount calculated from the central tax rate. For instance, in Brazil, enterprises have to pay a surtax of 10% on income in excess of BRL 240,000 per year on top of the statutory corporate income tax of 15%. Germany also charges surtax. The surtax in Germany is a solidarity tax, which is levied on corporate income tax. The rate is 5.5% of the corporate income tax, for which the rate is 15%.

⁵ The corporate tax rates for OECD countries are taken from OECD's database and refer to the combined corporate income tax rate. This is the combined basic central and sub-central (statutory) corporate income tax rate based on the central government rate and the sub-national rate (less deductions for sub-national taxes). Tax rates for other countries are compiled from publicly available data from KPMG and Deloitte.

Many countries try to encourage entrepreneurship and give a tax discount on corporate income below a certain threshold or to small companies. France charges a reduced rate of 28% (in 2018) on corporate income below EUR 500,000, whereas the standard rate is 33.33%. (The rate of 34.43% is this standard rate plus the surtax of 3.3% on liabilities above EUR 763,000.) In Australia, companies with an aggregate annual turnover of less than AUD 25 million are charged 27.5% on taxable income (for 2017-2018 tax year) rather than the standard rate of 30%. These discounts are not reflected in the figures in Figure 3-1.

Despite being the key driver of companies' total tax bills, corporate income tax is not the only tax that businesses pay. Companies also have to make tax payment on their occupation of a commercial property. A national non-domestic rate is payable by businesses in the UK to the local authorities for the use of their commercial premises. These are called business rates. Similarly, in Ireland, municipal authorities levy "rates" on a company's use of commercial real property.

Companies are also often required to make a contribution to social insurance for their employees. In South Africa, there is an obligation for employers to contribute the equivalent of 1% of each employee's gross income towards the Unemployment Insurance Fund. The Singaporean government requires every employer to register with the Central Provident Fund and make a monthly contribution from both itself and on behalf of its employees. Meanwhile, in Spain, businesses must pay an equivalent of 29.9% of an employee's annual wage (up to a maximum of EUR 3,751.20 per month) as a contribution to Spanish Social Insurance.

In economic terms, total corporate tax should be proportionate. This means that the tax regime should not lead to different types of company being taxed vastly differently. In particular, small or new companies should not be paying an effective tax rate, inclusive of non-income tax, that is much higher than the average for businesses across the country. A tax system that achieves this outcome could deter people from setting up a new business, as the gains of doing so may not sufficiently reward them for their efforts. Furthermore, a disproportionately large tax bill could put an existing small business with weak cashflow under significant financial duress.

The rest of this report evaluates the situation around tax payment for SMEs as a result of the countries' present tax regimes. In addition, we also examine the indirect cost of tax borne by companies through related administrative tasks in the 11 study countries. The analysis in this report is based on the results of a survey, which is described in the next section. The conclusions from the analysis are used to inform the recommendations in the last section of this report.

4 Survey methodology

In order to evaluate the situation around corporate taxation in the 11 study countries, we posed three hypotheses.

- Hypothesis 1: The tax burden is disproportionate for smaller companies.
- Hypothesis 2: The tax burden is disproportionate for new companies.
- Hypothesis 3: The cost of tax administration to an SME is significant.

The first two hypotheses are designed to help investigate whether young companies are subject to a tax rate that is too high. If there is no evidence that new and small businesses do not experience a disproportionately large tax burden, then no need for intervention may be needed. The third hypothesis will examine the indirect burden of taxation resulting from the need to do tax-related accounting including filing tax returns.

Plum commissioned FTI Consulting to perform a survey to verify these hypotheses. The survey was administered between July and August 2017 in eleven countries. There were almost three hundred SMEs that responded to the questionnaire sent out in each country. Figure 4-1 shows the countries in which the questionnaire was conducted. The two-letter codes next to the countries' names are country references used in figures throughout this report.

Figure 4-1: List of countries (with two-letter codes)

Australia (AU)	Brazil (BR)	Canada (CA)
France (FR)	Germany (DE)	Ireland (IE)
Singapore (SG)	South Africa (ZA)	Spain (ES)
United Kingdom (UK)	United States of America (US)	

The questions asked in the survey were grouped into five key areas:

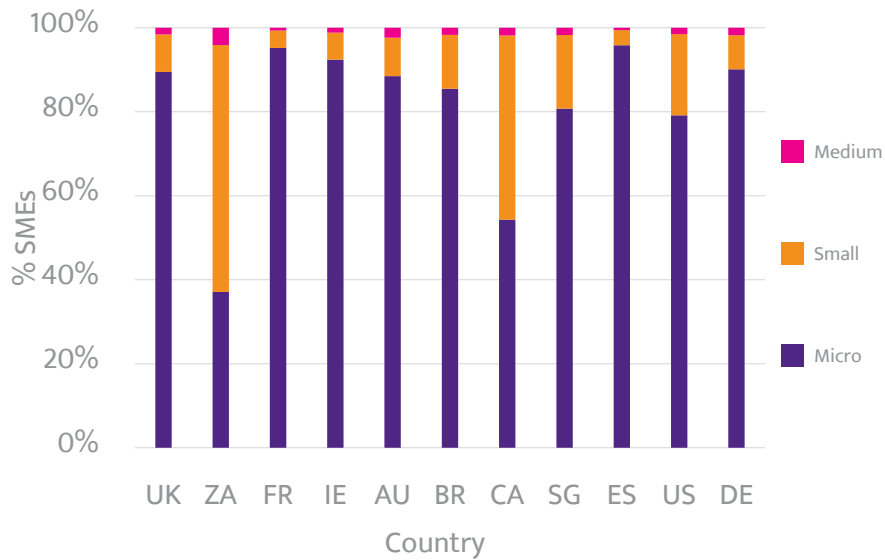
- Questions about the business itself, to determine suitability for the survey and to assist with disaggregated analysis;
- Questions about administrative burden;
- Questions on taxation;
- Questions on late payments; and
- Questions on business outlook.

The first three groups are most relevant to the analysis this report. The relevant questions from the questionnaire used in the survey can be found in Appendix B.

The responses to the questionnaire for the three types of SMEs are analysed and weighted, once they have been compiled. This is done to ensure that the results are representative of the SME economy. The average for each

of the three groups is weighted by the proportion of the company type within the SME economy. These weighted averages are then combined to derive statistics for all SMEs.

Figure 4-2: Composition of SME economies



In the case of Singapore, no such information is publicly available. As a result, the proportion of all SMEs that each type of company represents is estimated. This is done by averaging the proportions of the same type of company in the other 10 countries.

5 Hypotheses and analysis

To examine the hypotheses set out in Section 4, we have asked the following four questions:

- How much does tax vary with company size?
- Is there a relationship between the size of tax payment and company's age?
- What is financial and opportunity cost of performing tax-related accounting?
- Is there a role for intervention?

We examine these questions in turn below. For each question, we have analysed the overall impacts in each of the eleven countries. Subsequently, data points that may be outliers based on the compiled statistics are identified.

We calculate the tax-to-profits ratio in our analysis rather than use the amount of tax reported by the company in order to adjust for the base on which the tax is calculated. In all study countries, corporate income tax is calculated on income after expenditure, a large proportion of which is profits.

In compiling the results, it was found that the tax-to-profits ratio ranges from zero to 200. This means that a number of SMEs in the survey paid tax that is several times the size of their profit.⁶ An examination of the distribution of companies by this ratio shows that the vast majority of them had a ratio of between zero and 1. This distribution is shown in Figure 5-1. In fact, all SMEs in the range 1.0-1.2 report a tax-to-profit ratio of 1.

Figure 5-1: Distribution of SMEs by tax-to-profit ratio

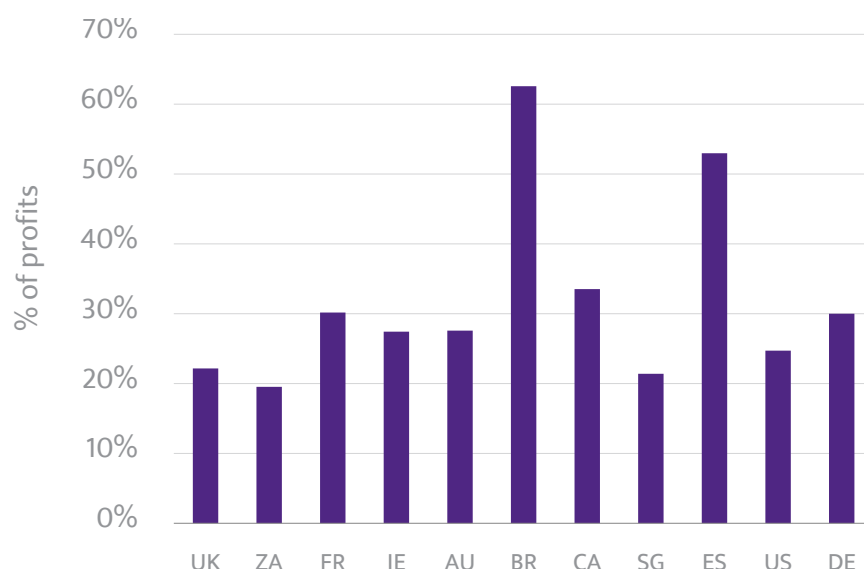


To ensure that our calculations are not skewed by companies with an exceptionally high tax-to-profits ratio, we exclude companies with a ratio of greater than 1.0 from our analysis. Including them in the analysis could cause

⁶ It is possible for a company to have a tax bill that is several times its current-year profits. This can be the case when it is also being taxed on income from previous years, which may only be received in the present year. However, its tax-to-profit ratio would not represent the ratio of current year's tax to current year's profits, which is the indicator of interest in our analysis.

the average ratio to be much higher than the median for the survey sample. The analyses in the subsequent sections of this report are based on this reduced sample, which nevertheless represents 93% of all data points in the survey. Figure 5-2 shows the proportion of profits that tax payment constitutes in each of the eleven study countries based on this reduced sample.

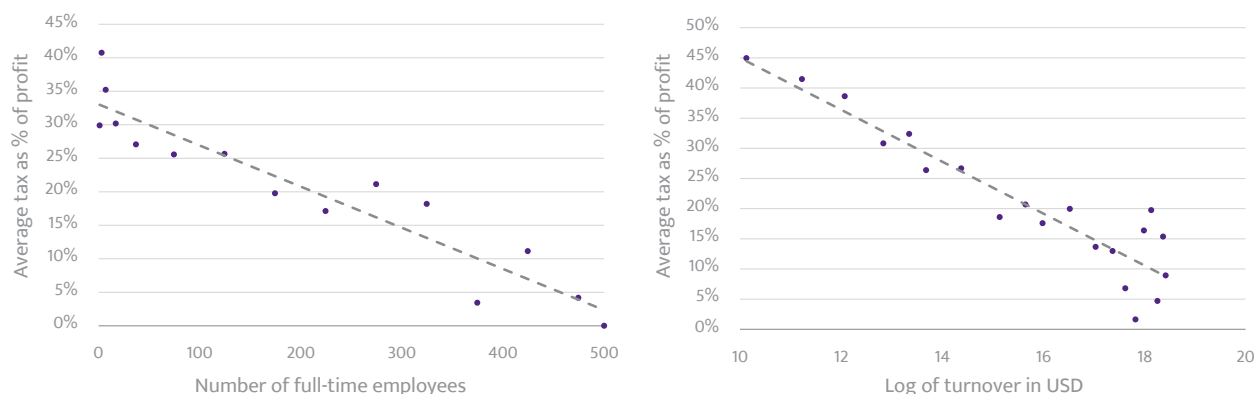
Figure 5-2: Corporate tax as a percentage of profits in study countries



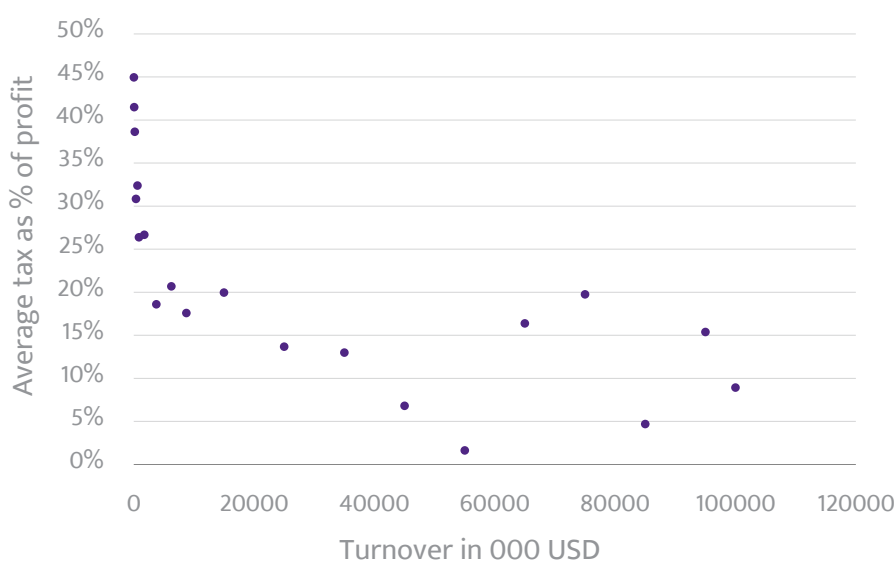
5.1 How much does tax vary with company size?

To establish whether tax varies with SME size and by how much, the relationship between the size of an SME and its tax-to-profit ratio was examined. Both SMEs' employee count and their turnover are used as indicators of size.

The questionnaire used in the survey asked each respondent to select the size of their workforce from a list of 15 options. These choices range from 1 employee to 500 and more employees. We take the average of the tax-to-profits ratios for companies in each category and produce a scatter plot to deduce the relationship. The midpoint of the range of employees is used for the X-axis of the scatter plot. Similarly, the questionnaire categorises the turnover of an SME into 21 different groups, and the average tax-to-profits ratio for each group is computed and plotted against the log of the mid-point of each group's turnover range. Figure 5-3 shows these two scatter plots.

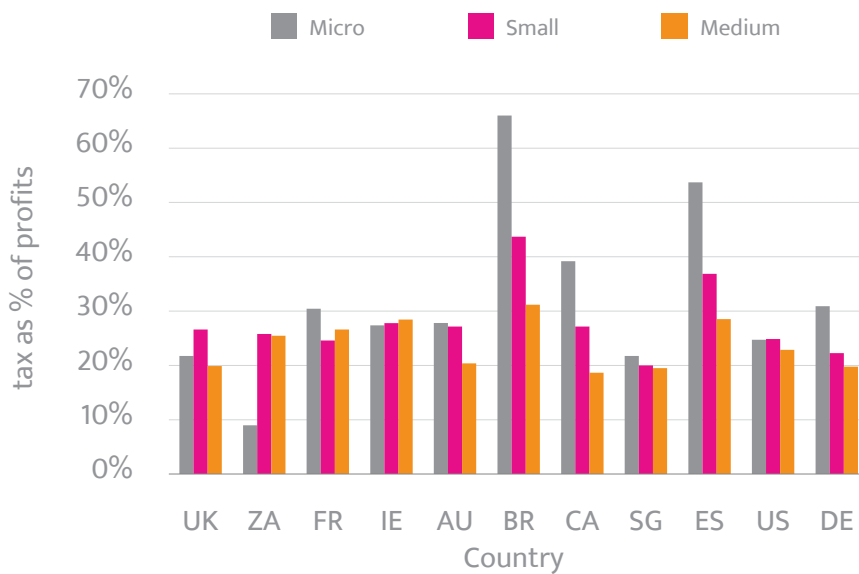
Figure 5-3: Average tax as percentage of profits vs measures of company's size

The plots in Figure 5-3 suggest that there is a strong negative correlation between both measures of company size and the percentage of profits that an SME pays in tax across the study countries. The reason that a log of turnover is produced for the second plot is that the inverse relationship between the tax-to-profits ratio and turnover. Figure 5-4 shows the scatter plot for tax-to-profits ratio and the absolute value of turnover.

Figure 5-4: Average tax as percentage of profits vs company's turnover

The plot above shows that there is a sharp drop in the ratio of tax to profits, as the size of a company's turnover increases to USD 10 million. On average, SMEs with a turnover of between USD 50,000 and USD 99,999 have a ratio of 0.41 (41% on the graph). This drops to a ratio of 0.20 (20%) for companies with a turnover between USD 7,500,000 and USD 9,999,999. For higher turnover values, the average tax-to-profits ratio is between 0.01 and 0.20 with the majority of them falling below 0.15.

We also examine the relationship between tax-to-profits ratio and the type of SME in each study country. Companies were asked to identify themselves as large-sized, medium-sized, small or micro in the questionnaire based on criteria such as their employee headcount and turnover. This allows the average tax-to-profits ratio to be computed for each type of company in each country. Figure 5-5 shows this average ratio for each of the three SME types for the eleven study countries.

Figure 5-5: Tax as a percentage of profits by type of SME in study countries

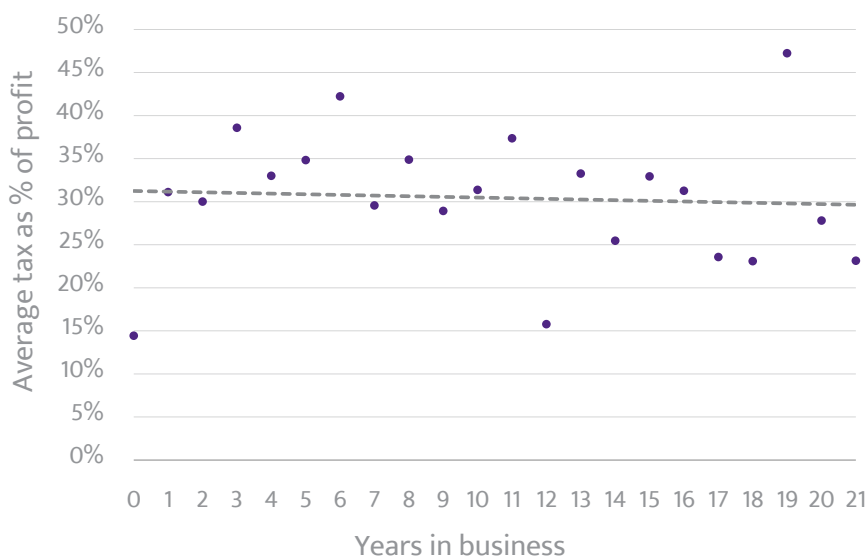
Micro companies report the highest tax-to-profit ratio and medium-sized companies the lowest in six of the eleven countries. SMEs in the US do not conform to this trend, but medium-sized companies still pay the lowest tax as a percentage of their profits. In Brazil and Canada, the ratios recorded by micro companies are around twice as high as the ratios for medium-sized companies. Only Ireland did medium-sized companies pay the highest tax as a percentage of profits. However, the percentages for all 3 SME types are very similar.

There appears to be strong evidence from the above analysis that small SMEs are paying more tax relative to their profits compared to their larger counterparts globally. When the entire set of survey results are examined, there is a strong negative correlation between the percentage of profits that a firm pays as tax and its size – both in terms of its headcount and turnover.

This trend is also fully supported in over half the study countries when each country is considered individually. In Australia, Brazil, Canada, Singapore, Spain and Germany, micro enterprises pay the highest proportion of their profits in tax, while medium-sized companies pay the least tax as a percentage of profits. In the UK, France and the USA, micro companies have a higher tax-to-profits ratio than medium-sized firms. The only two countries that do not follow this trend are South Africa and Ireland.

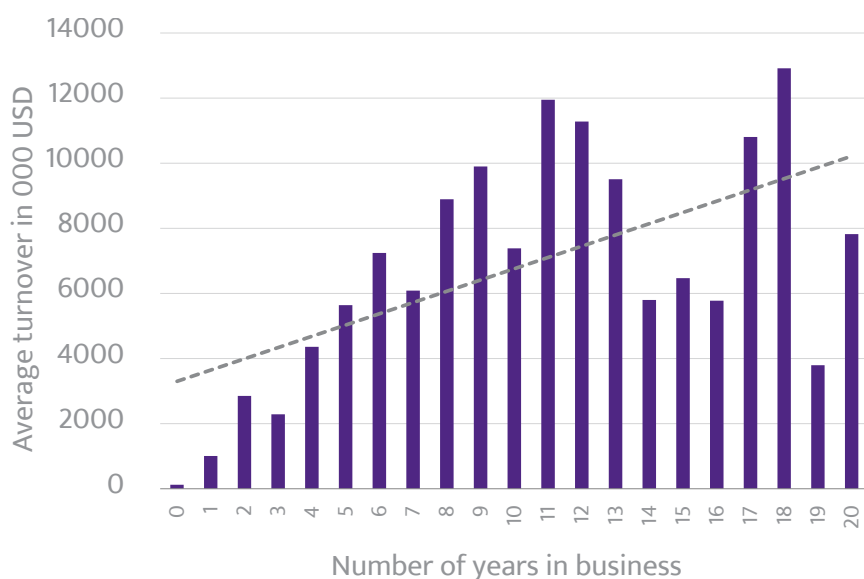
5.2 Is there a relationship between the size of tax payment and company's age?

Tax-to-profits ratio is plotted against the number of years that a company has been in operation in order to examine the relationship between a firm's tax payment and its age. The tax-to-profits ratio used is the average of the ratios for SMEs within each age group. Figure 5-6 shows this scatter plot.

Figure 5-6: Tax-to-profits ratio vs number of years in business

The plot shows that, for our global sample, there is a negative (albeit weak) correlation between the ratio of tax to profits of an SME and its number of years in operation. That means that older companies pay less tax relative to their profits compared to young companies but only marginally. However, there may be biases here as a result of the different number of samples within each age group. Some samples are smaller than others, which may have led to the average tax-to-profits ratio being somewhat different from their population average. For this reason, we also consider other approaches to provide further evidence for this relationship.

We look at the relationship between the age of a company and its size. A bar chart showing the average turnover of companies in each age group from our survey sample is shown in Figure 5-7.

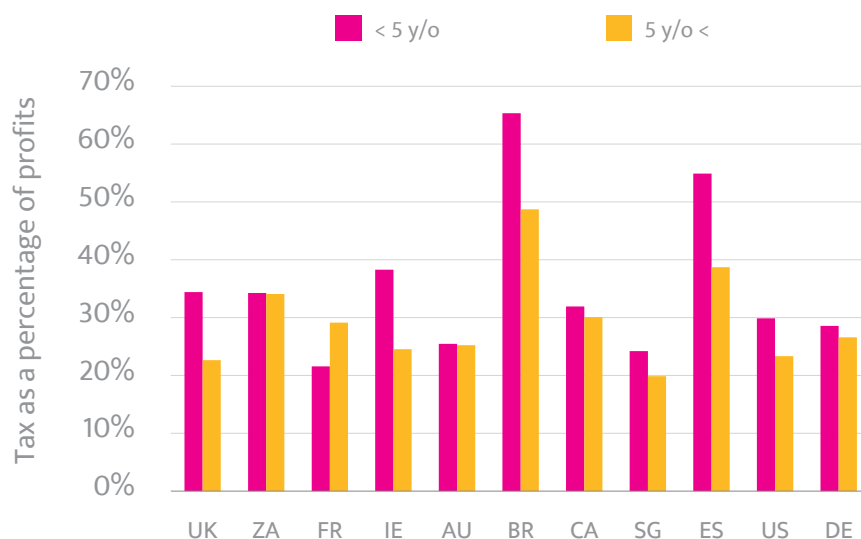
Figure 5-7: Company turnover vs number of years in business

Small companies are subject to a tax-to-profits ratio that is much higher than their larger counterparts as illustrated previously in Section 5.1. Therefore, the positive correlation between age and turnover in Figure 5-7

appears to affirm that younger companies (as small companies) are more likely to pay higher tax as a percentage of their profits relative to more established firms (which are larger companies).

When we restrict our consideration to small companies (with turnover of less than USD 1 million), we find that young companies (with less than 5 years in business) do pay more tax as a percentage of profits compared to older companies in all study countries except France. Figure 5-8 illustrates the extent of this inequality for the eleven countries.

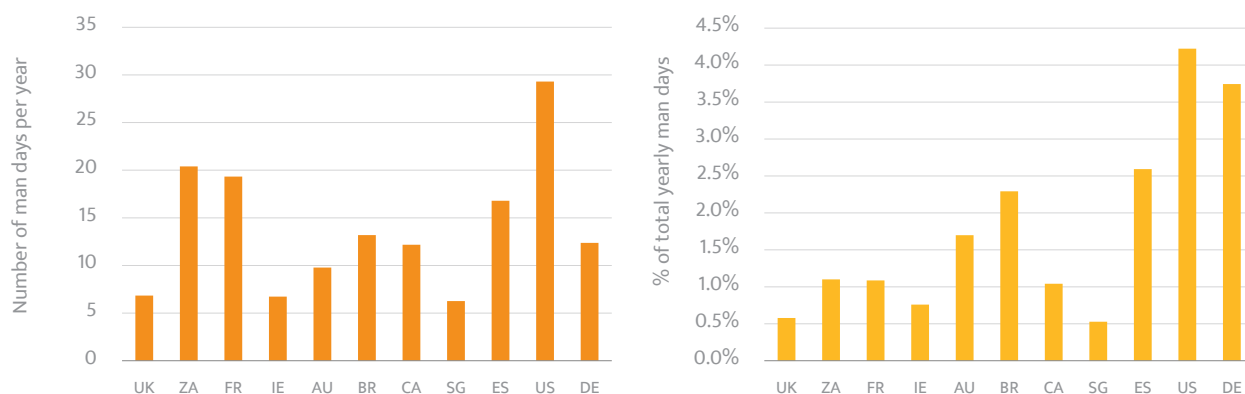
Figure 5-8: Tax-to-profits ratios for young and established SMEs in study countries



5.3 What is the opportunity and financial cost of performing tax-related accounting?

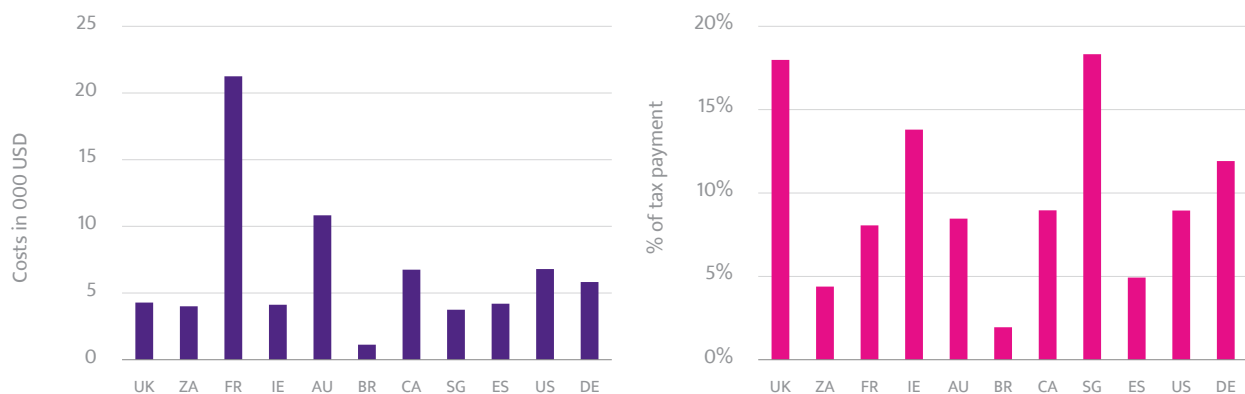
In addition to the financial burden that tax represents, paying tax also requires administrative efforts from an SME. Tax is calculated from the relevant corporate incomes with deductions for the financial year, and so the relevant components of corporate income have to be filed with the tax agency. This can take a significant amount of manpower as well as costs. This section examines that indirect cost of taxation on SMEs as a result of tax-related accounting activities.

Figure 5-9 shows the amount of administrative efforts that are required for tax-related accounting each year for an average SME in each of the study countries.

Figure 5-9: Man days spent on tax-related accounting

Tax-related accounting takes between 7 and 29 man days per year across the 11 study countries, with the US reporting the greatest number of days spent on the administrative activity. SMEs in Singapore spent the lowest number of days on tax-related accounting. Correspondingly, the percentage to total man days that are taken up with tax-related accounting is the highest for the US (over 4%), and the lowest percentage of the company's total man days spent on tax-related accounting is in Singapore. If companies in the study countries did not have to perform tax-related accounting, they could increase the time spent (in man days) on more productive activities by 0.5% and 4.4%.

Figure 5-10 shows the financial costs associated with tax-related accounting in the study countries.

Figure 5-10: Financial costs of tax-related accounting

France is a clear outlier in terms of the absolute financial cost of tax-related accounting. SMEs in France report more than quadruple the costs borne by SMEs in 7 other study countries. This is because some French SMEs in the survey report a very high cost for tax-related accounting. However, this cost is still a significantly lower than the total tax bill. This makes it more intuitive to consider the cost of tax-related accounting as the indirect cost of tax and hence as an incremental cost on tax payment.

In eight of the 11 study countries, tax-related accounting adds less than 12% to the corporate tax bill. In half of these eight countries, SMEs' indirect costs of tax from tax-related accounting amount to 5-10% of the tax payment. France falls within this 5-10% range, even though in absolute terms, SMEs appear bear a much greater costs of processing and filing tax. SMEs in the UK and Singapore reported the highest tax-related accounting costs as a percentage of tax – 18%.

5.4 Is there a role for intervention?

The findings in Section 5.1 lend some support to the hypothesis that small firms are being taxed disproportionately. The results from our survey for all 11 countries show that the ratio of tax to profits for SMEs is lower for larger companies. This inverse relationship is particularly strong when firm's turnover is used as a measure of size. This inverse relationship is also observed at country level for over half the study countries. Firms are asked to self-identify as medium-sized, small or micro, and we examined how tax-to-profits ratio varies for these three types. Medium-sized firms pay the least tax and micro companies the most tax relative to their profits in Australia, Brazil, Canada, Singapore, Spain and Germany.

Small companies are more vulnerable to financial shocks, as they are likely to have smaller credit facilities. When they experience cashflow problems, they take measures that can negatively affect their long-term growth. These are documented in our previous report, 'The Domino Effect: the impact of late payments'. A high tax bill can further exacerbate cashflow problems, which may make the implementation of these measures more likely. The end result is a less efficient economy. Therefore, it is in the interest of governments to ensure that small companies do not face a disproportionately large tax bill.

Tax as a percentage of profits also varies by the length of time that a firm has been in business. There is a relatively weak correlation when the average tax-to-profits ratio is computed for companies in different age groups as shown in Section 5.2. However, there is strong evidence that young companies also tend to be small companies, and companies that have been in business for a while are large companies. This suggests that they young companies are likely to be paying more tax in relation to their profits than older companies and provides some support for the hypothesis that tax burden is high for new companies.

There is further evidence that new, small companies pay more tax as a percentage of their profits compared to older, small companies. This is the case in 10 of the 11 study countries when small companies (with turnover of less than USD 1 million) that at most 5 years old are compared with small companies that are at least 6 years old. In the UK, Ireland, Brazil and Spain, the differential is over 10 percentage points.

One problem with a tax system that charges new companies too much is that it creates disincentive for would-be entrepreneurs. The gains from setting up a new business may be so reduced by tax that many such entrepreneurs may choose to be an employee instead. Start-ups are essential to a vibrant and competitive economy. Therefore, it is in the interest of the government to devise a tax regime that is sufficiently progressive, so that new entrepreneurs are adequately rewarded for the risks associated with setting up a new company.

The indirect costs of tax are also found to be significant in our analysis. In particular, the cost of tax-related accounting can add up to 18% to a company's tax bill. This means more resource being diverted to tax rather than being used for investment in the company. A more cost-effective system for tax-related accounting such as the use of digital platform could be introduced to ensure that tax administration does not represent a significant drain on corporate resources.

Appendix A The importance of SMEs

This Annex, based on work by FTI Consulting, considers the importance of SMEs across the world, and their contribution to employment and the economy. Small and Medium Enterprises (“SMEs”) are widely considered to be the backbone of the economies of all of the 11 countries that we analyse in this report: Australia, Brazil, Canada, France, Germany, the Republic of Ireland, Singapore, South Africa Spain, the UK and the US.

SMEs not only account for a significant (in many cases the majority) share of economic activity and employ a large share of the working population, but they also drive innovative and vibrant sectors in virtually all parts of these economies and in every region and territory.

In the EU, SMEs are typically defined as enterprises with fewer than 250 employees and micro enterprises are those with fewer than 10 employees. In other parts of the world SMEs and micro enterprises are often defined slightly differently. For example, in Canada and the US, SMEs include larger firms with up to 500 employees. In Canada, Brazil and South Africa, micro enterprises are smaller firms; those with fewer than 5 employees. Figure A-1 below summarises these definitions across the 11 markets considered in this report.

Figure A-1: Definition of size of SME businesses across countries (by employment)

Country	Micro	Small	Medium	Large
Australia	<5	5-19	20-199	>200
Brazil	<5	5-19	20-249	>250
Canada	<5	5-99	100-499	>500
France	<10	10-49	50-249	>250
Germany	<10	10-49	50-249	>250
Ireland	<10	10-49	50-249	>250
Singapore	<10	10-49	50-199	>200
South Africa	<5	5-49	50-199	>200
Spain	<10	10-49	50-249	>250
UK	<10	10-49	50-249	>250
US	<10	10-99	100-499	>500

Note: There are multiple alternative definitions relating to the size of businesses across countries, including those relating to income, profits, assets and amount of tax paid.

Source: National statistics authorities.

We emphasize that the definition of SMEs, somewhat counterintuitively, includes micro enterprises. Therefore, throughout the report when we refer to SMEs we do not only mean small and medium enterprises, as the term would suggest, but micro enterprises as well.

A.1 In terms of number of enterprises, SMEs dominate the economies considered

In each of the economies examined, SMEs account for over 99% of all enterprises (except in South Africa where they account for nearly 97%). The vast majority, typically over 80% of enterprises, is accounted for by micro enterprises. Canada and South Africa stand out as having significantly smaller share of micro enterprises

however in these countries micro firms represent a narrower category (fewer than 5 employees) than in most other countries (fewer than 10 employees).

The number of registered SMEs⁷ ranges from around 217,000 in Singapore to 5.8 million in the US.

Figure A-2: Number of (registered) SME enterprises (thousands)

	Micro	Small	Medium	Large	Total	Micro Share	SME Share
Singapore		216		1	217		99.4%
Ireland	229	16	3	1	249	92.2%	99.8%
South Africa	200	315	21	17	553	36.2%	96.9%
Canada	638	515	21	3	1,177	54.2%	99.7%
Australia	1,918	199	51	4	2,172	88.3%	99.8%
Germany	2,062	364	67	17	2,510	82.2%	99.3%
UK	2,277	227	40	10	2,555	89.2%	99.6%
France	2,928	122	19	4	3,074	95.3%	99.9%
Spain	3,097	116	18	5	3,237	95.7%	99.8%
Brazil	2,768	415	54	12	3,249	85.2%	99.6%
US	4,597	1,122	88	19	5,825	78.9%	99.7%

Note: Figures are from the latest publicly available data. Figures show registered enterprises where available (e.g. VAT or PAYE registered enterprises in the UK, enterprises with paid employees in the US, enterprises with paid employees in classified industries in Canada, enterprises with paid employees in Brazil and VAT registered enterprises in South Africa). Separate data for micro, small and medium companies in Singapore is not available.

Source: National statistics authorities.

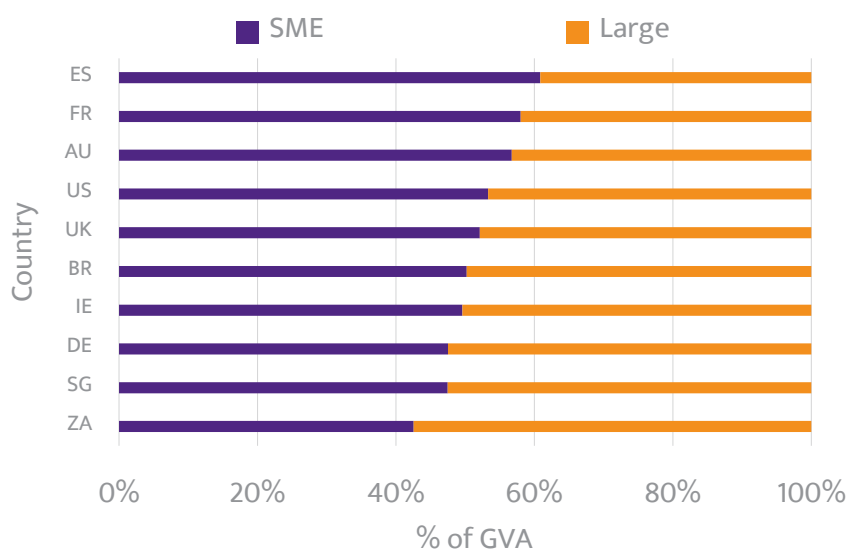
A.2 SMEs contribute a large share of economic activity and employment

Two key indicators of the importance of SMEs to their respective economies are their contribution to Gross Value Added (GVA) and their share of total employment. GVA is essentially the same as the more widely used term of economic activity, Gross Domestic Product (GDP).⁸

In 6 of the 10 markets where data is available, SMEs contribute more to the GVA of the economy than large enterprises, and in some cases significantly so. In Spain and France, for example, SMEs contribute 61% and 58% of GVA. For Canada, the latest figure available is as of 2005 when SMEs contributed 54% of Canadian GDP. Even in South Africa, where the contribution of SMEs is the lowest in terms of percentage, SMEs contribute 43% of the country's value-added.

⁷ Some statistical offices separately report the total number of SMEs and the number of SMEs which are tax registered or which have paid employees. When this distinction is made, we use the figures for the latter, narrower categories as these appear more comparable across the board and have more detailed information.

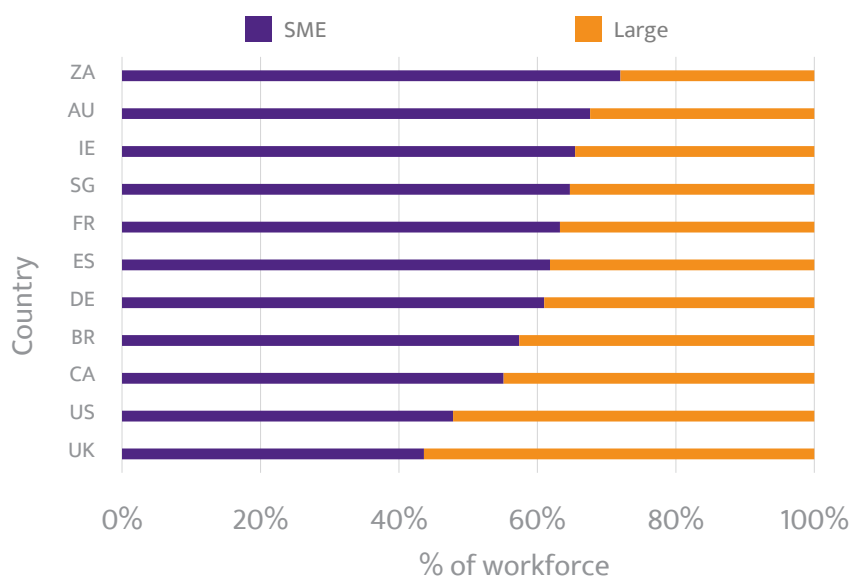
⁸ The difference between the two terms relates to the treatment of financial intermediation services, taxes and subsidies. From the perspective of this report, these differences are not material.

Figure A-3: GVA contribution of SMEs vs large enterprises

Note: Figures are from the latest publicly available data: 2016 for Australia, France, Spain and the UK, 2015 for South Africa and the US, 2014 for Germany, Ireland and Brazil. This statistic is not available for Canada. Data for some countries exclude some sectors; typically agriculture and forestry, defence, health care, public administration.

Source: National statistics authorities

Typically, SMEs account for an even greater share of employment than of GVA across the 11 economies. More than half of the private sector workforce is employed by SMEs in all economies examined with the exception of the US and the UK. These are also the only two countries where SMEs' share of employment is lower than their share of GVA, indicating higher level of productivity of SMEs in these economies than in the rest of the sample. South Africa and Singapore stand out with high level of SME employment but relatively lower levels of SME value-added.

Figure A-4: Employment by business size

Note: Figures are from the latest publicly available data: 2016 for Australia, Canada, France, Singapore, Spain and the UK, 2015 for Ireland, 2014 for Brazil, Germany, South Africa and the US. Data for some countries exclude some sectors; typically agriculture and forestry, defence, health care, public administration.

Source: National statistics authorities

A.3 SMEs pay a substantial share of corporation taxes

The significant contribution of SMEs to economic activity also translates into government corporation tax receipts. Unfortunately, data on corporate taxes paid by SMEs is not readily available in many of the examined economies. In Spain, SMEs account for 59% of corporation taxes in line with their GVA contribution. In Australia, Ireland, and South Africa, SMEs pay around 32%-36% of corporation taxes, which is significant but well below their share of contribution to GVA. In the UK, smaller firms with profits less than GBP 1.5 million also pay around a third of corporation taxes however these companies are likely to represent only a subset of all SMEs.

Figure A-5: Share of corporate tax paid by smaller businesses

Country	Definition of SMEs for the perspective of corporation tax	Proportion of tax paid by smaller businesses
Spain	Number of employees under 250	59.2%
Australia	Total income less than AUD 100m	35.9%
Ireland	Pay less than EUR 10m in corporate tax	35.7%
UK	Profits less than GBP 1.5m	32.4%
South Africa	Income level varies across sectors	32.2%

Notes: For the UK, companies with profits less than GBP 1.5 million was used to approximate smaller firms; however these companies represent a subset of SMEs.

Source: Respective national statistics authorities

A.4 SMEs exist in multiple sectors

Across all economies where the data is available, the majority of SMEs are in services industries. The share is highest in Ireland and the US, where over 80% of SMEs are service firms. By contrast, around 30% of SMEs are in goods industries in Brazil, France, Spain and Germany.

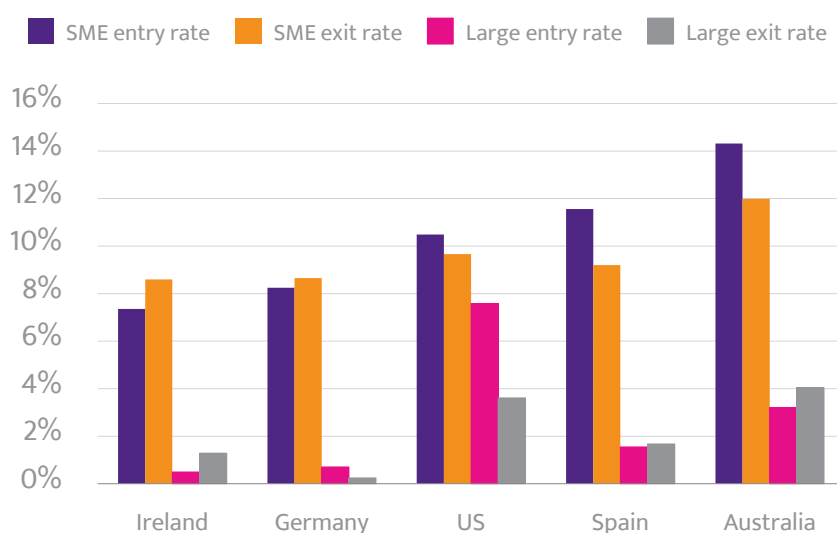
Within the services industries, the professional, scientific and technical sector, which includes legal and accounting services, management consultancies and architecture businesses, and the retail trade sector tend to be the dominant sectors in terms of SME contribution. Within the goods industries, SMEs tend to be concentrated in the construction sector.

A.5 SMEs drive growth, innovation and diversity

The number of SMEs has grown strongly in recent years in several of the countries examined. In the UK, growth in SMEs has outstripped that of large companies in recent decades – the number of SMEs has risen by 25% since 2000, while the number of large enterprises remained broadly unchanged. In Germany, between 2008 and 2014, the number of SMEs increased by 34% compared to that of large enterprises which increased by only 17%. In the US, the number of SMEs declined less steeply than that of large enterprises during the financial crisis however the recovery of SMEs has also been slower. Australia is one of the counter-examples, where the growth of large enterprises has outpaced that of SMEs since 2010.

SMEs maintain steady growth despite having significantly higher failure rates than those of large companies. As shown in Figure A-6, SMEs (micro enterprises in particular) have much higher start up and failure rates than large companies in all of the countries for which data is available.

Figure A-6: Entry and exit rates by business size



Note: Figures are from the latest publicly available data. For Germany, Ireland and Spain, SME entry and exit figures are for micro enterprises (<10) only. The data for the US is at an establishment level, which is defined as a single physical location where one predominant activity occurs, as opposed to a firm, which can consist of several establishments.

In many countries, SMEs are key drivers of employment growth. For example, in Canada, SMEs accounted for 95% of the increase in private sector employment (of 1.2 million jobs) between 2005 and 2015.⁹ Similarly in the US, between 1993 and mid-2013, small businesses created 14.3 million jobs out of the total 22.9 million new jobs created in that period, accounting for 63% of the net job creation.¹⁰

SMEs are also an important driver of innovation, diversification and export growth. For example, in Germany, SMEs are highly innovative and technology driven, with more than 42% of SMEs having launched a product or process innovation in 2014.¹¹ In the US, of high patenting firms (15 or more patents in a four-year period), small businesses produced 16 times more patents per employee than large patenting firms.¹² Similarly, in Singapore, the Government has identified SMEs as an important driver of innovation of new products and services, particularly in the digital economy.¹³

A.6 SMEs face several challenges particularly in the areas of regulation and taxation

Across all of the countries examined, regulation and taxation are two key challenges regularly cited by SMEs. Late payments, difficulty with staff recruitment and lack of access to finance are also important obstacles for many SMEs.

In the UK, the Small Business Survey conducted by the Government in 2016 reported competition, regulation, taxation and late payments as the major obstacles to the success of SMEs.¹⁴ For example, regulatory compliance costs are much more onerous for small firms than for larger ones:

“Fixed cost elements of regulatory compliance produce higher relative compliance costs for small firms. OECD evidence reveals that small firms (with 1–19 employees) incur more than three times higher regulatory costs per employee than medium firms (20–49 employees) and more than five times higher costs than large firms (50–500 employees).”¹⁵

In the US, the cost of health insurance appears to be the most severe problem facing small businesses.¹⁶ US SMEs also face a disproportionate burden of regulatory compliance:

“Research... estimates annual regulatory compliance costs businesses \$1.88 Trillion. At 11% of GDP, that’s \$280 Billion more than tax receipts... small businesses pay double per employee per year for regulatory compliance than big businesses.”¹⁷

In Canada, the average employee spends more than a month each year to deal with regulations:

“According to Canada’s Red Tape Report, the total cost of complying with government rules and paperwork reached \$37.1 billion a year in 2014. In the smallest businesses, the average employee can spend more than a month each year (185 hours) just dealing with regulations.”¹⁸

⁹ Key small business statistics, June 2016, Innovation, Science and Economic Development Canada Small Business Branch, page 7.

¹⁰ US Small Businesses Administration, FAQ - https://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf

¹¹ Translated from <http://www.bmw.de/Redaktion/DE/Dossier/politik-fuer-den-mittelstand.html>, Federal Ministry of Economics and Technology (Germany), 2017.

¹² US Small Businesses Administration, FAQ - https://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf

¹³ Singapore SMEs More Optimistic, SG SME, 2017 - www.sgsmc.sg/news/government/singapore-smes-slightly-more-optimistic-index

¹⁴ Small Business Survey 2016: SME employers, page 10.

¹⁵ Better regulation, Federation of Small Businesses, page 8.

¹⁶ Small Business Problems and Priorities survey, NFIB Research Foundation.

¹⁷ What Small Business Owners Think About Their Income Tax ROI, Forbes, 2014.

¹⁸ Regulation Costs for Canadian Businesses, CFIB, 2015

In Australia, compliance with Goods and Services Tax (GST) rules draws significant resources, particularly from SMEs:

“An SME spends an average of 84.1 hours a year to collect the tax on behalf of the Australian Government - or more than two full working weeks a year...this equates to \$6778 a year for each of the estimated 2.02 million SMEs and non-employing business in Australia – or \$13.7 billion a year across all SME...The GST represents two full weeks where the owner’s attention is dragged away from the day to day running of their business. This is a significant drain on the productivity and profitability of SMEs.”¹⁹

The complexity of tax systems is also regularly cited as a challenge for SMEs including in France and Brazil. In Brazil companies take 2,600 hours per year to comply with taxes:

“The complexity of the Brazilian tax system in terms of number of taxes and ancillary requirements is not sustainable in the long term. The World Bank conducts an annual “Paying Taxes” study together with PwC, which places Brazil as the country in which companies take amongst the most time to comply with taxes (2,600 hours per year, against 1,025 in Bolivia, 286 in Mexico, 291 in Chile or 175 in the US).”²⁰

The failure rate of SMEs in South Africa is one of the highest in the world. Lack of finance is one of the primary reasons, followed by compliance burden and late payments. Late payments are a big problem for small businesses as the lack of cash flow stifles growth and even puts entrepreneurs out of business.

A.7 Conclusion

There are many reasons why SMEs are considered the backbone of the economies of the 11 countries analysed in this report. They typically account for the majority or close to majority of GVA and employment, pay a substantial share of corporation taxes and are key drivers of growth, innovation and diversity. Their contribution is particularly noteworthy given the obstacles they face including lack of financing, difficulties with staff recruitment, late payments and a disproportionate burden of compliance with regulation and tax rules.

¹⁹ SME Compliance Costs, MYOB Australia, 2015

²⁰ Global Legal Insights – Corporate Tax, Fourth Edition, Global Legal Group, 2016, page 22.

Appendix B Survey questionnaire

Question	Options (where applicable)
In what age range do you fit into?	
What is your gender?	
Which of the following would you use to describe your organisation?	<ul style="list-style-type: none"> • Privately owned company • Publicly listed (i.e. on the stock market) • Government • NGO/ charity
How involved and knowledgeable are you with decision making on finances and administrative functions for your company?	
How many years has your company been in business?	
In which country are you personally based in?	
Is your HEAD OFFICE also in this country?	
Which of the following would you use to BEST describe the size of your organisation in your country?	
And approximately how many employees does your company directly employ full-time?	
By what percent do you expect the number of your full-time employees to change over the next 12 months?	
And approximately how many employees does your company directly employ on a part-time or casual basis?	
Approximately, what was your net profit (before tax) for the last 12 months?	
By what percent do you expect your net profit (before tax) to change over the next 12 months?	
Approximately, what was your Turnover for the last 12 months?	
By what percent do you expect your Turnover to change over the next 12 months?	
Approximately what percentage of your Turnover is from the country you're headquartered in?	
What geography does your company typically operate in?	<ul style="list-style-type: none"> • Nationally • Regionally • Globally

Question	Options (where applicable)
In which of the following geographies are your clients / customers based?	<ul style="list-style-type: none"> • Africa • Asia • Central America • Eastern Europe • European Union • Middle East • North America • Oceania • South America • The Caribbean
Approximately how many clients / customers have you had over the last 12 months?	
By what percent do you expect the number of your clients / customers to change over the next 12 months?	
Which of the following industries is your company in?	<ul style="list-style-type: none"> • Banking, Financial Services & Insurance • Education • Energy • Food and Beverage • Government Contracting • Healthcare / Wellness • Hospitality & Leisure • Infrastructure, Construction & Transport • Insurance • Life Sciences • Legal • Manufacturing & Aviation • Media, Sport & Entertainment • Mining • Real Estate • Retail • Technology & Telecoms • Other
Would you use any of the following to describe your company?	<ul style="list-style-type: none"> • Start-up • Technology company • Disruptive to a traditional industry • None of the above
To the best of your knowledge, what is your forecast for your organisation over the next 12 months?	<ul style="list-style-type: none"> • Rapid growth • Steady growth • Broadly Flat • Decline
Approximately what proportion of administrative tasks over the last 12 months are taken up with the following? <ul style="list-style-type: none"> • Accountancy tasks • HR tasks • Payroll tasks • Tax-related accounting • Chasing late payments • Processing invoices received • Generating invoices & process payments • Talent acquisition / training 	

Question	Options (where applicable)
With regards to all these administrative tasks, how many days of work would you estimate is spent on them in TOTAL over the last 12 months?	
What would you estimate is the overall cost (including wages and specific software) to your company on these administrative tasks?	
What was your total corporation tax bill for the last 12 months?	
How strongly do you agree or disagree with the following statements: We spend a lot more processing our tax than the amount we pay	<ul style="list-style-type: none"> • Strongly agree • Slightly agree • Slightly disagree • Strongly disagree
How strongly do you agree or disagree with the following statements: We deliberately re-invest profits in the company to minimise the tax burden	<ul style="list-style-type: none"> • Strongly agree • Slightly agree • Slightly disagree • Strongly disagree
How strongly do you agree or disagree with the following statements: SMEs are disadvantaged competing with large companies that can afford specialist tax advice	<ul style="list-style-type: none"> • Strongly agree • Slightly agree • Slightly disagree • Strongly disagree

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