

Tax Compliance Perceptions
and Formalization of Small Businesses
in South Africa

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Abstract

This paper is based on large-scale surveys of formal and informal small businesses in South Africa, including questions about their experiences and perceptions about tax compliance, tax morale, and related variables. The survey findings suggest that formalization is more likely to take place in urban areas, involving relatively larger firms, and those who already use proper bookkeeping. Informal firms who said they were likely to register

for tax in the near future were more likely than other informal firms to report higher satisfaction with government services, and to believe most businesses pay their taxes. The most-cited advantages of being registered for tax included better access to government services, better access to financing, and better opportunities for growth.

This paper—a product of the Regulatory Simplification Unit, Investment Climate Department—is part of a larger effort in the department to reduce unnecessary tax compliance costs on businesses. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at jcoolidge@worldbank.org

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Tax Compliance Perceptions and Formalization of Small Businesses in South Africa

Introduction

Background and motivation: The Government of South Africa is committed to encouraging the growth of entrepreneurship in the country, including the formalization of informal firms. To this end, the National Treasury (NT) and the South Africa Revenue Service (SARS) have been developing tax policy and tax administration reforms, including a “tax amnesty” for many previous informal firms and a concerted effort to reduce the tax compliance burden on Small, Medium, and Micro Enterprises (SMMEs).¹ For the purposes of this study, and in line with current tax legislation in South Africa, SMMEs are defined as those with an annual turnover under R 14 million (about US\$ 2 million).

At the request of the National Treasury of South Africa (NT) and the South Africa Revenue Service (SARS) in 2006, the Foreign Investment Advisory Service of the World Bank Group (FIAS) initiated a set of surveys to measure the tax compliance burden for SMMEs. Earlier studies in South Africa (e.g., SBP 2005) had also documented onerous compliance burdens on SMMEs, including tax compliance costs in particular.

Anecdotal evidence in South Africa suggested that many of the smallest firms struggle with tax compliance, as is common elsewhere in the world (see Literature Review, below). Meanwhile, fear of “making mistakes” on taxes and the risk of heavy penalties imposed by SARS (in addition to unwillingness to pay taxes) was said to be a factor deterring formalization of many informal firms. Other research in South Africa suggested that broader attitudes about the fairness of the fiscal system (both spending and taxation) and the quality of public services also had an influence on the willingness of the owners of informal firms to formalize and start paying taxes (Fjeldstein, 2004).

Brief Overview of the Survey: To document the extent of the problem in South Africa, FIAS worked with NT and SARS to design a set of three surveys:

- A survey of professional tax practitioners (TP) about their SMME clients
- A survey of SMMEs registered with SARS
- A survey of informal SMMEs regarding their perceptions of tax compliance costs.

The latter two surveys listed above were both co-financed by USAID and carried out by Citizen Surveys. The surveys focused on firms with turnover between R70,000 and R 14 million to exclude both the tiniest “survivalist” firms (e.g., those whose income would be too low to be assessed for personal income tax if they were employees) as well as large firms. The survey field work for the informality survey included 1,000 small businesses that were not registered with SARS (based on area sampling) and took place in mid 2007. The survey of formal firms included 1,000 businesses as a representative sample drawn from the SARS database of registered business taxpayers and was completed in late 2007. Both reports were finalized in March 2008 (USAID, 2008).

¹ For details of the new tax regime for micro-enterprises (i.e., those under R 1 million turnover), see <http://www.sars.gov.za/home.asp?pid=43122>

Research Goals: NT and SARS asked FIAS to make use of the survey data to answer a number of questions about the formalization of informal firms, including the following (for details about analytical methods, see Annex 1):

- What are the characteristics of the 12% of formal firms who reported they had operated for some time before registering with SARS?
- What are the characteristics of the informal firms who reported they are considering registering with SARS?
- Is there a “bridge” that can be found between informal and formal firms?
- What do informal firms know about their tax obligations?
- What are some of the key attitudes of informal firms that may be related to their decisions about formalizing and registering with SARS?

The structure of this paper is as follows. After this introduction, Part 1 provides a summary of the relevant international tax compliance research; Part 2 describes the main survey findings and Part 3 contains conclusions and policy implications.

1. Literature Review

The original assumptions about tax compliance were rooted in standard analyses of maximization of expected income, taking into account the risks and penalties associated with non-compliance (Allingham and Sandmo, 1972). However, empirical data quickly revealed that taxpayers throughout the world paid much more tax than could be accounted for even by the highest feasible levels of auditing, penalties and risk-aversion. The question therefore switched from “why do taxpayers evade” to “why do taxpayers comply?” (Alm, et al..1992, 2003).

The more recent literature on tax compliance has taken into account economic theory, experimental design, and survey results. While much of the analysis has focused on individual taxpayers, the behavior of business taxpayers (including the self-employed and small business owners as well as managers of joint-stock companies) should probably be similar, and if anything the “elasticity” of tax compliance to the tax burden for business taxpayers should be probably higher than for individuals. Capital has long been documented as the most mobile among the main factors of production. Thus, Tiebout (1956) pointed out that taxpayers can “vote with their feet” by migrating between different jurisdictions, so governments throughout the world must take note that much investment can be “footloose” and that overly heavy tax burdens can deter investment – either encouraging it to search for locations that offer the highest expected after-tax rate of return or discouraging entrepreneurship in favor of wage labor. See also OECD Guidance Note on Tax Compliance (2004).

The OECD (2001) describes the use of surveys to gather evidence on tax compliance, and points out that their strengths include “their ability to capture a broad range of explanatory variables known only to taxpayers, notably their understanding of compliance requirements, relevant values and attitudes, expectations of risks and benefits of non-compliance ... [while disadvantages include] variations in definitions of issues such as non compliance, the integrity of the answers for deliberate or inadvertent reasons, and the inability to report on inadvertent omissions.”

Most importantly, Alm et al. stressed that “individuals exhibit much diversity in their behaviour.” Some are primarily worried about getting caught and penalized; others (especially businesspeople who face competition) are more concerned about the behavior of other taxpayers/neighbors/competitors; others think in terms of civic duty and/or public services and may weigh those considerations against the perceived accountability and efficiency of the state. These different factors are all likely to vary across different countries, institutions, and cultures, and much information about such factors can be estimated from surveys.

Alm et al. also found that “tax revenues increase with greater enforcement efforts, but this payoff declines as the probability [i.e., of being caught and punished for tax evasion] increases.” They later note that “compliance increases with [indicators of the availability of public goods and services], and suggest that government can increase compliance by providing goods that their citizens prefer more, by providing these goods in a more efficient manner, or by more effectively emphasizing that taxes are necessary for receipt of government services.”

Tax compliance can also have important spillover benefits to firms. The literature on tax compliance notes that one indirect benefit of tax compliance is the discipline imposed on small businesses to prepare and maintain accurate financial accounts (e.g., income statement, balance sheet). Sandford (1995) noted many of the relevant benefits (particularly improvements in information systems and financial control) and these have been further documented by the tax compliance cost literature.

Cummings et al (2004) used both survey-based evidence and experimental results in the U.S., South Africa and Botswana and concluded that tax morale and tax compliance levels appear to be influenced by “the fairness of tax administration, the perceived fiscal exchange, and the overall attitude towards the respective governments.”

Alm and Torgler (2006) analyzed tax morale and correlations with cultural differences in the U.S. and Europe. There is strong evidence that tax morale differs across countries, with relatively higher tax morale in the U.S., Austria and Switzerland and relatively lower tax morale in Spain, Portugal and Belgium. They also found strong negative correlation between the size of the “shadow economy” and the degree of tax morale². Higher “tax morale”, in turn, is correlated with various estimates of tax compliance³.

In South Africa, Fjeldstad analyzed compliance with local “service charges” (user fees that bear some similarity to taxes) using survey data, and found that failure to comply with service charges (which displayed high degrees of variation both within communities and between communities

² “Tax morale” was measured by responses to survey questions from the World Values Survey: “Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: ... Cheating on tax if you have the chance.” The size of the shadow economy is measured as a percent of official GDP, using the estimates of the shadow economy from Schneider and Klinglmair (2003) based largely on currency demand.

³ Although Alm, Lewis and others have noted that “tax evasion is notoriously difficult to measure”. For example, Alm and Martinez-Vazquez note “A major difficulty in analyzing evasion is its measurement” and in turn cite Tanzi (1980) and Schneider and Enste (2000) “for discussion and applications of various approaches to measurement, all of which are subject to much imprecision and controversy.” Lewis says “Methods of assessing the extent of tax evasion have been indirect and open to a great deal of error.” He goes on to cite Gutman’s methods, (later elaborated by Schneider), using cash demand as a proportion of the money supply as a proxy variable for evasion. However, in the 21st century, the growing use of electronic finance has also opened up many new opportunities for tax evasion.

with similar socio-economic characteristics) was associated not only with “ability to pay” but also strongly correlated with the following three variables:

- (1) Trust in the local government to use revenues to provide expected services
- (2) Trust in the authorities to establish fair procedures for revenue collection and distribution of services
- (3) Trust in other citizens to pay their share.

2. Main Survey Findings

Overall 12% of formal businesses reported operating at least for a while before registering for tax. When informal businesses were asked how likely it is for them to register for tax in the next two years 66% of valid responses suggest that it is at least to some extent likely⁴.

Figures 1 and 2 below focus on the data by province. It appears that businesses in Gauteng and Western Cape are the ones most oriented toward the formal sector: Almost 80 % of informal firms in Gauteng report they are at least somewhat likely to register for tax, while only 5% of formal businesses reported they had ever operated informally before registering for tax. By contrast, in Kwazulu Natal (which, like the previous two mentioned, is a relatively urbanized province), only 56% of informal businesses say they are likely to register for tax and 15% of formal businesses reported they had operated informally before registering for tax. Western Cape has low number of formal SMMEs who reported operating informally, but roughly an “average” proportion of informal firms reporting likelihood to register for tax. In the less urbanized provinces (“Other”), 20% of formal businesses reported operating informally before registering.⁵

Figure 1: Likelihood for registering for tax by province

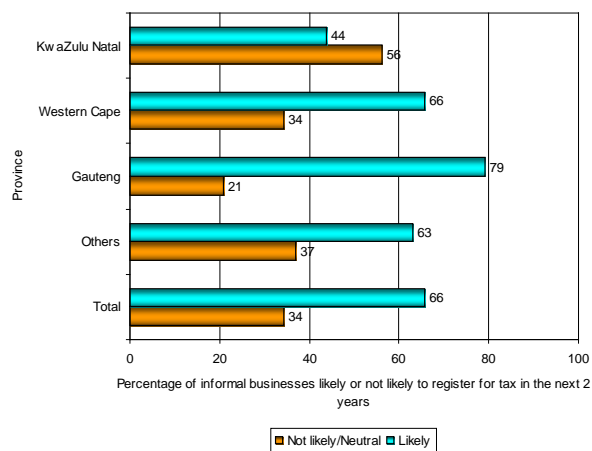
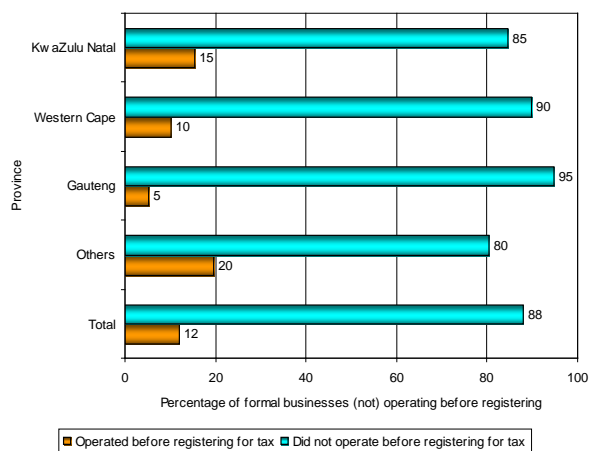


Figure 2: Operated before registering for tax by province



⁴ The number of non-valid responses is 84 and they mostly refer to answer ‘I don’t know’. If we include these answers, the share of respondents claiming that it is at least to some extent likely that they will register for tax in the next 2 years is 60.3%.

⁵ Survey data was not conducive to a strict urban/rural analysis.

Figures 3 and 4 below provide a picture of the sector breakdown. Among informal businesses, those in Agriculture, construction and manufacturing report the highest likelihood to register for tax. Similarly, among formal firms, respondents in these sectors reported a relatively higher proportion that had operated informally before registering for tax (for more on this “bridge” see below).

Figure 3: Likelihood for registering for tax by sector

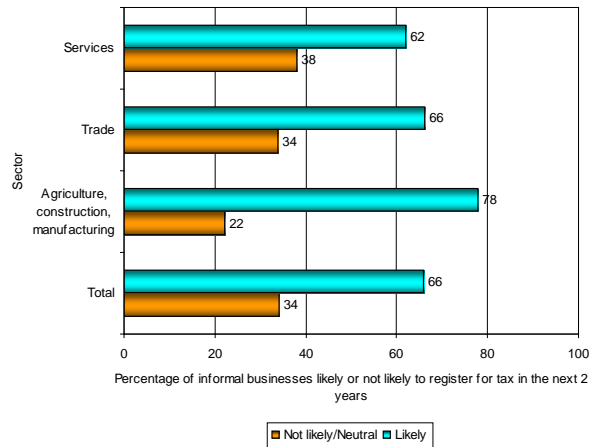
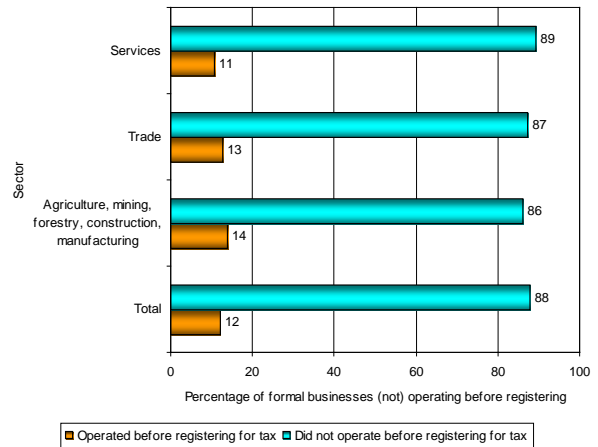


Figure 4: Operated before registering for tax by sector



Figures 5 and 6 focus on employment. As might be expected, among informal businesses, those with more employees are relatively more likely to report a possibility for registering for tax. Among formal businesses, those with with over 30 employees were the least likely to reported they had ever operated informally.

Figure 5: Likelihood for registering for tax by number of employees

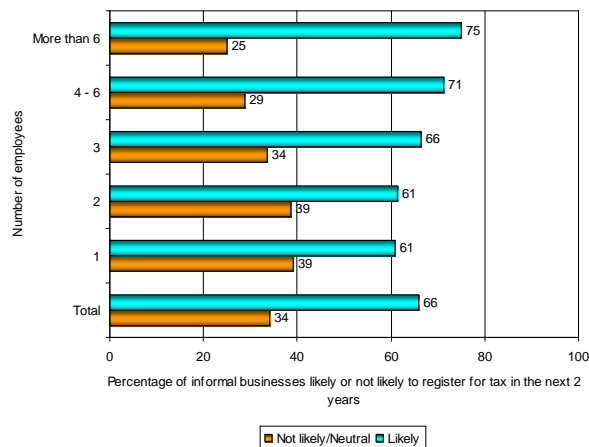
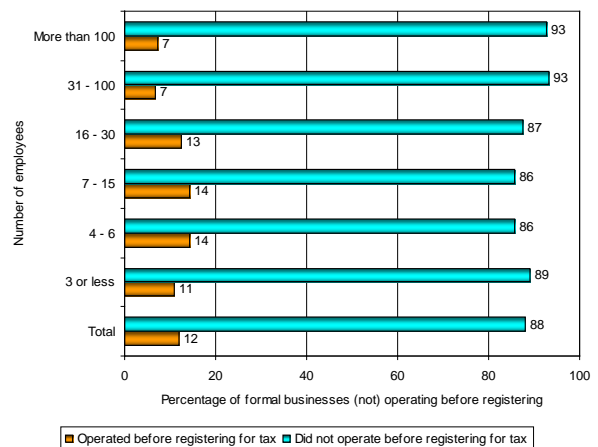


Figure 6: Operated before registering for tax by number of employees



Informal – formal “bridge”

To investigate the possible “bridge” (i.e., regular similarities that could be found in the survey data) between the informal and formal companies we undertook an analysis focusing on two specific samples in both surveys. These samples represent those formal businesses who reported they had been operating for a while before formalizing, and those informal businesses who reported likelihood for formalization within the next two years. A note should be made that the two surveys used different methodologies⁶, and that sometimes makes the comparison rather difficult.

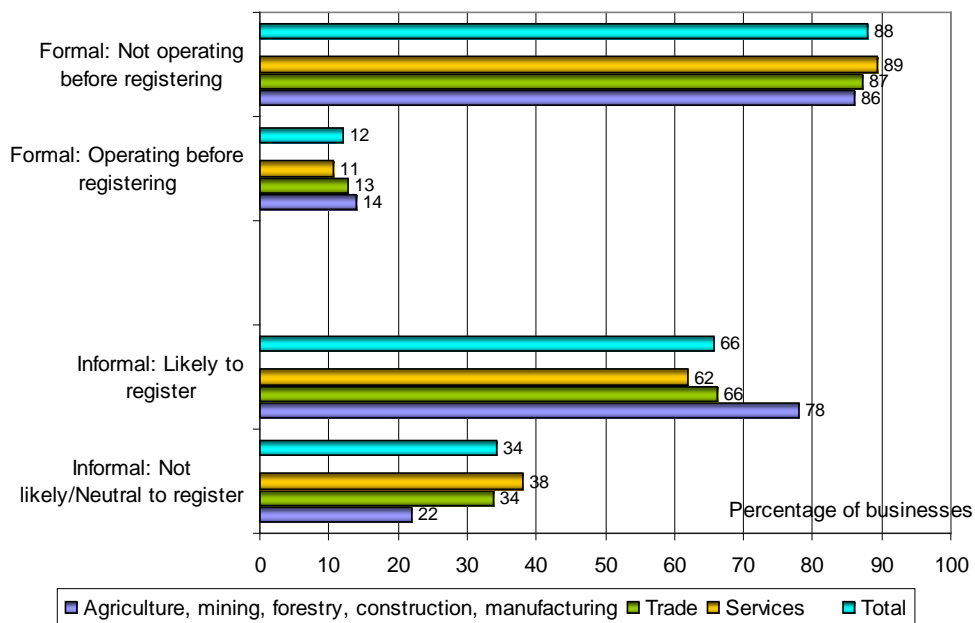
The analysis that follows will try to investigate what kinds of businesses tend to be more frequently part of this “bridge” between formal and informal.

Sector

Due to different methodologies and different structures of the formal and informal economies, the sector structure of two samples (formal and informal businesses) is not comparable without some regrouping of categories. In order to compare these samples three broad sectors were newly established:

- Agriculture, forestry, fishing, mining, construction and manufacturing
- Trade
- Other Services

Figure 7: Operating before registering (for formal businesses) and likelihood of registering (for informal businesses)



⁶ Formal survey was done using telephone interviewing as a data collection method while informal survey was done “face – to – face”. The formal survey was based on a representative sample of SMMEs registered with SARS while the informal survey used area based sampling.

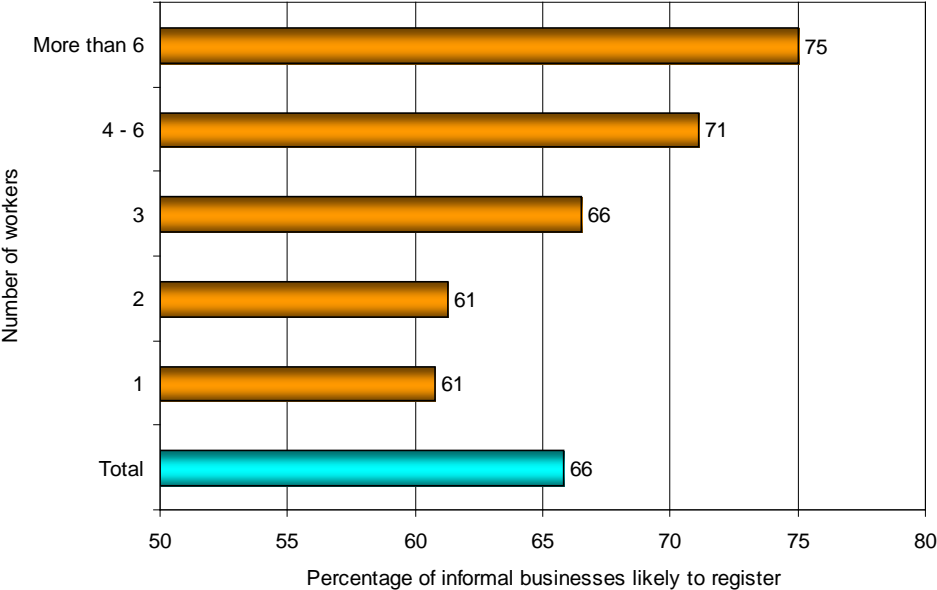
Additional Chi square tests showed no statistically significant differences between sectors in the formal sample, but statistically significant differences do appear to exist among the informal businesses⁷. The analysis of this significant difference in the informal sample and a tendency in the formal one shows that businesses in agriculture, mining, forestry, fishing, construction and manufacturing tend to be more frequently a part of the bridge between the formal and the informal economy, while service sector businesses (other than trade) tend to be a part of this bridge less frequently, and trade is in the middle.

In other words, informal firms in primary industries and manufacturing more frequently report they are likely to formalize and conversely, are the same sectors among formal firms that are most likely to have operated for a period of time informally. In contrast, informal firms in the service sector report they are relatively more likely to stay in the informal sector, while formal firms in the service sector are more likely to have started out formal (i.e., registered for tax) to begin with. Unfortunately the survey categories do not allow for further disaggregation.

Size

The T-test shows that the difference in the number of workers among informal businesses likely to register and those not likely to register is significant⁸ and that the likelihood for tax registration is higher if the business employs more workers. The same can be seen when looking at Figure 8. This may be due to the difficulties of “hiding” relatively larger firms from the tax authorities.

Figure 8: Informal business size and likelihood for tax registration

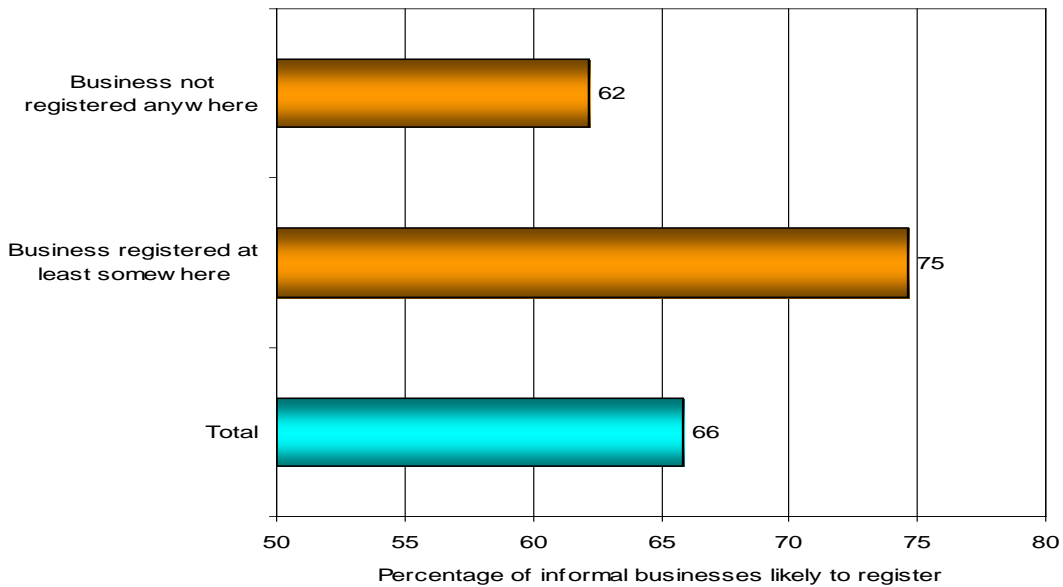


⁷ Chi square = 12.713, significant on 1% level
⁸ T = 4.052, significant on 1% level

Registration with Government Agencies and Business Associations

As Figure 9 clearly suggests, businesses that are already registered at some government agency or professional association (the national business registry - CIPRO, Chamber of Commerce, Business associations, Workers Compensation and other) are more likely to make the next step and register for tax⁹.

Figure 9: Registered at government agency or professional association and likelihood for tax registration



⁹ Chi square = 13.034, significant on 1% level

Location of business operation and value of assets

It seems that business owners who are renting their business premises are more likely to consider tax formalization (See Figure 10)¹⁰. They may be at highest risk from their landlords declaring their rental income and thereby being discovered by SARS. Landlords may also want to see tax clearance certificates as part of their credit clearance. The value of assets does not seem to significantly influence the likelihood for registering for tax (t-test does not result in a statistically significant difference), and as Figure 11 suggests, it seems to be the lowest among businesses with the lowest value of assets.¹¹

Figure 10: Location of business operation and likelihood for tax registration

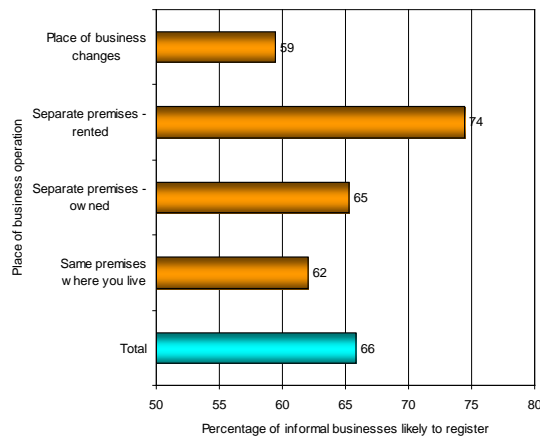
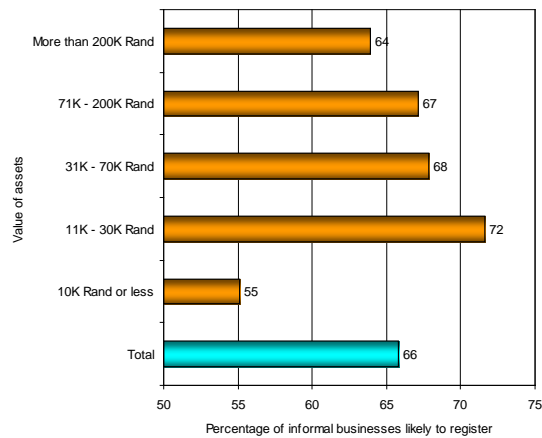


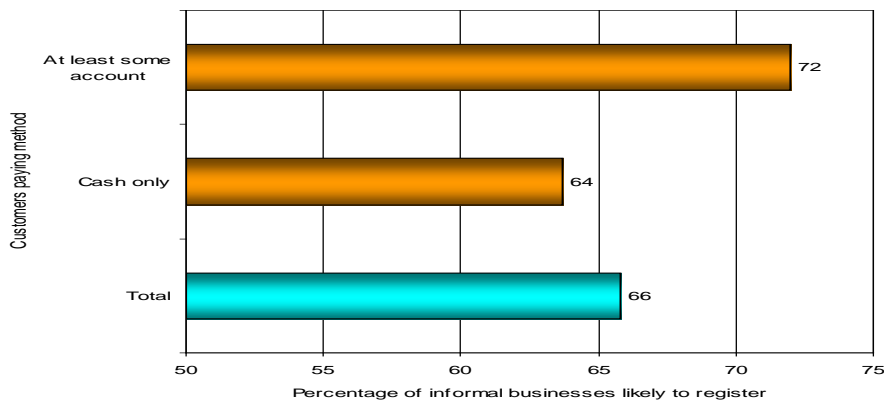
Figure 11: Value of assets and likelihood for tax registration



Customers' method of payment

As expected, the survey data supports the supposition that cash payments from customers have a negative influence on likelihood for tax registration. Businesses reporting using only cash payments tend to report that they are likely to register less frequently than those paid with other methods¹².

Figure 12: Payment method and likelihood for tax registration



¹⁰ Chi square = 12.999, significant on 1% level

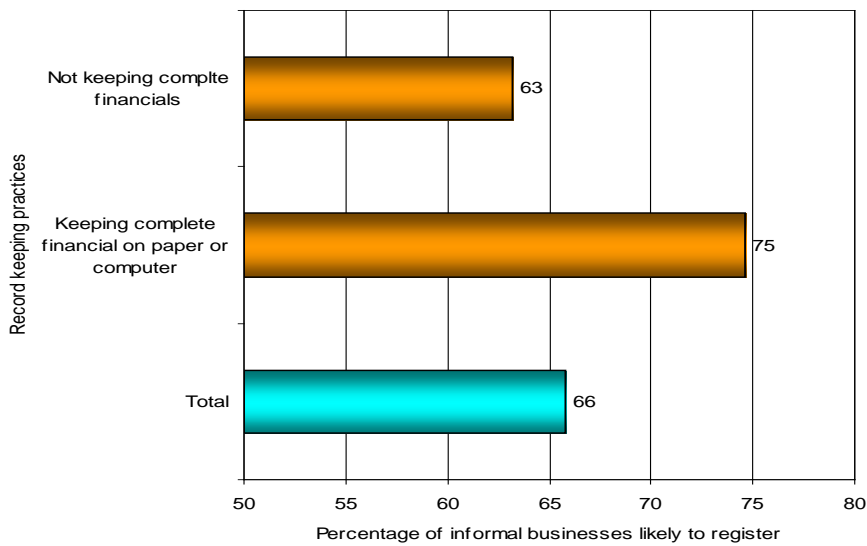
¹¹ Only visual inspection of the figure suggests this assessment. Statistical tests do not demonstrate statistical significance.

¹² Chi square = 5.414, significant on 5% level

Record keeping practices

Businesses already doing their complete financials either on paper or on the computer are more likely to register for tax¹³. About 23% of respondents claimed to keep complete financials either on paper or in the computer, while 77% reported they do not. It would be expected that larger businesses are more likely to use more sophisticated record keeping practices than smaller firms, and this may account for the difference.

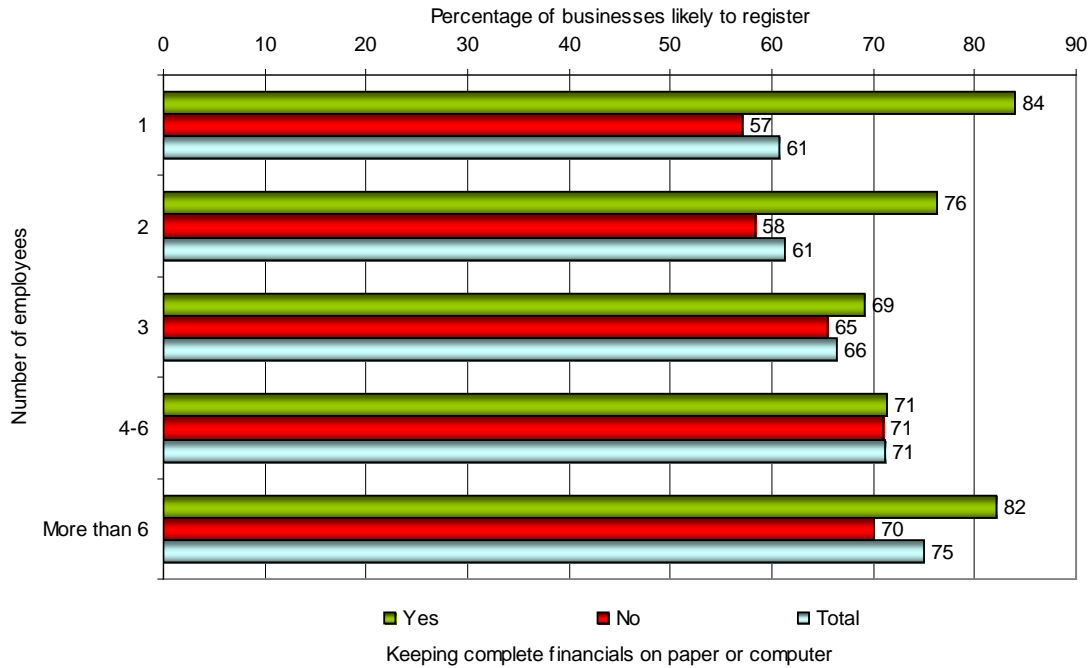
Figure 13: Record keeping practices and likelihood for tax registration



One might hypothesize that record keeping practices do not have an independent influence on the likelihood for registration, and that their influence is registered only due to their correlation with business size (that indeed does have a significant influence on likelihood for registration as shown on figure 8). Figure 14 shows the relationship among all three variables.

¹³ Chi square = 9.594, significant on 1% level

Figure 14: Record keeping practices and likelihood for tax registration by number of employees



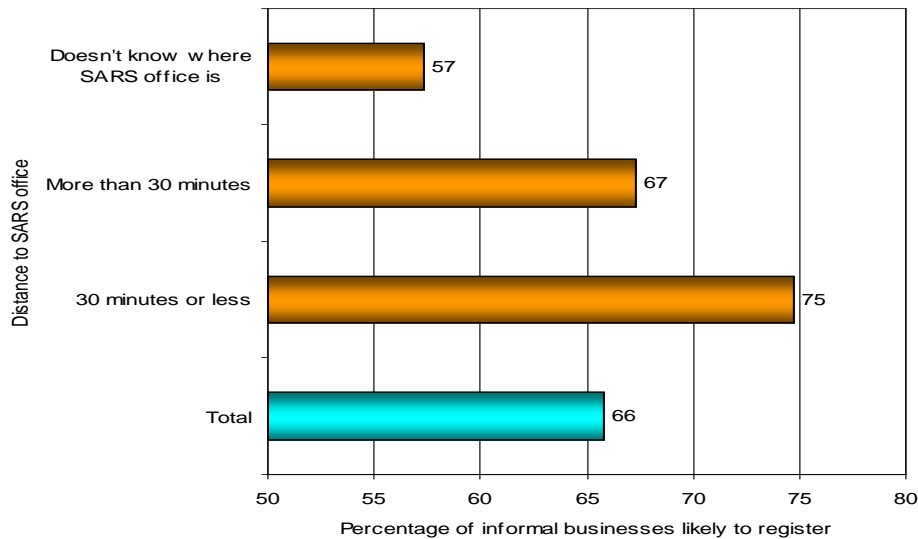
Additional testing showed that there is a significant difference in the likelihood for registration between record keeping and non-record keeping businesses, but only for the two smallest categories¹⁴ (with 1 and 2 employees). This analysis supports a conclusion that bookkeeping practices have an independent, positive influence on the likelihood for registration, at least among the smallest businesses.

¹⁴ For businesses with 1 employee - Chi square = 6.546, significant on 5% level; for businesses with 2 employees - Chi square = 4.321, significant on 5% level

Knowledge about nearest SARS office and its distance

Informal businesses reporting that they know where the nearest SARS office is are more likely to register for tax than other respondents¹⁵. Also, although statistical tests are not significant at the 5% level¹⁶, it seems that the distance to the nearest SARS office (comparing those reporting they are less than 30 minutes versus more than 30 minutes away) has some influence on the likelihood of registration. If so, these findings may suggest there is merit in ensuring an adequate “field presence” of tax offices – either to provide wider outreach of services or to increase the (perceived) probability of discovering informal businesses.

Figure 15: Awareness of the nearest SARS office and its distance and likelihood for tax registration



¹⁵ Chi square = 13.125, significant on 1% level

¹⁶ Chi square = 3.483, significant on 7% level

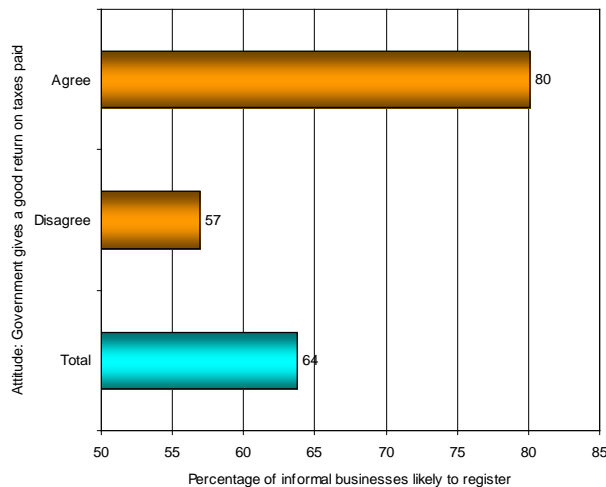
Attitudes and likelihood for formalization

To analyze various aspects of informal respondents' attitudes and the relationship of such attitudes to their likelihood for formalization, 14 statements¹⁷ rated by respondents will be grouped in categories covering 5 different aspects of attitudes (see annex 2).

Attitude: Government gives a good return for taxes paid

As Figure 16 clearly shows and Chi square analysis confirms¹⁸ respondents who report a feeling that businesses are getting “good service” from the government for taxes paid are much more likely to consider registration. The difference is quite large and highly significant. This finding underscores the importance of overall governance to tax compliance, and has been documented in other countries (e.g., Alm and Martinez-Vazquez, 2003).

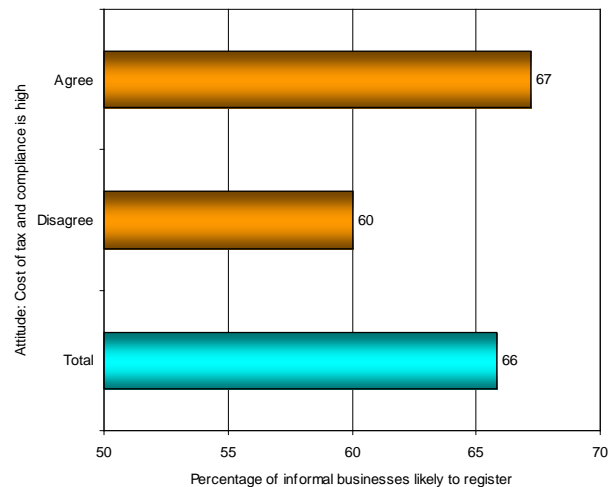
Figure 16: Attitude: “Government gives a good return for taxes paid” and likelihood for tax registration



Attitude: Cost of tax and compliance is high

Although one would expect that a perception that the cost of tax compliance is high would have a negative impact on a decision for registering for tax, the analysis does not support such a conclusion. Statistical testing found no significant difference, and other survey findings support the more intuitive notion that perceptions of the burden of tax compliance costs may have a negative influence on the likelihood for formalization.

Figure 17: Attitude: “Tax compliance is expensive” and likelihood for tax registration



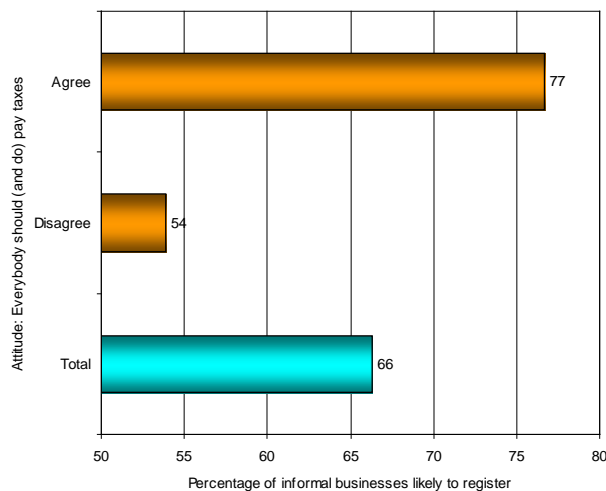
¹⁷ Statements mentioned are covered in question 18 in the informal survey.

¹⁸ Chi square = 37.822, significant on 1% level

Attitude: Everybody should/does pay taxes

Respondents believing that all businesses should pay taxes and that most of them actually do (this category is combined from two statements about should everybody pay tax and if they actually do) are much more likely to register for tax, and the difference is highly significant.¹⁹

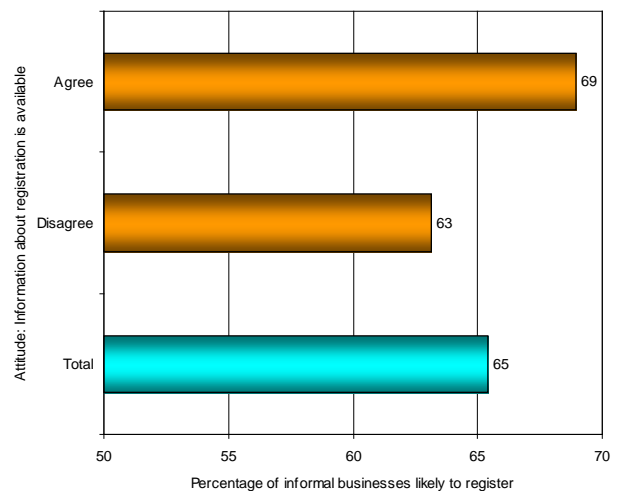
Figure 18: Attitude: “Everybody should (and does) pay taxes” and likelihood for tax registration



Attitude: Information about registration is available

It seems that attitude towards availability of information about tax registration and knowledge about it does not significantly influence the likelihood of registering for tax. (The level of significance is 10.4%)

Figure 19: Attitude: “Information about registration is available” and likelihood for tax registration

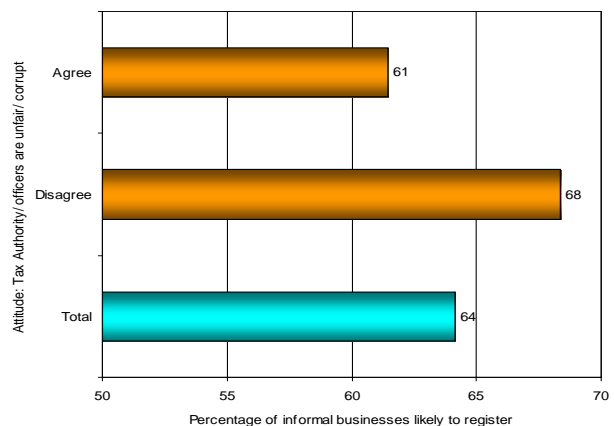


Attitude: Tax authority/officers are unfair / corrupt

Chi square analysis did not find the difference outlined in Figure 20 as significant at the 5% level of risk (the level of calculated risk is about 7%), but it still seems that there is at least a tendency showing that the belief that tax authority officers are unfair or corrupt may influence one’s decision to register for tax.

Figure 20: Attitude: “Tax authority/officers are unfair / corrupt” and likelihood for tax registration

The survey of registered SMMEs did not include a similar question. It was excluded based on previous surveys which found little evidence of corruption in tax administration in South Africa (SBP, op cite).²⁰



¹⁹ Chi square = 42.657, significant on 1% level; correlation between the two variables is 0.291.

²⁰ See also Transparency International, where South Africa is ranked second-best in Africa (after Botswana) and on par with South Korea.

Problems / issues and likelihood of formalization

An analysis was done on 14 different issues²¹ on which respondents were asked to report whether a certain issue is an obstacle for their business operation and growth, and their relationship to the reported likelihood for registering for tax. It was reasonable to expect that respondents who reported having problems associated with “Not being registered for income tax”, “Not being registered for VAT” and “Not being registered for UIF” would in fact be more likely to report likelihood to register for such taxes in the near future. As one would expect, the differences were highly significant in differentiating respondents who reported they were likely to register from those not,²² but such answers are not very useful in terms of policy implications.

Most other issues showed themselves not to be very significant drivers for such a decision, so for these other issues, a more flexible significance rate of 10% will be used as a criterion to try to figure out which ones may have an influence on the likelihood for registration.

It is not surprising that respondents feeling they have to hide from the authorities to avoid paying tax consider registration more frequently²³ than those not having this problem (Figure 21), but it is interesting that:

- Respondents considering labor regulations to be a problem are relatively more likely to consider registration for tax.²⁴
- Respondents perceiving access²⁵ and cost²⁶ of financing as a problem are more likely to consider registering for tax (see also Gatti and Honoratti, 2008).
- Respondents citing transportation²⁷ as a problem for their business are less likely to consider registration for tax than other firms.

21 The issue mentioned here are covered in question 16 of the informal questionnaire

22 Chi squares of 13.104, 16.696 and 14.723 respectively significant on 1% level

23 Chi square = 6.469, significant on 2% level

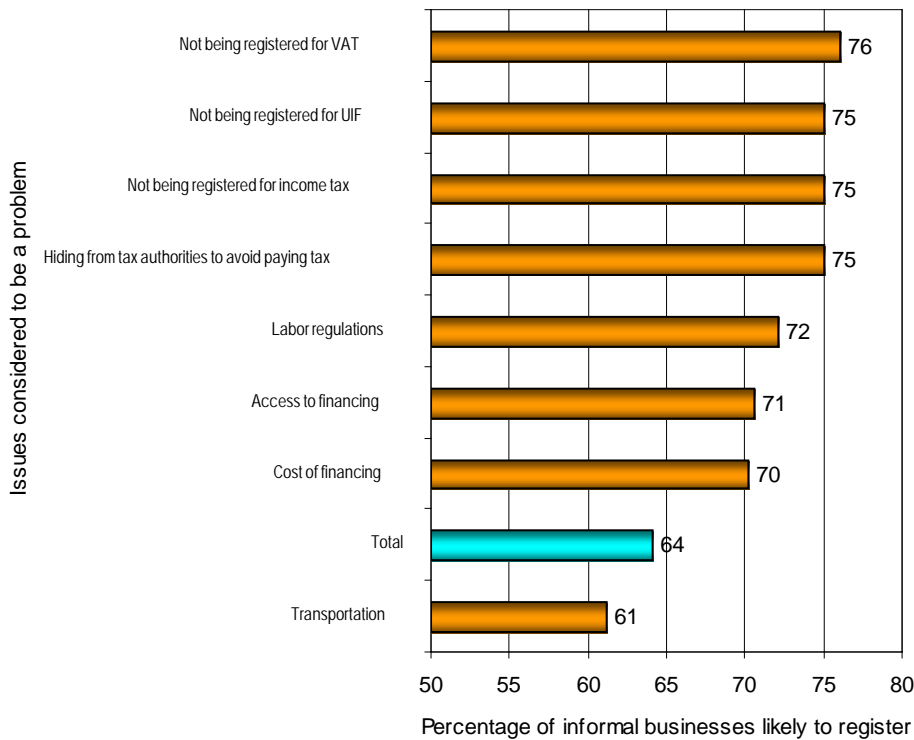
24 Chi square = 3.319, significant on 7% level and correlated with number of employees.

25 Chi square = 5.085, significant on 5% level

26 Chi square = 3.347, significant on 7% level

27 Chi square = 5.960, significant on 2% level

Figure 21: Issues / problems and likelihood for tax registration

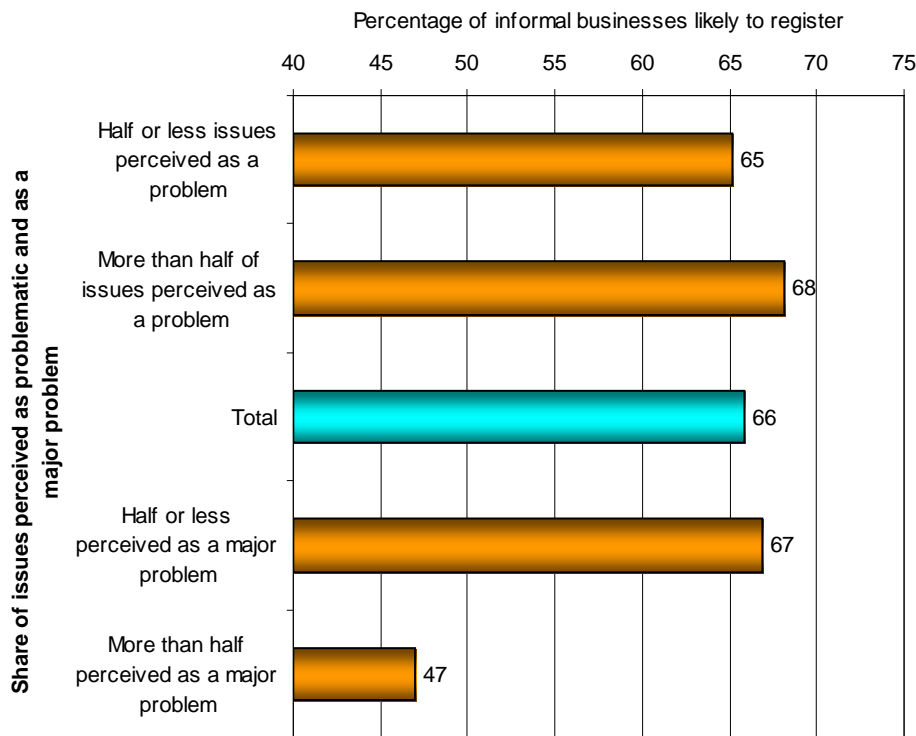


Additional analysis was performed to see if the number of problematic issues and their severity, as reported by respondents, have an influence on their likelihood for tax registration. For the analysis of the influence that the “number of perceived problems” may have on their “likelihood for registration,” respondents were divided into two groups: those considering more than half of the issues as “problematic” and those considering half or less of the issues as “problematic.” The analysis showed no difference between these two groups when likelihood for registering is concerned.

However, an analysis resulting in a more interesting finding can be found when we examine the share of issues perceived to be a “major problem.” This analysis shows that respondents reporting more than half of the issues to be a “major problem” consider registering for tax significantly less often than other businesses (Figure 22)²⁸.

²⁸ Chi square = 5.960, significant on 2% level

Figure 22: Number of issues and their severity and likelihood for tax registration



Since this analysis contradicts to a certain extent the previous finding (where most problems, considered individually, had a positive effect on the reported likelihood for registration) a deeper analysis was necessary to investigate this phenomenon. For each of the 14 investigated issues the respondents were divided into those considering it to be a major problem and those considering it only a problem of minor or moderate severity, or not a problem at all. As Figure 23 suggests, issues not highlighted in the previous analysis turn out to be an important predictor for likelihood for tax registration. The issues in question refer to infrastructure and government services, which some respondents feel are not being adequately provided. Thus it is expected that these respondents will have a lower likelihood to register for tax, relative to firms who report they are less troubled by these issues.

The issues that, when perceived as a “major problem”, reduce the likelihood for registration are as follows: “Skills and education of available workers”²⁹, “Electricity”³⁰, “Bribery and corruption”³¹, “Transportation”³², “Telecommunications”³³ and “Crime, theft and disorder”³⁴.

²⁹ Chi square = 15.935, significant on 1% level

³⁰ Chi square = 17.541, significant on 1% level

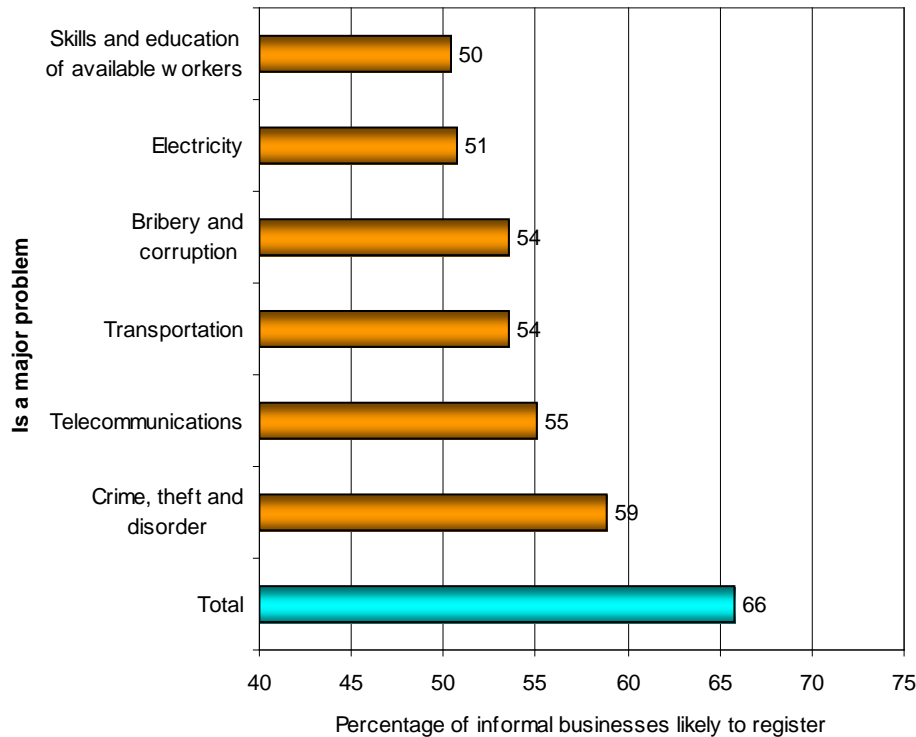
³¹ Chi square = 9.027, significant on 1% level

³² Chi square = 13.894, significant on 1% level

³³ Chi square = 5.437, significant on 2% level

³⁴ Chi square = 8.614, significant on 1% level

Figure 23: Issues perceived as “major problems” and likelihood for tax registration



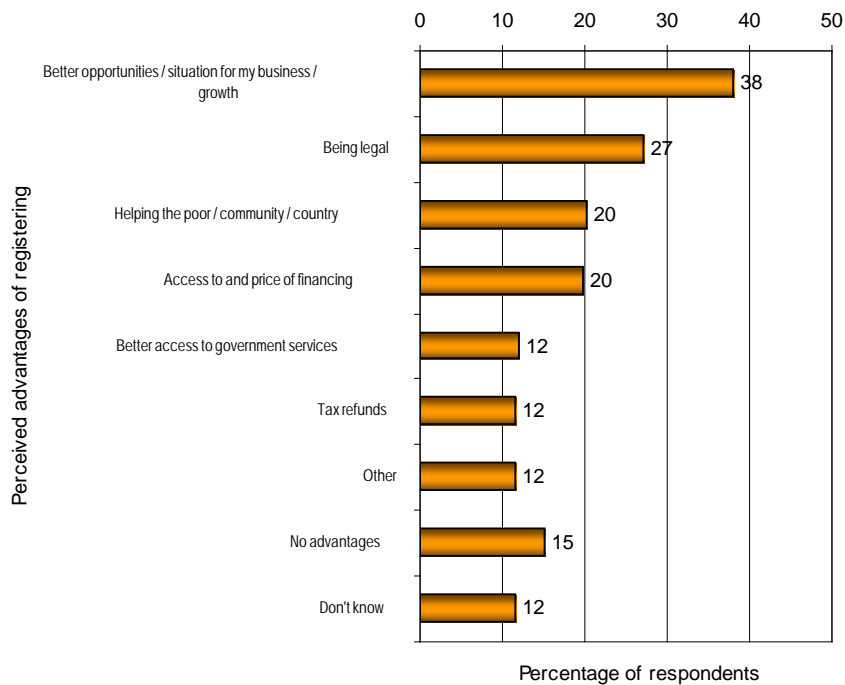
The findings outlined in Figure 23 are in accordance with the findings in the analysis of various attitudes about government services. If businesses feel that government is providing good service for taxes paid and see the benefits of registration, then they are more likely to register. However, when businesses do not see services provided, then the likelihood for formalization is lower.

In order to investigate more deeply, additional analysis was done comparing respondents reporting major problems with these issues and those not, and their respective attitudes towards government returns for taxes paid (Attitude: “Government gives a good return for taxes paid”). This analysis confirms that respondents reporting major problems with infrastructure and government services have a significantly lower attitude about the “returns” that businesses get from the government for taxes paid (see annex 3). Such firms, in turn, are relatively less likely to report they are considering registering for tax in the near future.

Perceived (dis)advantages of registering and likelihood for registering

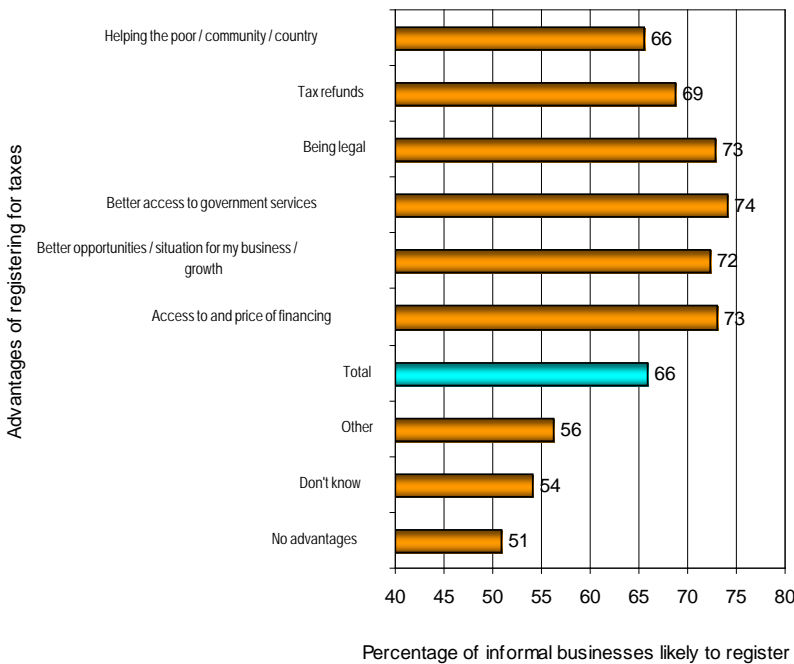
The survey of informal businesses also asked respondents about the possible advantages and disadvantages of registering for tax. The perceived advantages of registering for tax are presented in figure 24. The largest group of respondents cited improved opportunities for business growth, followed by the advantage of “being legal.”

Figure 24: Perceived advantages of registration for tax



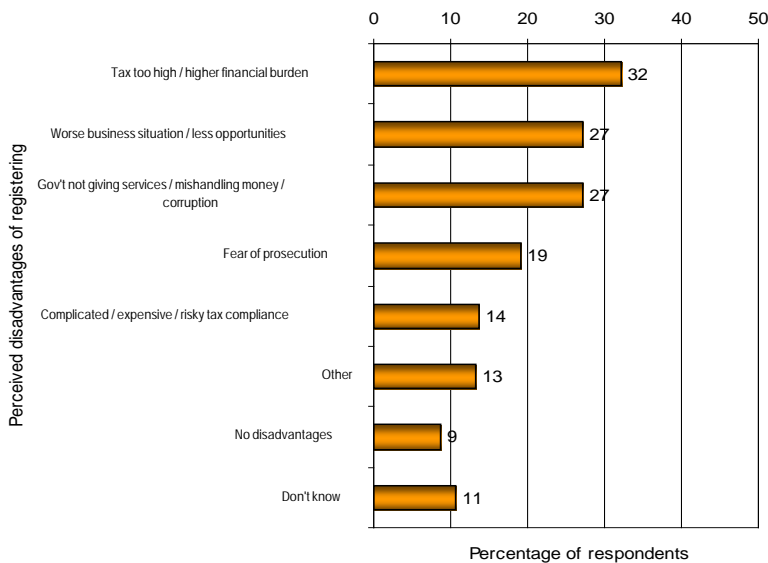
An analysis was done on perceived advantages and disadvantages of registering for tax. Results indicate that whatever the perceived reason is, the likelihood for registering is higher. The strongest effects are associated with “better access to government services”, “being legal”, “access to and price of financing” and “better opportunities for business growth.” Respondents who do not perceive any advantages (and those giving very specific and rare answers categorized as “Other”) are less likely to consider registering for tax.

Figure 25: Perceived advantages of registration and likelihood for registration



Perceived disadvantages of registering for tax are presented in figure 26. As expected, the largest category of respondents cited the financial burden of taxation.³⁵

Figure 26: Perceived disadvantages of registration for tax

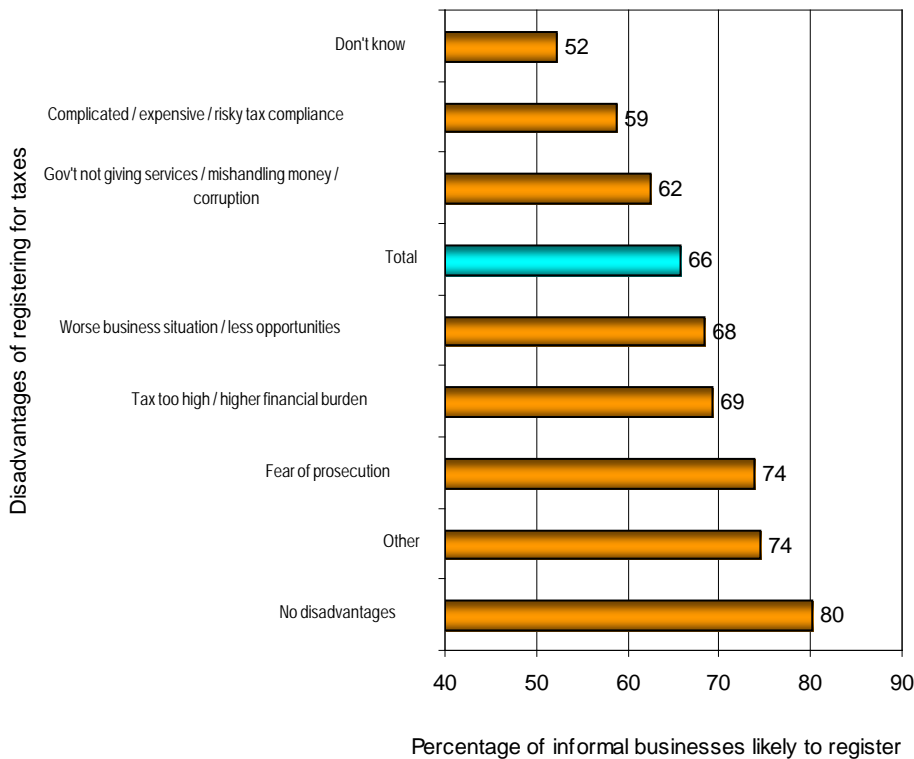


³⁵ Analysis of the size of tax payments was outside the scope of the survey, but could be undertaken on the basis of SARS' data for formal micro-enterprises. However, international survey data shows that complaints about tax burdens are nearly universal across countries and are not necessarily significantly correlated with actual tax burdens (World Bank, 2004, pg. 13).

A comparison of perceived disadvantages and the likelihood for registration again leads to the conclusion that respondents who do not perceive that they get a positive return for taxes paid and that government is not providing enough services are relatively less likely to register. With that, respondents perceiving that registration would lead to high compliance burden also have lower likelihood for registration than average.³⁶

As one might expect, the highest likelihood for registration is reported by respondents who do not report any disadvantages. It seems that even those who fear prosecution in the event of registration have a higher than average likelihood for registration (or maybe they fear even more being caught as informal). Finally even respondents emphasizing higher financial burden and worse business conditions do not report likelihood for registration that is lower than the overall average.

Figure 27: Perceived disadvantages of registration and likelihood for registration

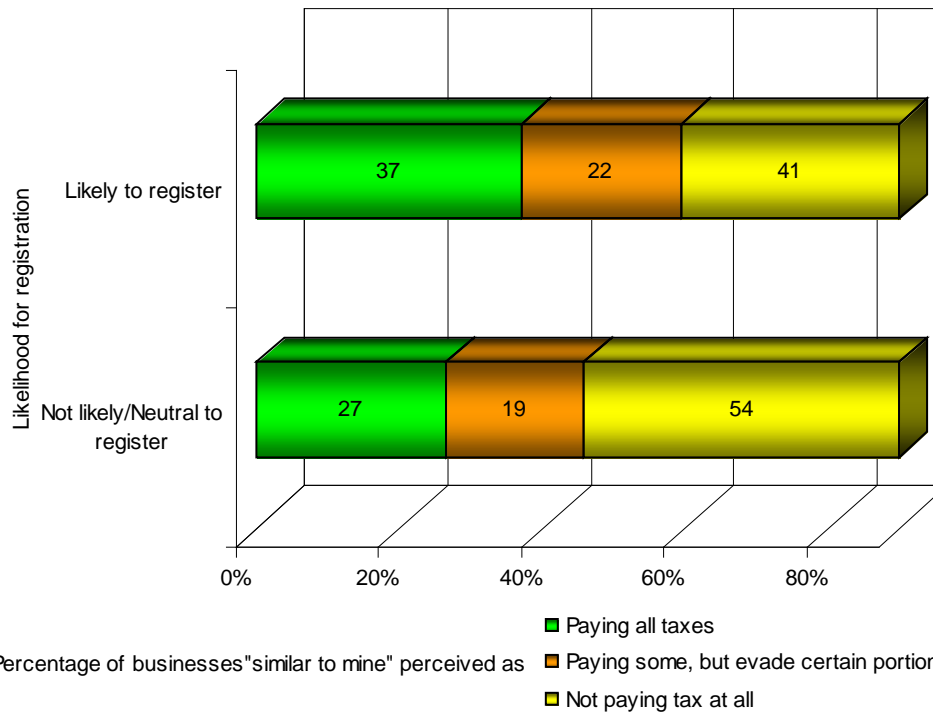


³⁶ Note Figure 17 on page 10 refers to a question about the cost of complying with tax which included the burden of the tax obligation itself, while this question focuses more specifically on the “compliance cost” alone.

Perceived share of similar businesses paying all, some or none of the taxes and likelihood for registration

Although the question of causality makes an interpretation somewhat difficult, it is interesting to see the relation between perception of share of businesses paying taxes (and to what degree) on one side and likelihood for registration on the other side.

Figure 28: Perceived share of businesses paying taxes and likelihood for registration



What figure 28 suggests is that both groups (those reporting they are likely to register for tax and those unlikely/neutral) have a similar perception about the share of businesses paying some of their taxes but evading a certain portion. However when it comes to perception of the share of businesses paying all of their taxes and the share of businesses paying none, their perceptions are quite different. Businesses who report they are likely to register perceive a significantly higher share of businesses paying all the taxes than businesses not likely/neutral to register (37% and 27% respectively)³⁷. Correspondingly, business not likely (or neutral) towards registration perceive that a significantly higher share of businesses “similar to” themselves are not paying taxes “at all” than those respondents who reported they were likely to register for tax (54% and 41% respectively)³⁸.

³⁷ T = 6.475, significant on 1% level

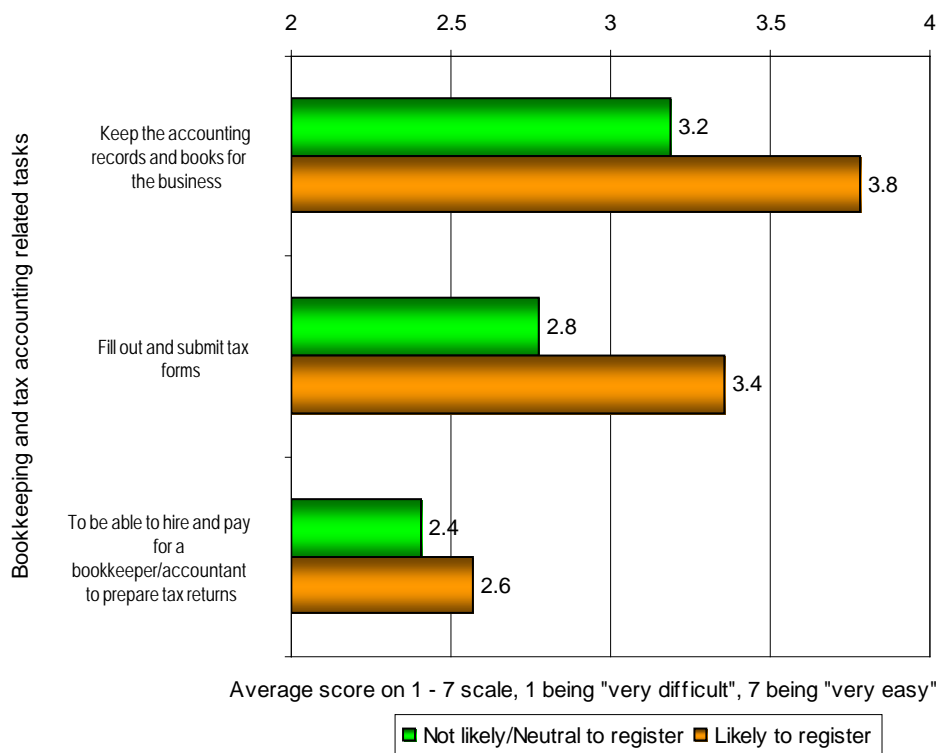
³⁸ T = 6.812, significant on 1% level

Perceived difficulty of bookkeeping and accounting tasks and likelihood for registration

As figure 29 clearly shows, businesses who report that they are likely to register for tax perceive tax compliance tasks to be easier for them than businesses reporting they are not likely to register. The difference is statistically significant for “Keep the accounting records and books for the business” and “Fill and submit tax forms”³⁹, but is not significant for “hiring a bookkeeper.”

These findings suggest that the perception of the degree of ease/difficulty of various tasks of tax compliance has an influence on likelihood for tax registration among informal businesses.

Figure 29: Perceived ease of bookkeeping and accounting tasks and likelihood for registration

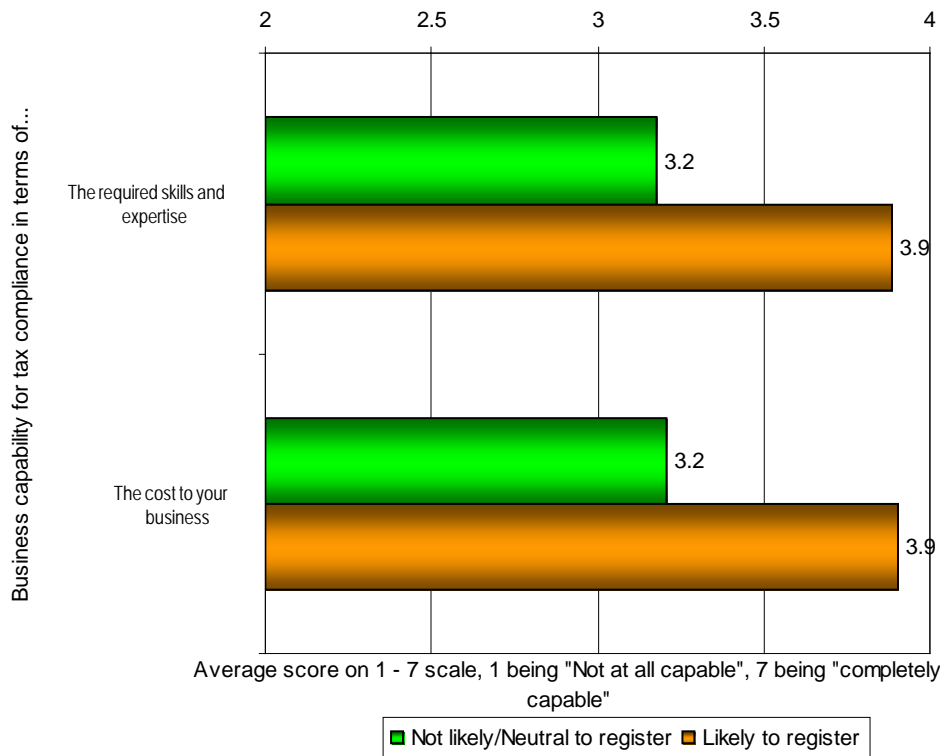


³⁹ T = 4.084 and T = 4.353 respectively, significant on 1% level

Perceived capability for tax compliance and likelihood for registration

Also, it seems that businesses reporting they are likely to register for tax feel themselves more capable to bear the tax compliance burden both in terms of necessary skills and expertise as well as the financial burden it carries. Businesses reporting they are likely to register perceive their capacity to handle the compliance burden to be significantly higher than businesses not likely to register in both expertise and skills dimension⁴⁰ and cost dimension⁴¹. These differences are highly significant.

Figure 30: Perceived capability for taking tax compliance burden and likelihood for registration



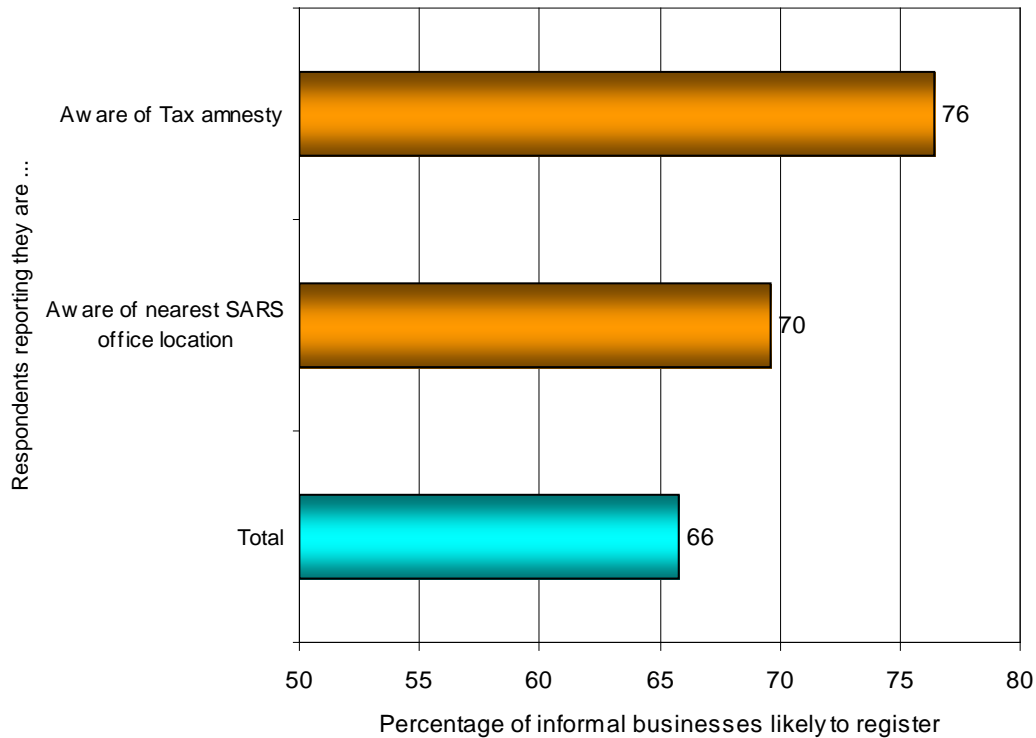
40 T = 5.058, significant on 1% level

41 T = 5.011, significant on 1% level

Knowledge about the location of SARS office and awareness of tax amnesty compared to reported likelihood for registration

Respondents who are aware of the nearest SARS office are more likely to register for tax than those unaware⁴². Also, it seems that the respondents who were aware of Tax Amnesty were also more likely to say they might register for tax⁴³. However it seems that the level of knowledge about details concerning tax amnesty is about the same among respondents likely and unlikely to register.

Figure 31: Awareness of nearest SARS office and Tax Amnesty and likelihood for registration



42 Chi square = 13.125, significant on 1% level

43 Chi square = 29.853, significant on 1% level

Perception of percentage of formal and informal businesses suffering negative phenomena imposed by SARS and likelihood for registration

Figure 32 suggests that, while likelihood for registration does not depend on perception of how frequently tax registered businesses have inspections and audits and suffer penalties and fines, businesses who are likely to register estimate the share of “caught” informal businesses to be higher than businesses not likely to register.⁴⁴

Figure 32: Perception of negative phenomena and likelihood for registration

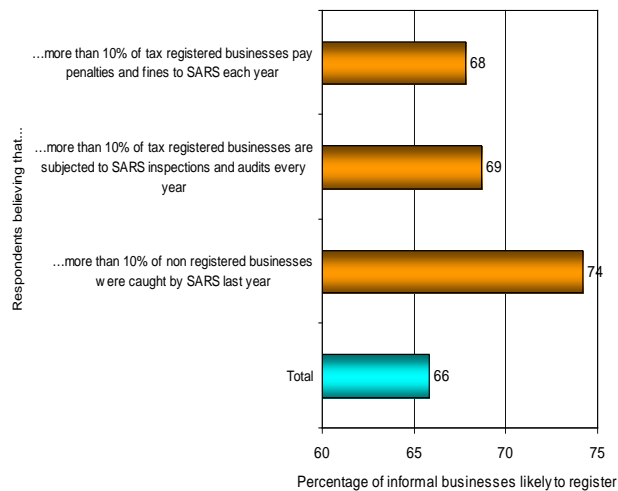
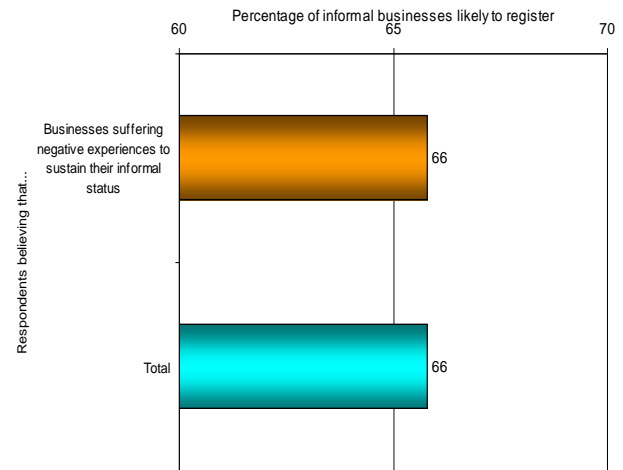


Figure 33: Experiencing negative phenomena and likelihood for registration



Businesses were asked if they experienced any negative phenomena (i.e. cost) to sustain their informal status, such as:

- Paying bribes to sustain the informal status
- Providing free products or services to sustain the informal status
- Temporarily shutting business down to avoid being detected by SARS
- Relocating the business to avoid being detected by SARS.

The great majority of respondents (94% of them) reported none. When an analysis was done to establish if these negative experiences might trigger the higher chance for registration, results show that there is no significant influence of these negative experiences on likelihood for registration.

⁴⁴ Significant at the 5% level.

3. Conclusions and Policy Implications

The surveys of formal SMMEs and informal firms may provide useful information to guide the efforts of the National Treasury and SARS to encourage higher rates of voluntary registration among informal firms. Comparing the two surveys, it was noteworthy that firms in Gauteng province appear most oriented toward formality, with relatively low numbers of formal firms reporting they had ever operated informally before registering for tax and relatively high numbers of informal firms reporting they are likely to register for tax soon. This may suggest that formalization is easier to encourage in relatively urbanized settings.

While almost 90% of formal firms reported they had never operated informally before registering for tax, firms in the primary sector (agriculture, forestry, fishing and mining), construction and manufacturing appear relatively more likely to start out informal and to register themselves at some point. By contrast, firms in trade and other services seem either to start out and stay informal or to initiate operation as a formal company registering for tax at the outset.

As expected, businesses that are not registered for tax, but are registered with CIPRO, Chamber of Commerce, or other business associations, are relatively more likely to report they plan to register for tax. Similarly, informal firms with more employees appear more likely to register for tax.

Interestingly, businesses who rent their premises are relatively more likely to register, probably because they anticipate a higher likelihood of coming to the attention of the authorities because their landlords may report the rental income.

Informal businesses who keep financial records are significantly more likely to report they expect to register for tax, as are those who felt confidence in their abilities to do the necessary accounting and fill out tax forms. Those who knew the location of the nearest SARS office (and within that group, those who are closer to the SARS office) were also more likely to register. Informal firms who are concerned about their access to finance were relatively more likely to report they may register for tax. Conversely (but as expected), informal businesses who receive most of their income in cash report they are less likely to register for tax. Perceptions about SARS inspections and penalties did not appear to make statistically significant differences in the reported likelihood for registration, but a perception that many informal businesses are caught by SARS seemed to be associated with a relatively higher likelihood for registration.

Attitudes toward government and perceptions of problems associated with government appear to have a significant influence on the likelihood of informal firms registering for tax. In particular, respondents who believe that government provides good service for taxes paid are significantly more likely to report that they may register for tax in the near future. Similarly, informal firms who believe that everyone should pay some tax (and who believe that most firms do pay taxes) are more likely to report they may register for tax. These attitudes are much more significant than the respondents' attitude toward the availability of information about tax registration.

Firms complaining about "major problems" associated with crime, infrastructure (telecoms, transportation and electricity) and "skills and education of available workers" were relatively less likely to register for tax than firms who perceived such issues to be less serious problems. Thus

solving or mitigating such problems may reap rewards for the government in the form of higher formalization and tax compliance.

Perceived advantages of registration for tax included “better opportunities for growth”, followed by “being legal”, “helping the poor/community”, “access to financing” and “better access to government services.” Disadvantages, as expected, included the financial burden of taxation, and dissatisfaction about government services. Closer examination of SARS’ data on tax returns from SMMEs may be fruitful to better understand that burden.

Policy implications

The picture of formalization is therefore somewhat complex, with relatively few clear opportunities for SARS to encourage higher rates of voluntary tax registration on the basis of their own behavior or performance. Rather, informal businesses seem most encouraged to register when they view government services as “good value” for taxes paid, when they perceive that most businesses (e.g., their own suppliers, customers, and competitors) are paying taxes, and when they are carrying out basic bookkeeping.

Of course, from the point of view of public finance, there may appear to be a “chicken and egg” problem: formalization could be encouraged by improved government services, but such services must be paid for by revenues. Given the fact that small businesses yield only tiny amounts of revenue under the best of circumstances, it is probably the government side that should move first to target improved services in communities where there appears to be high levels of informality; targeting those services that appear to be of most concern to small businesses (i.e., crime, infrastructure and worker skills). Improved services, in turn could form the basis of a coordinated campaign by the GoSA to showcase improvements in public services wherever possible, and to stress the need for higher levels of compliance to expand/improve services. It may also be worth considering whether resources for local governments to pay for critical services are adequate to encourage higher rates of voluntary tax compliance.

While general trends away from reliance on cash payments for transactions and toward electronic and other bank-mediated forms of payment may over time help to encourage more formalization (and tax compliance more broadly), NT and SARS want to look for ways to encourage those trends. Since likelihood for formalization seems to be associated with the practice of proper bookkeeping, it may also be advantageous for NT and SARS to encourage small businesses to maintain regular books, to learn the basics of bookkeeping, and/or to hire the necessary expertise. It would be beneficial to remind small businesses that proper bookkeeping is important for the financial health of all businesses, and critical for any business that aspires to expand. Another key message should be that tax compliance expands business opportunities to enter the supply chain of larger businesses and to gain improved access to larger and wealthier markets. SARS’ SME office (perhaps working in cooperation with SME Associations) may help expand bookkeeping training for small businesses, especially in conjunction with the new turnover tax, which is designed to be handled by entrepreneurs with limited accounting skills. Working in cooperation with SME associations may be the most effective way to deliver both the training and the “message.”

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Annex 1: Analytical methods used

In order to support the findings outlined here a number of very simple statistical methods were used:

T-test for independent samples was used when analysis of continuous data was performed. T-test scores were quoted together with significance levels.

Chi squares were used when analysis of categorical data was performed. Chi square results were quoted also together with their significance levels. Chi square tests were performed only in case when visual inspection of cross tabulation confirmed that the eventual statistical significance can be interpreted, e.g. that the direction of difference is clear and unambiguous.

Analysis of variance was performed to analyze relations of continuous and categorical variables. F-statistics were quoted with their significance levels. In addition Scheffe tests were also performed to determine the exact categories between which the significant difference exists.

Factor analysis with principal components as the extraction method was used. Also component matrix was rotated to achieve best possible solution using Varimax rotation method. Factor analysis was used only in order to confirm or deny the selection of logical groups among attitude statements.

When the above mentioned significance tests were not possible a simple analysis of cross-tabulations was done searching for patterns.

Annex 2: grouping of statement under question 18

Grouping was done based on logical analysis into five different aspects of attitudes⁴⁵. In other words statement were grouped into 5 categories (below) depending on the subject they are covering.

Attitude: Government gives a good return for taxes paid

Attitude: Cost of tax and compliance is high

Attitude: Everybody should (and does) pay taxes

Attitude: Information about registration is available

Attitude: Tax authority/officers are unfair / corrupt

Government is doing a good job of providing services to your business	Group 1
There are many benefits for businesses that pay taxes	Group 1
Tax rates for businesses such as yours are too high	Group 2
Businesses registered for tax are often subjected to SARS audits and inspections	Group 2
Keeping records for tax purposes is time-consuming and expensive	Group 2
Professional bookkeepers or accountants are too expensive	Group 2
Tax authorities are unfair	Group 5
Every business should pay taxes	Group 3
Most businesses do pay taxes	Group 3
Tax procedures are too complicated	Group 2
All information about tax compliance is easily available	Group 4
SARS officials are corrupt	Group 5
You know exactly what to do to register for income tax	Group 4

In order to check the validity of this logical grouping, factor analysis⁴⁶ was performed on 13 statements under question 18 and it corresponds to logical grouping. Groups 5 did not separate itself as an independent factor but is rather covered by components 1 and 2, but due to its specific logical meaning it will be separated in grouping. Table below shows factor loadings (correlations) with particular statements. The higher the loading (in both positive and negative direction) the more can the factor be explained by particular statement.. Loadings marked yellow are the highest ones for particular factor and thus factors can be best interpreted by them.

⁴⁵ Statement 14 wasn't used in this grouping because it represents likelihood for registration rather than an attitude.

⁴⁶ It is important to note that statistical conditions for factor analysis are not satisfied. Items under consideration are not on the proven interval scale, and this analysis should be used for guidance and checking purposes only.

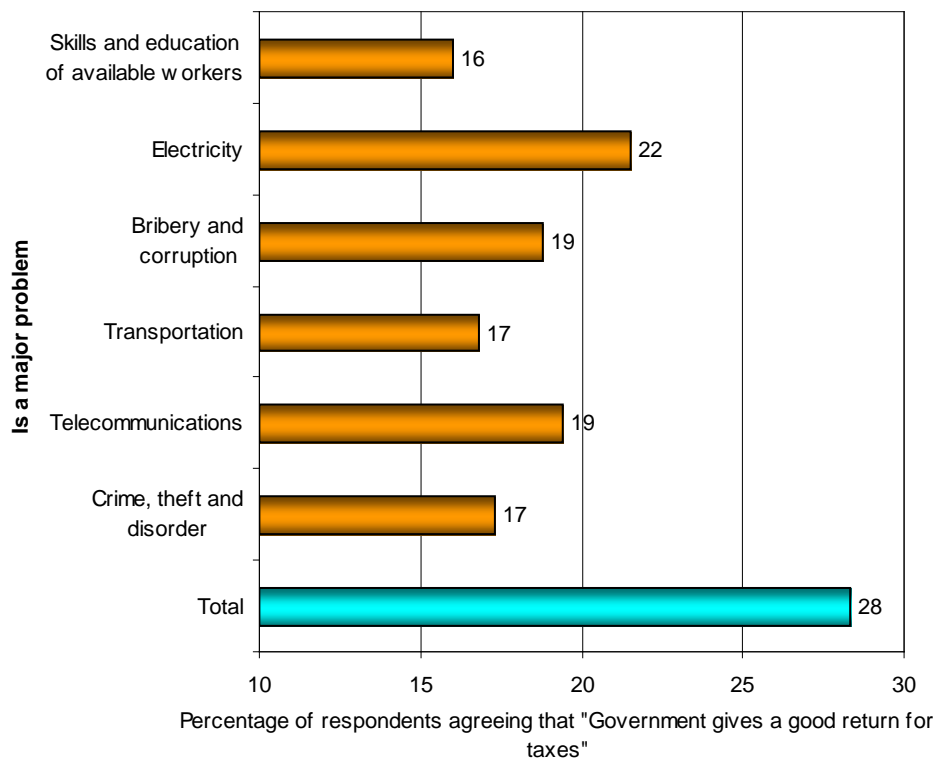
Rotated Component Matrix(a)

	Component			
	1	2	3	4
Government is doing a good job at providing services to your business	-.081	.207	-.086	.815
There are many benefits for businesses that pay taxes	.115	-.057	.338	.747
Tax rates for businesses such as yours are too high	.765	.007	-.005	.138
Businesses registered for tax often subjected to audits and inspections	.740	-.049	.036	.145
Keeping records for tax purposes is cumbersome and expensive	.796	-.016	.021	.012
Professional bookkeepers or accountants are too expensive	.811	-.033	.087	-.012
Tax authorities are unfair	.601	.215	-.168	-.249
Every business should pay taxes	.009	.195	.754	.024
Most businesses pay taxes	.145	.075	.687	.089
Tax procedures are too complicated	.579	-.021	.188	-.249
All information about tax compliance is easily available	-.102	.760	.251	.055
SARS officials are corrupt	.286	.487	-.398	-.112
You know exactly what to do to register for income tax	-.014	.813	.126	.141

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 5 iterations.

After grouping scores were added for evaluation of statements under each group. Respondents were then divided into three groups according to their average scores (under each group): those with above neutral attitude, those with neutral attitude and those with below neutral attitude. Respondents with neutral attitude were excluded from analysis because it is difficult to estimate if their attitude is really neutral or non-existing. Respondents with above and below neutral attitude were directly compared.

Annex 3: Relation between “Attitude: Government gives a good return for taxes paid” and major issues



Chi square tests for issues as major problems and agreement with the attitude “Government gives a good return for taxes paid”		
Issue as a major problem	Chi square	Sig.
Telecommunication	4.339	0.037
Electricity	3.843	0.050
Transportation	13.921	0.000
Skills and education of available workers	11.077	0.001
Bribery and corruption	5.876	0.015
Crime, theft and disorder	26.984	0.000

The share of respondents seeing certain issues as a major problem varies across issues.

		Attitude: Government gives a good return on taxes paid			
		Total		Disagree	Agree
		Valid N	Column N %	Column N %	Column N %
Telecommunications	Major problem	98	12.1	13.6	8.3
	Not a major problem	712	87.9	86.4	91.7
	Total	810	100.0	100.0	100.0
Electricity	Major problem	144	17.4	19.1	13.3
	Not a major problem	682	82.6	80.9	86.7
	Total	826	100.0	100.0	100.0
Transportation	Major problem	173	20.9	24.2	12.4
	Not a major problem	656	79.1	75.8	87.6
	Total	829	100.0	100.0	100.0
Skills and education of available workers	Major problem	119	14.9	17.6	8.3
	Not a major problem	679	85.1	82.4	91.7
	Total	798	100.0	100.0	100.0
Bribery and Corruption	Major problem	117	14.8	16.7	9.9
	Not a major problem	673	85.2	83.3	90.1
	Total	790	100.0	100.0	100.0
Crime, theft and disorder	Major problem	278	34.2	39.7	20.6
	Not a major problem	534	65.8	60.3	79.4
	Total	812	100.0	100.0	100.0

The share of respondents seeing “Crime, theft and disorder” as a major issue is 34%, while for other issues it varies between 12% (for “Telecommunications”) and 21% (for “Transportation”). To try to identify who are these respondents seeing the mentioned issues as major problems an analysis was done by province, sector, turnover and number of workers.

		Province					
		Total		Gauteng	Western Cape	KwaZulu Natal	Others
		Valid N	Column N %	Column N %	Column N %	Column N %	Column N %
Telecommunications	Major problem	107	11.2	11.4	2.1	13.5	16.4
	Not a major problem	849	88.8	88.6	97.9	86.5	83.6
	Total	956	100.0	100.0	100.0	100.0	100.0
Electricity	Major problem	163	16.7	18.8	4.7	17.6	22.9
	Not a major problem	811	83.3	81.2	95.3	82.4	77.1
	Total	974	100.0	100.0	100.0	100.0	100.0
Transportation	Major problem	196	20.0	17.1	5.6	28.0	28.8
	Not a major problem	783	80.0	82.9	94.4	72.0	71.2
	Total	979	100.0	100.0	100.0	100.0	100.0
Skills and education of available workers	Major problem	135	14.3	10.8	5.2	18.9	21.2
	Not a major problem	809	85.7	89.2	94.8	81.1	78.8
	Total	944	100.0	100.0	100.0	100.0	100.0
Bribery and Corruption	Major problem	127	13.6	10.0	5.2	23.1	18.8
	Not a major problem	804	86.4	90.0	94.8	76.9	81.2
	Total	931	100.0	100.0	100.0	100.0	100.0
Crime, theft and disorder	Major problem	314	32.6	26.1	16.8	39.5	45.6
	Not a major problem	648	67.4	73.9	83.2	60.5	54.4
	Total	962	100.0	100.0	100.0	100.0	100.0

Due to a relatively small number of respondents in some regions a regional division used in provincial analysis is separating three regions and putting the rest of them in a common category. Analysis shows that for all issues share of respondents claiming them a major problem is lower in Western Cape. On the other end this share is higher in “Other provinces”. Gauteng and Kwazulu Natal are usually around national average with some exceptions. Transportation, “Skills and education of available workers”, “Bribery and corruption” and “Crime theft and disorder” also seem to be somewhat more of a problem in Kwazulu Natal than it is on average. Gauteng is for all issue either around or below the national average (i.e. issues are less frequently perceived as a major problem).

		Sector				
		Total		Agriculture, construction, manufacturing	Trade	Services
		Valid N	Column N %	Column N %	Column N %	Column N %
Telecommunications	Major problem	107	11.2	8.6	7.6	14.4
	Not a major problem	849	88.8	91.4	92.4	85.6
	Total	956	100.0	100.0	100.0	100.0
Electricity	Major problem	163	16.7	10.5	15.0	19.8
	Not a major problem	811	83.3	89.5	85.0	80.2
	Total	974	100.0	100.0	100.0	100.0
Transportation	Major problem	196	20.0	18.7	18.9	21.2
	Not a major problem	783	80.0	81.3	81.1	78.8
	Total	979	100.0	100.0	100.0	100.0
Skills and education of available workers	Major problem	135	14.3	11.0	11.2	17.4
	Not a major problem	809	85.7	89.0	88.8	82.6
	Total	944	100.0	100.0	100.0	100.0
Bribery and Corruption	Major problem	127	13.6	10.6	12.9	15.0
	Not a major problem	804	86.4	89.4	87.1	85.0
	Total	931	100.0	100.0	100.0	100.0
Crime, theft and disorder	Major problem	314	32.6	24.7	32.9	34.9
	Not a major problem	648	67.4	75.3	67.1	65.1
	Total	962	100.0	100.0	100.0	100.0

Although differences are not very noticeable, one can see that services sector sees all issues more frequently as a major problem. Another interesting finding is that “agriculture, construction, manufacturing” sees crime, theft and disorder less frequently as a major issue than other sectors.

		Turnover			
		Total		70K - 300K Rand	More than 300 K Rand
		Valid N	Column N %	Column N %	Column N %
Telecommunications	Major problem	107	11.2	11.1	12.0
	Not a major problem	849	88.8	88.9	88.0
	Total	956	100.0	100.0	100.0
Electricity	Major problem	163	16.7	16.9	15.7
	Not a major problem	811	83.3	83.1	84.3
	Total	974	100.0	100.0	100.0
Transportation	Major problem	196	20.0	19.8	21.8
	Not a major problem	783	80.0	80.2	78.2
	Total	979	100.0	100.0	100.0
Skills and education of available workers	Major problem	135	14.3	13.9	17.2
	Not a major problem	809	85.7	86.1	82.8
	Total	944	100.0	100.0	100.0
Bribery and Corruption	Major problem	127	13.6	12.3	22.9
	Not a major problem	804	86.4	87.7	77.1
	Total	931	100.0	100.0	100.0
Crime, theft and disorder	Major problem	314	32.6	32.0	37.3
	Not a major problem	648	67.4	68.0	62.7
	Total	962	100.0	100.0	100.0

The only significant indication related to turnover refers to bribery and corruption. Larger businesses tend to see as a major problem more frequently.

		Number of workers						
		Total	1	2	3	4 - 6	More than 6	
		Valid N	Column N %	Column N %	Column N %	Column N %	Column N %	Column N %
Telecommunications	Major problem	107	11.2	5.5	7.7	12.7	18.1	11.6
	Not a major problem	849	88.8	94.5	92.3	87.3	81.9	88.4
	Total	956	100.0	100.0	100.0	100.0	100.0	100.0
Electricity	Major problem	163	16.7	9.5	14.9	19.6	21.8	17.4
	Not a major problem	811	83.3	90.5	85.1	80.4	78.2	82.6
	Total	974	100.0	100.0	100.0	100.0	100.0	100.0
Transportation	Major problem	196	20.0	17.2	16.3	23.2	23.9	18.6
	Not a major problem	783	80.0	82.8	83.7	76.8	76.1	81.4
	Total	979	100.0	100.0	100.0	100.0	100.0	100.0
Skills and education of available workers	Major problem	135	14.3	14.0	11.3	13.1	16.5	20.8
	Not a major problem	809	85.7	86.0	88.7	86.9	83.5	79.2
	Total	944	100.0	100.0	100.0	100.0	100.0	100.0
Bribery and Corruption	Major problem	127	13.6	7.4	12.4	13.5	19.7	14.5
	Not a major problem	804	86.4	92.6	87.6	86.5	80.3	85.5
	Total	931	100.0	100.0	100.0	100.0	100.0	100.0
Crime, theft and disorder	Major problem	314	32.6	23.7	32.1	36.0	36.7	35.7
	Not a major problem	648	67.4	76.3	67.9	64.0	63.3	64.3
	Total	962	100.0	100.0	100.0	100.0	100.0	100.0

Five out of six issues have the similar trend when it comes to seeing issues as a major problem and size of the business measured by number of its employees. The trend is that share of businesses seeing it as a problem grows with size, but then drops for the highest category. Generally we might conclude that perception of issues as a major problem rises with size, but it seems that some (probably largest) businesses are immune to these problems.