Informal economies, state finances and surveyors

P. van der Molen

All countries host informal economies, sometimes even exceeding the size of the formal economy. Living in the informal economy means for citizens that they and their activities are invisible for the government. Governments miss information about which people live in their country and what economically happens. They miss relevant data to develop policies, to monitor implementation and to levy taxes for generating budget. This hampers good governance and state building. This paper analyses the problem, and argues that when surveyors would expand their capacity for administration of land to other recordable subjects and objects, they can contribute to a solution.

Keywords: Informal economies, governance, state finances, information, surveyors

Introduction

There is no clear definition of what the ‘informal economy’ is. In section ‘The informal economy’, we will mention various options, but a common factor in all definitions is that a part of the economic and social status of countries is not visible for the government. This suggests a link with the surveyors’ profession, as surveyors are supposed to master the ‘art of recording’: initiating and maintaining records at quality standards. This paper applies a simple form of ‘grounded theory’, which allows us – while studying the topic – to be guided by our findings. Having said this, a conclusion of the paper is that – although surveyors normally focus on spatial and attributed data – they can increase the leverage of their skills by expanding these skills to other relevant information domains, in favour of providing a robust information fundament for governance.

The logical argument in this paper is organised as follows. First, in section ‘The informal economy’, we will review some current definitions of ‘informal economy’ and find out about the estimated size of it. Then, in section ‘Effects of the informal economy on development’, we address the question how experts value the existence of an informal economy with respect to the development of countries. Is it a good thing, a bad thing? As the informal economy is invisible for the government, a question arises how it affects state finances. In section ‘Missing tax revenues hamper governance’, we collect information about missing tax revenues, tax evasion and tax avoidance, all impacting the financing of the state. The question then is how states with a (major) informal economy currently are financed. Although section ‘Missing information hampers governance’ shows that other revenue sources as remittances, oil rents and aid sometimes appear to play a major role, a reality is that remittances can stop, oil rents can come down, and aid can be reduced. Therefore, a challenge remains for governments to increase tax revenues, by broadening the tax base and enhancing enforcement. To achieve this, the existence of adequate records is a prerequisite, which brings us to section ‘The way forward’ addressing the broader issue of how governments can create an information fundament, which gives them the information and evidence needed to govern. Finally, in section ‘Informal economies: what surveyors can do’, we will observe some links with the surveyors’ profession, as information management is in their domain. Although surveyors have a focus on spatial and attributed data, these information management skills are applicable on other sorts of data too, we argue. By expanding their application, surveyors’ skills might contribute significantly to the governance of a country, and thus to state building.

The informal economy

What is the informal economy?

There are no clear and globally accepted definitions of what the ‘informal economy’ entails. The International Monetary Fund recognises a variety of terms, such as ‘hidden economy’, ‘shadow economy’, ‘clandestine economy’, ‘parallel economy’, ‘subterranean economy’, ‘unreported economy’, ‘cash economy’, or ‘black economy’ (Vuletin, 2008), a Handbook even more than 30 (OECD, 2002). A first aspect to be mentioned is that to calculating GDP and associated national accounts, a boundary must be defined between activities which are economically productive and which are not. This is the production boundary that defines which activities are included and which are excluded in the GDP. Included are – in general – all economic activities that are human controlled resulting in output capable of being exchanged, thus (a) linked to an ‘institutional’ unit and (b) marketable. Within the production boundary, the national accounts aim to be exhaustive. Countries normally comply with the production boundary as defined by the EU,
IMF, OECD, WB and UN; the so-called SNA system (System of National Accounts) (EU, 1993). The production boundary is maintained. Economic activities outside the production boundary are thus not immediately, e.g., ‘black’ or ‘unreported’. As the national accounts aim at measuring the production as complete as possible, it is realistic to say that there are not many activities excluded from being measured. Actually, only non-market household production of goods and services for own consumption are excluded, although in case this production is significant (for example in emerging countries where a major part of agricultural production regards subsistence farming), the value still can be included. The Handbook gives three major categories of – what it calls – the non-observed economy (NOE). First of all, it is the underground economy, which are the activities both productive and legal that are deliberately concealed from public authorities to avoid paying tax and social contributions, to avoid having to meet legal standards and to avoid complying with administrative procedures. Second, there is the illegal economy, which is the economic production forbidden by law. Third, there is the informal sector production, which may be broadly characterised as the production of goods and services at low level of organisation (mainly households), with employment based on kinship or personal relations, where the actors have to raise finance at their own risk and which are non-declared to the government. These economic activities can be perfectly legal and are not necessarily deliberately kept invisible, for example because the state is practically non-present or because tax rules and other regulations are irrelevant to the needs and conditions. Interestingly, as the reader will understand, overlaps are possible, even likely. Production in the informal sector can be legal, but also illegal; can be deliberately concealed from public authority or without that intention. The Handbook does not classify ‘shadow’ or ‘black’ economies, but in Pedersen (2003) we find a link: the ‘formal’ economy consists of the declared part of the market economy plus the production of households when significant. The informal economy consists of the ‘shadow economy’ plus the activities outside the production boundary. The ‘shadow economy’ consists of ‘black economy’ which is the non-declared part of the market economy plus the illegal production. For this reason, we use in this paper the term informal economy, as the part of the economy that covers all parts of the economy that is non-observed by the public authorities, thus the underground economy, the illegal economy and the informal sector (see Fig. 1).

This paper does not aim to develop a new definition, rather wants to be aware of some characteristics popping up from all these definitions, namely (a) it concerns economic activities that are unrecorded (Schneider, 2002), (b) which are not captured by official national accounts and statistics (ILO, 2013), (c) which are invisible for policy formulation (ILO, 2013), (d) which avoid payment of taxes and social security contributions (Feld and Schneider, 2010), and (e) which employ labourers which are excluded from labour market standards such as minimum wages, safety, working hours and social security allowances (ILO, 2013). Specifically the elements of ‘unrecorded’, ‘tax avoidance’ and ‘invisibility for policy formulation’ are suggesting links with the surveyors’ profession. Let us now see what the size is of the ‘informal economy’.

The size of informal economies

By consequence of lack of clear definitions, measuring the size of the informal economy is difficult (Vuletin, 2008). Nevertheless, professor Friedrich Schneider from the Johannes Kepler University of Linz (Austria) is a leading economist in this field, publishing reports on the size of the informal economy in 76 countries (Schneider and Enste, 2000), 84 countries (Schneider and Enste, 2002), 110 countries (Schneider, 2002), 145 countries (Schneider, 2007) and 162 countries (Schneider et al., 2010). These figures are mostly used in the global discourse. A sample is depicted in Fig. 2.

One might wonder how it is possible to provide figures of something whose main nature is being unreported, being hidden. There are several methods. According to Schneider and Enste (2000), Feld and Schneider (2010) and Heintz (2012), one can estimate the size of the informal economy directly by surveys and auditing programmes, indirectly by comparing national expenditure vs. national income, official vs. actual labour forces, currency demand, and transaction costs, or using physical inputs like energy consumption or households and businesses (thus using ‘proxies’). In his calculations, Schneider applies a balanced combination these methods, by the way.

How to understand the informal economy

What contributes to the confusing number of definitions is that the informal economy can be understood as a continuum, in which it might occur that not everyone complies with everything, companies can be registered but avoid to pay taxes, companies pay taxes but are not registered, to name a few (USAID, 2005). This brings (Chen, 2007) to a classification of (a) dualism: the formal and informal economy are distinct sectors, (b) structuralism: formal and informal economy are linked intrinsically (for example: formal companies buy input from informal ones), and (c) legalism: which relationship exists between informal entrepreneurs and the formal bureaucratic framework.

The informal economy is steadily increasing (USAID, 2005; Farell, 2004). This is in contrast with the general view of experts that economic growth will also move the informal economy to formalisation. How that may be, the fact of a growing informal economy brings (Chen, 2007) to conclude that the ‘informal economy is here to stay’.

In sum, this section discussed what the informal economy is, gave various definitions of it, provided estimation of the size and how the size was calculated, and took note that the informal economy increases. The next question is whether the informal economy, ‘which is here to stay’, is a development that should be accepted as it stands, or not, which would warrant public intervention. This is the subject of section ‘Effects of the informal economy on development’.

Effects of the informal economy on development

There might be a reason to hide

A large number of people around the world (likely 4 billion) attempt to make a living outside the boundaries of
the formal economy (Banik, 2011). As we will see in this section, the general opinion is that the existence of an informal economy hampers the development of countries. However, a caveat is useful, namely that in countries where policies, justice and the monopoly of violence have traditionally been controlled by an economic elite, there might be good reasons for weaker groups to keep their assets out of the reach of public control (Granèr, 2005). Thus, the desire to be invisible for a government might have a political connotation, and might be fundamentally different from hiding for economic reasons, where – rationally – the individual or corporate disadvantages of being in the informal economy apparently offset the advantages of being in the formal economy.

Informality hampers decent work

The International Labour Organization knows a long tradition of having worries about the existence of an informal economy, where, ‘half of the world’s labour force’ suffers decent work deficits, bad quality of jobs, poverty, low productivity, discrimination, exclusion, insecurity and vulnerability in the labour market’ (ILO, 2013). Furthermore, it goes beyond individuals, ILO says, because it affects enterprises, state revenues and the development of adequate government institutions and policies. This ‘decent work agenda’, since 1999 encouraged by ILO, is once again supported by the United Nations Economic and Social Council (e.g. UN/ECOSOC, 2012).

Thus, the existence of the informal economy is considered to have negative effects on achieving decent work. But, as ILO already assumes, also enterprises and the state might suffer. Enterprises operating in the formal economy have to fulfil legal and fiscal requirements, ranging from meeting quality standards (for example food products), copyrights, health regulations and intellectual property rights, towards meeting labour market obligations (minimum wages, working hours, sick leave) and fiscal obligations (taxes and social security payments). Because informal enterprises avoid paying taxes and securities, the tax base for the government is small and by consequence formal enterprises are disproportionately taxed (Farell, 2004). This adds to the observation that in many countries individuals are hardly taxed, so that the burden is fully on the business sector, sometimes up to 80% of the total revenue (Farell, 2006).

Informality generated tax loss

Tax evasion because of informal economies is severe. It amounts up to 3.1 trillion US$ annually, which is about 5% of the world’s GDP (Tax Justice Network, 2011). Other figures are in support: an investigation for the OECD countries estimates a loss of 713 billion € in 2013 (7% of total tax) (Schneider, 2015), which is in line with an investigation for the EU countries that estimates a loss of 864 billion in 2009 (Murphy, 2012). Tax Justice Network (2011) calculates for Africa a loss of 80 billion (40% of total tax revenue, 6% of GDP); for Asia a loss of 665 billion (17% of the total tax revenue, 4% of GDP), and for the America’s 828 billion (25% of total tax revenue, 4% of GDP). In a sense, these estimates are considered by their authors as a best guess, as precise data are absent (Fig. 3). Apart from this, currently is tax evasion by global companies using tax heavens at the top of the agenda (loss for emerging countries estimated at 212 billion US$ (Crivelli et al., 2015)). This is a matter of base erosion and profit shifting, all said to be legal, thus not so much a matter of black economies, though severe.

Informality is unrecorded and hampers reliable information supply

A third aspect, the invisibility of the informal economy because of not being recorded, raises the question how governments can govern their country without information. How can be claimed that a country shows economic growth when a major part of the economy is unrecorded? How can be spoken about GDP per capita when countries do not know the number of citizens? In general, governments are expected to aim at policymaking and policy implementation based on relevant evidence, for example in line with the New Public Management movement (Sutcliffe and Court, 2005). Accordingly, the delivery of public services is often a burden to citizens and businesses, partly caused by lack of information (World Bank, 2015; Economist, 2015). Poor public services are mentioned as a main reason why citizens are reluctant to pay taxes (Ali et al., 2014).

Jerven (2013) concludes that the informal economy sometimes is so large, that ‘leaving informal economic transactions unrecorded is unsatisfactory’. Record keeping is a prerequisite for having knowledge about what happens in a society, he says, and for achieving good governance, both in the sense of transparency and
accountability, and evidence-based policy making. The starting point always is the population count, without which any per capita statistics is impossible. With large parts of the economy invisible, any new release on economic growth or alike (as we have seen a lot last years) is (at least) unproved and by consequence unreliable. It is remarkable that for example Africa shows strong economic growth figures, but a growing poverty and inequality at the same time (World Bank, 2013; Economist, 2015), although the Bank in the same report warns that reliable statistics are necessary to measure development progress and that currently Africa’s statistics are ‘wanting’.

In sum, the existence of an informal economy hampers governance. In this paper, we addressed three aspects: hampering decent work, missing tax revenue and lack of information for policymaking and service delivery. At the same time, publications show that the informal economy is a major provider of employment and is here to stay (Chen, 2007) and that there might be reason to hide for the government in certain political circumstances (Granèr, 2005). On the other hand, research shows too that the informal economy threatens economic growth, sustained welfare and wellbeing (Farell, 2006). Decisions made by the global community aim definitely in the direction of formalisation of the informal economy (ILO, 2007; ILO, 2011; UN/ECOSOC, 2012; UN/GA, 2015).

From the two elements described in the section, two are of main relation with the surveyors’ profession, namely ‘taxation’ and ‘information base’. So in line with the global course of decisions, the overall question is how to repair missing taxes, and how to enhance governance by better information.

In the next section, we will go deeper into taxation as budget provider for governments to enable them to govern. In section ‘Missing information hampers governance’, we will look at data- and information generation.

### Missing tax revenues hamper governance

In section ‘Effects of the informal economy on development’, we found that tax losses caused by the informal economy are severe. Let us see how much tax revenue countries generate.

<table>
<thead>
<tr>
<th>% GDP</th>
<th>OECD</th>
<th>ASIA</th>
<th>AFRICA</th>
<th>ASIA</th>
<th>COMMUNIST</th>
<th>PACIFIC</th>
<th>TRANSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most</td>
<td>Greece 26.3%</td>
<td>Bolivia 67.2%</td>
<td>Zimbabwe 64.6%</td>
<td>Thailand 53.6%</td>
<td>Lao DPR 33.2%</td>
<td>Tonga 35.8%</td>
<td>Georgia 66.4%</td>
</tr>
<tr>
<td>Least</td>
<td>USA 7.9%</td>
<td>Costa Rica 26.3%</td>
<td>Namibia 32.4%</td>
<td>Singapore 12.6%</td>
<td>Vietnam 16%</td>
<td>Marshall Isl 27.9%</td>
<td>Slovak Rep 18.2%</td>
</tr>
<tr>
<td>Average % GDP</td>
<td>14.8%</td>
<td>42.2%</td>
<td>42.8%</td>
<td>29.8%</td>
<td>22.8%</td>
<td>32.1%</td>
<td>38.8%</td>
</tr>
</tbody>
</table>

2 The countries with the highest resp. lowest informal sector, per region and expressed as a percentage of the official GDP (Schneider 2007)

On the basis of statistics of the IMF, World Bank and CIA, we have an idea of the magnitude. Although those tables provide data by country, we just picked 10 countries more or less at random to get an idea (unfortunately the various statistics produce various numbers; only considered as a best guess and not as the absolute truth, we might use them): Fig. 4.

In general, the level of tax revenue as % GDP in emerging countries is much lower compared with for example OECD countries, and for one reason or another there are little signs of diminishing the differences.

The World Bank calculates that tax collection in OECD countries is 33% of GDP every years since 2002, while in the emerging countries tax collection is 10% of GDP (Cunningham and Moriset, 2015).

When collecting so few taxes, emerging countries must have other resources. Indeed, they have: at least three sources, namely net export of natural resources (natural resource rent Table World Development Indicators 2015 3.15), development aid (table WDI 2015 6.11) and income from remittances sent by emigrants to their families in the home countries (World Bank, 2016b): see Fig. 5.

When countries can export oil and gas, in all cases this is the single most source of expert earnings and government revenues. To illustrate this, oil and gas export revenues as a percentage of total export earnings generate 93% in Nigeria, 96% in Venezuela, 90% in Angola, 68% in Russia and 80% in Saudi Arabia. As a percentage of the total government revenue, it forms 70% in Nigeria, 40% in Venezuela, 79% in Angola, 30% in Russia and 80% in Saudi Arabia (NRGI, 2015).

Remittances form a major source of income. East Asia and the Pacific received 125 billion US$ (of which China alone 64, the world’s second receiver), Europe and Central Asia 42 billion, Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Billion US$</th>
<th>GDP at Purchasing Power Parity 2015</th>
<th>GDP at Exchange Rate 2015</th>
<th>Tax as % of GDP (PPP) 2015</th>
<th>State Expenditure as % of GDP (PPP) 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>130</td>
<td>138</td>
<td>5.6%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>59</td>
<td>33</td>
<td>22.9%</td>
<td>36.1%</td>
</tr>
<tr>
<td>Congo DR</td>
<td>50</td>
<td>33</td>
<td>14.5%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Kenya</td>
<td>80</td>
<td>60</td>
<td>20.1%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Nepal</td>
<td>42</td>
<td>19</td>
<td>13.9%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>700</td>
<td>879</td>
<td>38.6%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>479</td>
<td>568</td>
<td>3.0%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>79</td>
<td>79</td>
<td>14.4%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>359</td>
<td>186</td>
<td>19.6%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>10</td>
<td>14</td>
<td>26.3%</td>
<td>29.3%</td>
</tr>
</tbody>
</table>

4 Tax revenue and state expenditure as % GDP. (datasets World Bank, IMF, CIA)

van der Molen  Informal economies, state finances and surveyors

66 billion, Middle East and North Africa 53, South Asia 120 (of which India alone 70, the world’s top scorer) and Sub Saharan Africa 33 million. The total remittances of 583 billion more than double the official aid (ODA) (World Bank, 2016b).

However, the high dependency from natural resources (gas, oil) is risky (as we see with oil prices falling from 110 to 30 US$ per barrel Brent), the dependency on foreign aid (still stable but shrinking for the poorest countries), and remittances which might rise and fall dependent from economic shocks in the sending countries (remittances from, for example, Russia fell sharply) which make The Economist of 16th January 2016 say ‘remittances are good except when they stop’.

Looking specifically to Africa, the African Economic Outlook 2013 clarifies that – in general – states in Africa are financed both by external financial flows into the country and by tax revenue. It is reported that tax revenue amounts to 27% (513 billion) of the GDP, namely 10% resource tax, 6% direct tax, 5% indirect tax, 2% trade tax and 4% other. Resource tax (revenue from upstream exploitation to processing activities in oil, gas and mining, thus royalties and corporate income tax) is in average 40% of the total tax revenue. Levyng resource tax is relatively easy, which means that other forms of taxes get less attention, both because they might be politically demanding and statistics about the tax base are lacking. Compared with OECD countries, it is observed that, for example, there direct taxes on individual and corporate income generate 33% of the total tax revenue, indirect taxes 31% and property tax 5% thus substantially different from Africa. The importance of the revenue from oil, gas and mining is also observed by Jerven (2013) who found that in emerging economies individuals and enterprises are less likely to be officially registered and that formal records of their economic activities are likely not kept. In addition, in Africa, he argues, land has not been subject to private property rights historically and by consequence has not been taxed. In general, as a consequence, states have been unable to collect taxes on land, income and production, and therefore tax collection was limited to levying taxes on imports and exports. Indeed, OECD countries levy 5% of their total tax revenue based on property tax, while emerging countries achieve not more than 0.5% according to table 4.14 World Development Indicators 2014. Property tax revenue counts for 50% of local revenue in OECD countries, while only 10% in Africa (Bird and Slack, 2006). Improved tax administrations might boost the revenue from 0.5 to 5% on average, based on realistic assumptions made by Bahl et al. (2013): it might rise, for example, from 348 to 1368 per capita in Chile, from 148 to 1395 in Malaysia and from 295 to 1585 in Latvia. The constraints are: absence of property registers, valuation rolls and street addresses which make revenue collection weak (Fjellstad and Heggstad, 2012).

A question is why citizens-taxpayers try to avoid paying taxes. Nobody likes to pay taxes and in some countries it appears to be a national sport. Nevertheless, they might consider paying taxes to be good when for example they offset what they get in return. Investigations in Africa show that main obstacles for paying taxes are citizens experiencing tax as unfair (10%), too high and unaffordable (53%), too poor public services delivered in return (13%), government wastes the money (10%), you will not be caught anyhow (2%) and others (10%) (Ali et al., 2014). The worries of tax payers are realistic: the Tax Justice Network reports that, for example, in Africa, natural resource revenues create economic growth but at the same time create increasing income inequality; there is a sharp rise of income for the richest 5%, while the poor become poorer. The role of taxation to redistribute income is missing and taxpayers who do not belong to the elites are increasingly reluctant to pay any tax as long as there is a visible lack of equality and there are realistic questions whether the elites pay taxes at all (Tax Justice Network, 2014).

When it regards enterprise-taxpayers, it appears that there is willingness to pay taxes but that the time to comply (average 261 h per year), the level of tax rate (48%) and the number of taxes to be paid (26) are severe obstacles. Only 84 countries provide electronic filing and payment facilities and the picture is that despite an urgent need for reform, progress is slow (World Bank, 2016a). One negative effect of the existence of a substantial informal economy is that it allocates the tax burden on a smaller part of the actors, namely only those in the formal economy, causing a relative high tax burden (Farell, 2004); Farell reports about a country where a certain tax rate was 18%, which could be reduced to 13% when the government succeeded in formalising the informal economy regarding this taxation, while the total tax revenue remained the same level. High costs of operating formally, red tape, high taxes, prohibited mobility (e.g. China’s hukou system), little enforcement, weak penalties and an ineffective judicial system are all recipe for creating informality (Farell, 2004). Overall, the performance of public service is statistically addressed in the annual Doing Business Reports. Although according to this report countries sometimes make good progress, still the time, costs and number of procedures it takes in the encounters with the bureaucracy make complying cumbersome, which as The Economist of 30 January 2016 says ‘make citizens see the bureaucracy as a problem to navigate, rather than as a source of help: citizens all over the world complain about red tape and pen-pushing bureaucrats’.

In sum, this section aimed at shedding some light on how states are financed. In OECD countries, tax collection amounts to, say, 33% of the GDP, while in other countries it reaches a level not higher than 11%. By consequence, those countries are dependent on income from natural resources (if any), foreign aid and/or remittances. This makes them rather vulnerable for shocks, as this can be observed worldwide. The point we would like to make is that people and enterprises likely are willing to be tax-compliant, when the administrative burden is manageable, the tax rate is affordable, and they get something in return: redistribution of income, good policy and good service. Without making the invisible economy visible by creating and keeping records we see a link with the surveyors’ profession, because this is certainly a matter of information management.

**Missing information hampers governance**

Governance has two sides of a coin: governments and civil society. The principles of good governance as developed by UN/DP (1997) should be supported by both.
Thus, one cannot expect a government to develop wise strategies (the ‘direction’ principle) when civil society does not want to be transparent and participative (the ‘voice’ principle and ‘accountability’ principle). Similarly, a government cannot be transparent and accountable (the ‘accountability’ principle) when the civil society is invisible for the government. Governments cannot create an efficient and effective governance (the ‘performance’ principle) when the civil society makes a sport of tax dodging (the ‘fairness’ principle). A government cannot ask civil society to pay taxes (the ‘fairness’ principle) when these taxes are neither responsive to society’s needs nor create equality and inclusiveness (the ‘performance’ and ‘fairness’ principle). In other words, the government should be visible for the civil society, and the civil society should be visible for the government.

Visibility means recording. Jerven (2013) links the availability of data with creating a knowledge base on the one hand and with governance on the other hand. Recordkeeping is a prerequisite and the starting point is the population count, the popular census, he argues. This is because economic data often are calculated per capita (GDP per capita, health budget per capita etc.). So without knowing how much ‘capita’ live in a country, many figures remain meaningless. But it is broader, we argue.

First of all, there is the human right aspect of being recorded. Setel and Macfarlane (2007) observes that most poor people in Asia and Africa render unseen because of the lack of up to date civil registration systems. By consequence, they are born and die without being counted. Since the Universal Declaration of Human Rights in 1948, the right to an identity is a human right and to have one’s identity recognised and securely registered (Szreter, 2007). ‘Everyone should count, by being counted’, says Setel.

Second, we see a clear link with the need for policymaking based on evidence (part of ‘new public management’), where Sutcliff and Court (2005) explicitly states that better utilisation of evidence in policymaking can help to save lives, reduce poverty and improve development performance in emerging countries. After all, how to apply the policy circle without relevant data? Without relevant data, it is impossible to set agendas, to formulate policies and to implement them.

Third, how can the civil society operate, especially the business sector, when basic information in society is missing, which is needed for appropriate product development, innovation and marketing, when, for example, the real estate sector lacks reliable data on persons and properties and thus cannot pursue secure transactions, where mortgage banks cannot record their loan to enjoy legal security.

By consequence, creating a sound base of relevant data is of a paramount importance. However, we are aware that it depends on the legal meaning created by the record, whether it is an easy task or not. When making a geo-dataset based on spatial images, it might be a rather easy task, apart from the technological challenges, as the data generated are free for all and visualise just what everyone sees in the reality. But in case making a cadastral dataset, there should be a regulation that explains which data should be recorded and what is the legal meaning of the recorded data: it means, for example, that the person whose name is attached to a parcel of land/house, is considered to be the owner, thus legally excluding all other people. Even more: when there is a conflict about ownership, the regulation should provide conflict resolution rules and enforcement (police force). To make it really complicated, such a regulation can only exist when in society the way people can have a relationship with a land is somehow a shared value, that is confirmed in the constitution, the civil code or land law. By consequence, certain categories of records can hardly exist without being created and validated by law.

When it regards the recording of the invisible informal economy, the International Labour Organization developed proposals: we learn from ILO (2013) that – while recognising the variety of country’s contexts – there are still some common fields, such as business records, property records, tax records, labour records, embedded in overarching corporate-, property-, tax-, and labour laws. Relevant for citizens are civil registration, and street addresses. We see this coming back in countries which are a bit further in installing a set of fundamental registers, often called ‘base registers’, to serve as the core information layer in their information infrastructures (see for example the EU project website on Interoperable Solutions for European Public Administrations ISA). Rather common is a framework of interconnected datasets on (a) Civil registers, (b) Business Registers, (c) Property Registers and/or Cadastre, (d) Address Register, (e) Geographic Base Layer and (f) Building Register. On the basis of such
core, other registers that gain an authentic status can be built, such as valuation registers, income registers, underground topography to name a few.

Such a framework is thus considered as a very core of wider system of interoperable datasets of which the source is defined, the keeper has the responsibility for maintaining the data-quality, which is compulsorily used at least for government agencies. The latter should make it impossible for government agencies to create their own datasets (which they usually like to do), which at macro-scale is a waste of government budgets and really killing for the users because of frequent and unavoidable data redundancies.

To help countries with appropriate record management, ISO (2001) provides for a standard that is encouraged by the World Bank Public Sector Governance department, especially while supporting the objectives on strengthening client records and information management, all under the mission statement that ‘records management is fundamental to all aspects of government and is essential for protecting citizens’ rights’.

In sum, this section aimed at providing a rationale for recordkeeping. As we saw, records are a prerequisite for various governance aspects, both seen from the government and the civil society perspective. Overseeing what already happens worldwide on national data collection and information generation, the proposition here (that without data it is not an easy task to govern a country resp. to manage a business, resp. to survive with a family), is hardly a novelty, but for example Jerven (2013) and Setel and Macfarlane (2007) show that despite this knowledge there is much room for improvement.

In section ‘The way forward’, we attempt to formulate elements of the way forward. In section ‘Informal economies: what surveyors can do’, we reflect briefly on what surveyors can do.

The way forward

The existence of an informal economy hampers at least three important aspects of governance: safeguarding decent work for ~4 billion of workers who currently work outside labour and minimum wage regulations, generating enough tax revenue to safeguard the funding of government policy to serve general interests, generate and managing records to safeguard knowledge, evidence-based policymaking, transparency and accountability.

Our starting point is that all countries aim at achieving sustained growth. Sustained growth requires good governance (World Bank, 1994; UN/DP, 1997; IMF, 1997). Governance requires an independent and fair government, not hijacked by ethnic or special interest groups, because “such highly politicized administrations leave the government incapable of resolving collective problems”: strengthening public institutions provided with adequate information is a priority (Bio-Tchane and Yehoue, 2007). Generating knowledge about society should be improved, including a wide range of data such as the characteristics of actors, tax collection, employment, working conditions, productivity (Ncube, 2013). When it regards the inclusion of the informal economy, the UN provides a typology of necessary development data: census and civil registration, welfare, health, education, economic data, geospatial data etc. (Espey, 2015). Additionally, linking information to location is considered as being critical to development (Steudler and Rajabifard, 2012; Onsrud and Rajabifard, 2013). Having data in place also facilitates counting down poverty and other objectives in the framework of the Millennium Development Goals resp. Sustainable Development Goals (Paris, 2007). Especially Africa’s statistics are wanting, which is reason for the World Bank to double its efforts (World Bank, 2013).

Many publications aim at ‘formalizing’ the informal economy and they provide a long list of actions to be taken. We do not believe in such an integral approach. Why? Because the weak institutional capacity of many emerging countries does not allow for such an enormous task. Our intuition says that a suitable approach is to start with a little step: to create the very absolute minimum system of core datasets, on which later can be built further. Bit by bit, the informal economy will become visible as times allow.

Where to start? We believe that a first priority is the development of a sound civil registration (popular census, population count). Jerven (2013) in his seminal study regards this as a prerequisite, without which any statement on per capita trends in, for example, growth, education and health is meaningless. But we also value the human rights arguments of Setel and Macfarlane (2007), Szreter (2007). Creating a sound civil registration in every country is not a new idea: already in the 1990s the United Nations started programmes to develop these kinds of vital records. As most constitutions assign to legal bodies also corporate personality rights (so that they can act as were they citizens), a civil registration for legal entities (‘business register’) has also priority, but — seen the lesser human rights aspect here — second, after the civil registration, we argue. Although both registers likely will know their complexities, a general opinion is that if political will is there, both are relatively straightforward (USAID, 2005).

When civil registers and business registers are in place, and individuals and companies are identifiable by a registration number, they also provide basic information about taxpayers. Together with records on taxable objects, this provides a fundament for taxation. Many countries are unable to collect taxes on land, income or production; therefore, they rely (as we saw earlier) on taxes in import and export (oil). Although property tax is not the main source of tax revenue anywhere (may be at local level it is), is might be wise to start here, although a proper administration is to be developed. A recent study of the World Bank and FAO (Grover et al., 2016) demonstrates that lack of property registers seriously hampers property tax collection: for example progress in Moldova, Serbia or Albania was slow because of incomplete cadastres, informal constructions and informal urban development. When it comes to other taxes, for the time-being governments might rely on taxpayers’ declaration on income and profit, as that was the usual approach also in richer countries some time ago. The other side of the coin is of course enhancing deterrence through improved detection and having a penalty regime (World Bank, 2016a).

But how to create a register of properties as taxable objects? The global discussion on the property right regimes that followed Soto (2000) and the myriad of publications on pros and cons of land reform and formalisation indicates that it is still a sensitive issue, which does
not easily come to a solution at national levels, although in general the matter is considered as an urgent one, as owners respectively users of about 60% parcels worldwide and 90% parcels Africa are said to lack legal security (Zimmermann, 2010). A full registration of legal properties requires a land law that defines the relationship between human and legal beings to a parcel of land. Many countries are currently in such a discussion, and some have decided what to do (e.g. Rwanda: replacement customary by private tenure, Kenya: recognition customary tenure, Vietnam: replacement state ownership by private land-use rights, China: replacement state and collective ownership by household use rights; Bolivia with replacing tribal ownership by ‘títulos de tierras de comunitaria de origen’), but a reality is that a majority is not that far yet (if there is anyhow political will to put it on the agenda). Therefore, it might be better, when it comes to the purpose of taxation, to record taxable landed objects instead of legal properties. These taxable landed objects together with the identified taxpayers linked to the civil registers and business register form a robust tax base. In fact, this is what was done in western countries times ago when they created their ‘cadastres’: they were all of a fiscal nature, later evolving into legal ones. Recording taxable land objects instead of properties might take the sting out of potential property right controversies. Of course in the adjudication of taxpayers, there will be an overlap between land use and land ownership, but there is no need for governments to sort out ownership in all its details prior to levying tax: it is the possession that counts. This approach is in line with a recent study by Plimmer and McCluskey (2016) confirming that land users or ‘property occupiers’ are more easier identifiable especially when, for example, a comprehensive title register or cadastre is absent and, after all, it is also the occupier who enjoys the benefit of better services obtained. For conceptual and technological aspects, the informed reader will know that the ‘fit-for-purpose land administration’ (Enemark et al., 2014) and the ‘land administration domain model’ (Lemmen, 2012) are fully applicable and that the benefits of these facilities are fully enjoyable also when the relation between a person/entity and an object is a fiscal instead of a legal one. Simple geocoding might provide location parameters (a ‘point cadastre’).

The next basis data are street addresses (World Bank, 2005). With appropriate street addresses, one might catch two flies in one stroke. Without street addresses, it will be difficult for a government to communicate with taxpayers. After all, how to deliver invitation to taxpayers to make their tax returns, to deliver tax assessments and tax distress warrants. By assigning addresses to houses, also location can be fixed, thus also a residential location component is safeguarded (Steudler and Rajabifard, 2012).

This gives the most essential and most minimal core of a data infrastructure, which is the first priority for all countries (Fig. 6).

When such a core dataset is present, and interoperability is guaranteed, it is easy to add – as times are appropriate – other datasets.

Having these minimal core datasets available, a government must be able to make steps towards generating tax revenues and create knowledge about society, both contributing to better governance. Having information available, a government can also enhance those elements that make people otherwise avoid tax paying: lower costs to comply, reduction of tax rates (because tax base is broadened), better enforcement, enhancement of deterrence and an increase of the benefits that taxpayers get in return. At a certain moment, taxpayers experience that paying taxes offsets the so-called advantages of dodge taxes and compliance figures will grow (World Bank, 2016a). One of those steps is the formulation of the tax base, which might vary from a flat rate based on square metres to individual discrete ad valorem valuation. A recent study from Plimmer and McCluskey (2016) gives consideration to opt for a banding system, that is more easy to design and apply, and where from a human resource point of view needs less input and is by consequence better manageable for emerging economies.

What is a bit out of scope in this paper, but, as said, nevertheless is on top of the agenda, is the whole discussion on tax dodging by large multinational companies, which use attractive fiscal facilities offered by recipient countries to avoid paying tax in the country where they produce. This dodging (officially called ‘base erosion and profit shifting’) causes a loss of 212 billion US$ annually (Crivelli et al., 2015). When emerging countries are successful in bringing back both such large sums of money to where they belong, then they generate funds, almost equal to the transmitted remittances, the mainstay of many countries today.

This is the way forward we would encourage: create the minimum of interoperable core datasets and build on the fundament when time allows. But who are the professionals who can do that? In section ‘Informal economies: what surveyors can do’, we believe that surveyors are pre-eminently capable to contribute.

**Informal economies: what surveyors can do**

Surveyors are professionals who can create and maintain information systems. Even huge information systems, like a nationwide cadastres: developing the data model, inventing the procedures to initially fill the systems with input, designing procedures to maintain and keep up to date, and creating procedures to deliver output. We
might frame as ‘surveyors possessing the art of recording’. To connect information systems in a coherent and interoperable infrastructure belongs to that art. Surveyors stood, in many countries, at the forefront of developing (spatial) data infrastructures. Of course, surveyors focus on spatial data. But makes it a difference whether to record spatial data or to record citizens, legal entities, taxes, or whatever? Not that much, we argue, but teaming up with domain experts appears to be recommendable, as with experts in information and communication technology. But how valuable these experts are; they all act within their specific domain, while the glue that binds their expertise together is information management, or the ‘art of recording’. We do not argue that surveyors are the panacea: let us not overestimate surveyors but still they are the ones to provide the conceptual and procedural glue.

The requirements for creating and maintaining information systems are surely context driven. But there are many common features, as shown earlier. Simple procedures, preferably of an administrative rather than legal nature, up-to-date-ness, fairness, promoting equality, deterrence and enforcement, transparency and accountability, and attempting the blessings of ICT. Worldwide only 84 countries have a fully electronic system for filing and paying taxes. Why? Because many countries do not have developed their back office components i.e. records (Kettani and Moulin, 2014). Creating the minimum core datasets we propose, is a step forward to electronic government.

Enhancing the tax base effects the level of tax revenue, so that taxes are not experienced as too high or unaffordable. When more countrymen pay tax, taxation will be considered as fair. When the government has access to more tax revenues, the chance for better public service grows. When deterrence and enforcement are increasing, tax dodgers will know that they have a fair chance to get caught. This enhances tax compliance, as ‘high tax rate + low tax enforcement + poor public services’ kills compliance, according to the Economist of 5th December 2015. In addition, simple and understandable procedures combat the current regulatory burden of complex procedures which cost time and money and make taxpayers believe life is just too complicated to comply. The Doing Business Reports cannot be misunderstood here: too much red tape, too much pen-pushing. And what to think about publications which indicate that countries which do not stop their overly burdensome laws and policies, will become ‘losers’ in the ‘digital divide’ (McKinsey, 2014; Pomfret, 2015)?

It would be effective and efficient to concentrate all records in a single government organisation to maximise scarce expertise and information management, instead of creating datasets scattered all over the government structure (which is often the case) and every agency lacking quality expertise. Also a frequently reported unwillingness to share data, because of competence reasons, can then be avoided. We recommend the Lithuanian State Centre of Registers in Vilnius as a shining example here (UN/WPLA, 2005).

In sum, we argue that surveyors should be aware of the role they can play in creating such a minimum core set of data, on which can be built further when time allows. Enhancing and fully exploiting their skills in information management enhances their contribution to the development of their country.

Conclusion

This paper discussed the effects of the existence of informal economies in countries. From literature review, it became clear that at least three negative effects occur: (a) people in the informal economy lack decent work, (b) governments miss substantial tax revenue and (c) government miss information to develop evidence-based policymaking. Also it became clear that in countries with a substantial informal economy, the lack of fundamental datasets hampers any development in these fields. We took a closer look into two of fields, namely taxation and information supply. It appeared that the worst missing dataset is the lack of a reliable civil register and reliable business register. We also found – in the literature – that it is even a human right for people to be registered: the Universal Declaration of Human Rights indicates that ‘people should count for their government by being counted’. When it regards taxation, we argued that without a civil and business register also taxpayers are unknown. To start a development towards better governance, we proposed to develop a minimum core dataset, consisting of civil and business records, and records of taxable objects. The latter, because in the whole taxation system, taxes on income and business profit most likely still shall be pursued on declaration and checking mechanisms, while using land and/or houses is a solid and verifiable tax base. We argued that the discussion on property right regimes is sensitive to aim for a full property register; therefore, it might be wiser to record the fiscal relationship between a human or legal being and a taxable object, than a property relationship. That can evolve over time, as it did in many western countries, where the ‘cadastre’ also started as a fiscal record. On the basis of the analysis done in the literature why people and business stay in the informal economy, it became also clear that compliance is hampered by complex procedures, perceptions of unfairness and inequality and poor public services, so that disadvantages of being informal offset advantages to be formal. When street addresses are attached to the records, a residential location component is safeguarded as well. With this minimum core of interoperable datasets, a country has the start of an evolving information infrastructure, which encourages good governance. A question is which professionals should feel responsible for the development of all this. Here we see a role for surveyors, who – similar to the ‘cadastres’ – have the capability to create and maintain (large nationwide) information systems. Our argument is that it makes not so much difference whether to record people, businesses, taxable objects or whatever, so surveyors should feel responsible to provide overall concepts and information management for the creation of procedures for data collection, data management and data output, while teaming up with relevant domain experts. Creating a single registration agency might maximise scarce professional resources instead of being dispersed.

References
