

Chapter 2. Informality in the development process

The informal economy is a dominant feature of developing economies and encompasses a diverse group of workers and enterprises (Chapter 1). This heterogeneity prompts various perceptions of and stereotypes about the informal economy and has fuelled debate about its role in the development process. To inform policy debate and decision makers, this chapter reviews links between informality and the development process and, more importantly, provides new evidence on the less-studied drivers of informality. It shows that the long-standing negative connotation of informality is not always grounded in evidence and often masks the subtler reality. Fighting stereotypes and promoting an accurate picture of the informal economy's contribution to development is key to making the case for investing in the protection of workers.

The complex relationship between informality and development mirrors various development patterns

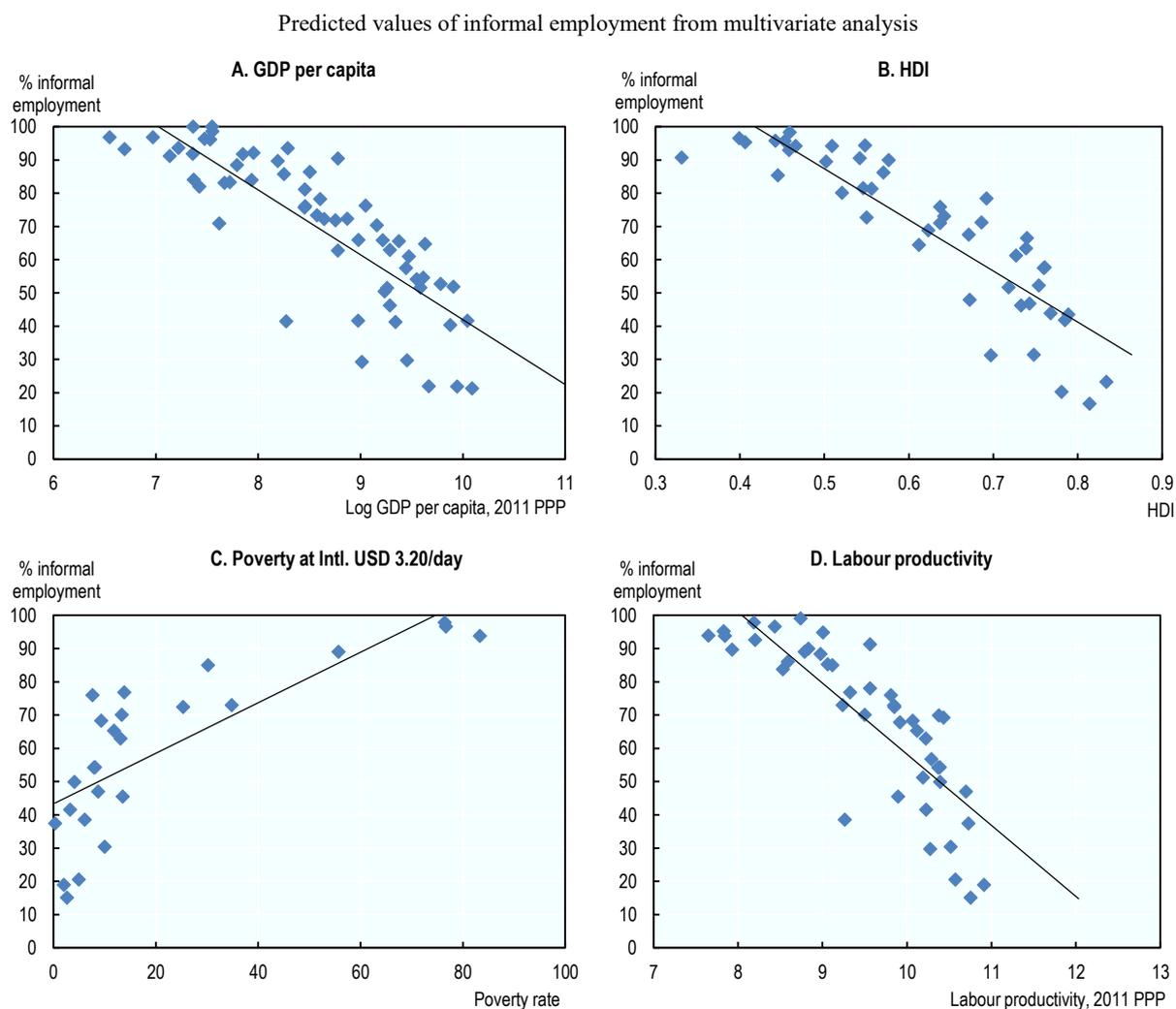
Macro-level data can shed light on the links between informality and development, including, importantly, how informality responds to economic and social development. The informal economy is often considered a sign of underdevelopment that goes hand-in-hand with poverty. It is thought to contract during economic growth and expand during economic crisis. The reality is more complex and dynamic, with substantial variation in patterns of informality across and within countries.

Informality correlates with key development outcomes across countries but no longer within countries

Across countries, the prevalence of informality tends to fall as measures of economic and social development rise. However, the impact of development on the informal economy is widely debated. Some studies associate greater informality with lower growth (Loayza, 1997^[1]; Johnson, Kaufmann and Shleifer, 1997^[2]). More recent analyses of panel data suggest a more complex and dynamic inverted-U relationship between the size of the informal sector and growth of gross domestic product (GDP) per capita (Elgin and Birinci, 2016^[3]).

The relationship can be illustrated by plotting the level of informal employment and four measures of economic and social development: GDP per capita, Human Development Index (HDI), labour productivity and poverty (Figure 2.1A, 2.1B, 2.1C, 2.1D). In order not to confound the effects of differences in development indicators with the effects of other contemporaneous differences, predicted values of informal employment, obtained from multivariate analysis and controlling for other factors associated with informality, are reported instead of actual values. Levels of informality correlate negatively with GDP per capita, HDI and labour productivity, and positively with poverty. In other words, in countries where the level of development is higher, the share of the workforce working informally is lower. A more dynamic analysis shows that the relationship is more complex.

Figure 2.1. Informality correlates negatively with higher levels of economic and social development



Note: Vector of control variables has been adjusted for each panel in order to reduce the effects of multicollinearity on regression estimates. For all panels, controls include geography, labour productivity, SIGI 2014, 2017 Ease of doing business index, number of start-up procedures, share of youth (aged 15-24) and KOF Economic Globalisation Index. For HDI, they include composition of GDP and exclude GDP per capita. For GDP per capita (2011 PPP), they include infant mortality rate, life expectancy and education and exclude HDI.

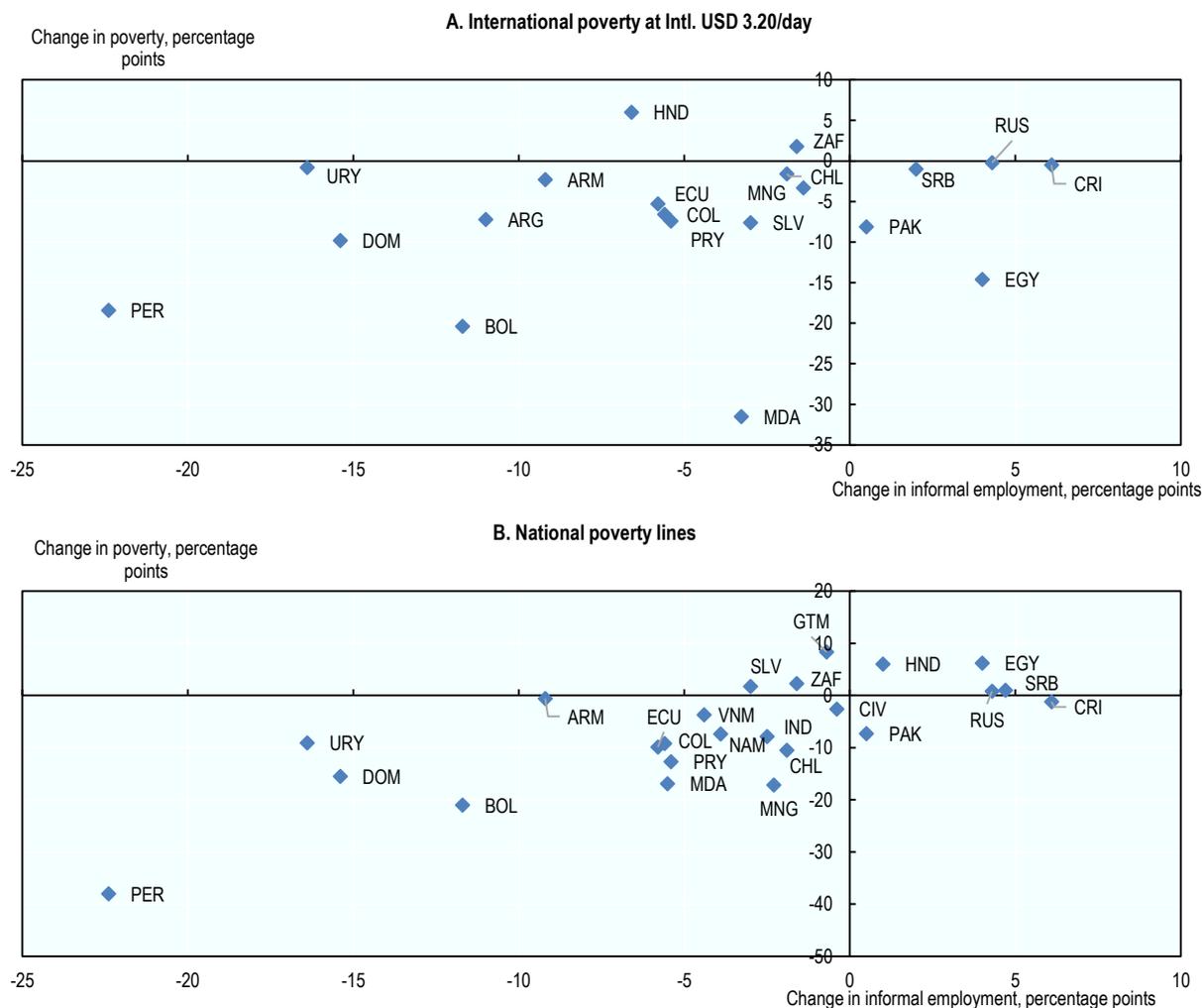
Sources: For informal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for labour productivity; ILO (2015^[5]) *Key Indicators of the Labour Market (9th edition)*, www.ilo.org/kilm; for GDP per capita and international poverty rates, World Bank (2018^[6]), *World Development Indicators (database)*, data.worldbank.org/products/wdi; for HDI data, UNDP (2016^[7]), *Human Development Index*, hdr.undp.org/en/data.

A reduction in informality is not always associated with a decline in poverty over time. Empirical evidence shows that there is no simple relationship between poverty reduction and formalisation within countries (Figure 2.2A, 2.2B). While, in recent years, many countries that saw a decline in informal employment also experienced a decline in poverty, in some countries, such as Honduras and South Africa, poverty increased

alongside a decline in informality. In other countries, such as Costa Rica, Egypt, Pakistan, the Russian Federation and Serbia, where the informal economy expanded, there was a coinciding stagnation in poverty (Costa Rica, the Russian Federation and Serbia) or a decline (Egypt and Pakistan). The lack of an obvious association between formalisation and poverty reduction may reflect a combination of factors, such as an increase in low-paid formal jobs.

Figure 2.2. There is no simple relationship between poverty reduction and formalisation

Changes in international poverty rates, national poverty rates and informal employment at the national level

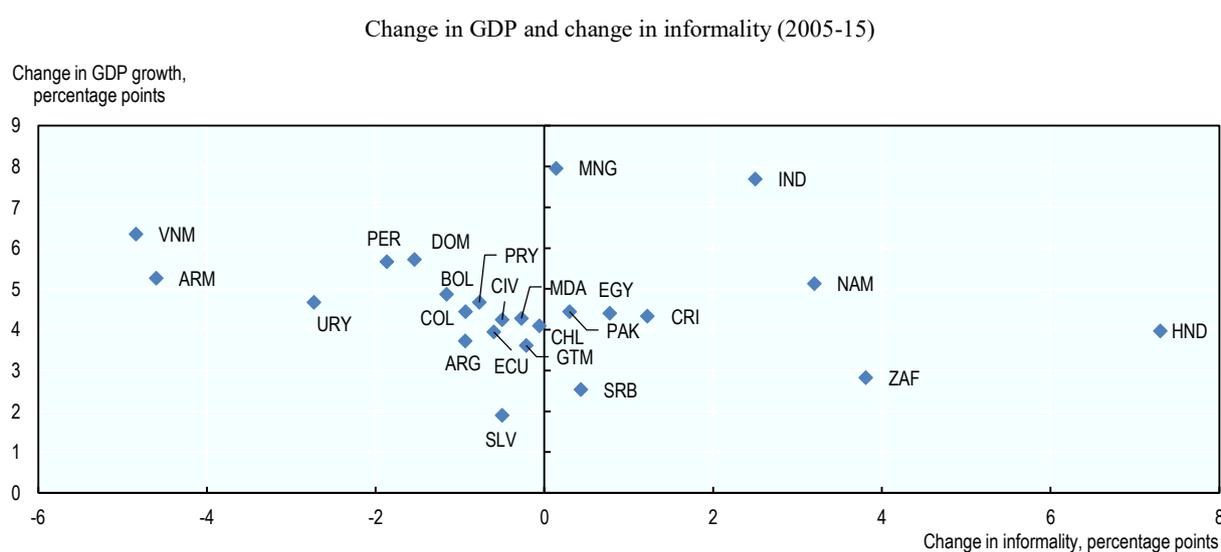


Notes: Differences for both headcount poverty ratios and informality rates calculated at the national level. Time periods used to calculate differences vary according to data availability: Moldova and Peru (2004-16); Argentina (2005-14); Bolivia and the Dominican Republic (2005-15); Honduras (2006-16); Egypt (2008-15); Paraguay (2009-16); Pakistan (2010-13); South Africa (2010-14); the Russian Fed. and Serbia (2010-15); Colombia, Ecuador, El Salvador, Mongolia and Uruguay (2010-16); Chile (2011-15); Costa Rica (2011-16); Armenia (2014-16). Informality rate includes agriculture, with the exception of Argentina and the Russian Fed., for which no data are available.

Sources: For informal employment; ILO (2018^[8]), “ILOSTAT Informal employment and informal sector as a percent of employment by sex -- Harmonized series (%)”, www.ilo.org/ilostat; for international and national poverty rates, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

Long-term GDP growth does not necessarily lead to a reduction in informality. The informal economy is often thought to expand during economic downturns and contract during economic growth. Analysis of informal employment and GDP data between 2005 and 2015, however, suggests substantial variation in patterns across countries (Figure 2.3). In some countries, such as Colombia, Cote d'Ivoire and Peru, the incidence of informal employment has been persistent in recent years, responding only weakly to a long period of economic growth. In other countries, such as India and Uruguay, informality has increased, despite long-term economic growth. In still other countries, such as Bolivia, the strong period of growth during the 2000s is associated with a significant decline in informal employment.

Figure 2.3. There is no obvious pattern in changes in GDP growth and changes in informal employment



Note: Change in GDP growth measured as the mean of the period-to-period differences in GDP.

Sources: For informal employment, ILO (2018^[8]), “ILOSTAT Informal employment and informal sector as a percent of employment by sex -- Harmonized series (%)”, www.ilo.org/ilostat; for GDP growth, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

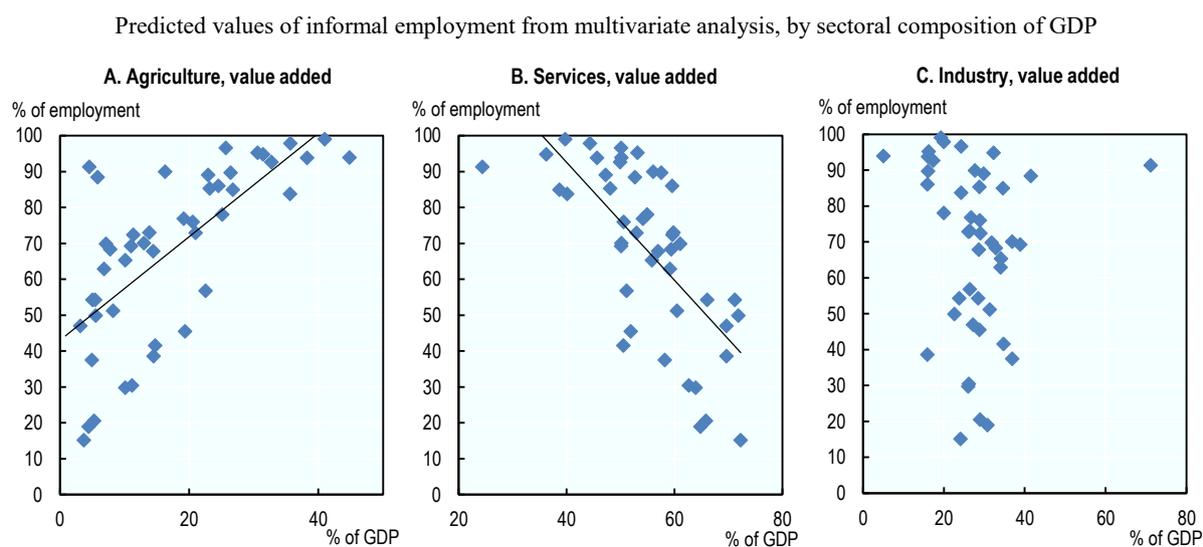
Type of growth matters in informality trends

There is no simple answer as to why the informal economy expands in some countries and contracts in others in times of growth. While various drivers of informality may be at work in various contexts, the type of growth seems to be an important factor. The growth process in some countries may allow the formal sector to absorb a higher share of informal workers. Conversely, a reduction in the size of the informal economy – for instance, following stronger regulatory enforcement – may boost economic growth through efficiency gains. Informality may expand because of increased demand for informal jobs due to outsourcing or subcontracting through global commodity chains (Chen, 2012^[9]) or because the growth process is more capital intensive and does not create enough formal jobs for all those seeking work: they have no choice but to join the informal economy.

In terms of the relationship between the sectoral composition of growth and informality, agriculture and services interact strongly with informality, but there is no obvious association in manufacturing (Figure 2.4A, 2.4B, 2.4C). That is, controlling for other

factors, the higher the share of agriculture and forestry in value added, the higher the informal employment; the higher the share of services, the lower the rate of informal employment. This may reflect the fact that, in agriculture and forestry, most backward linkages, such as production, collection and processing, are often carried out informally, while as high-value services expand and contribute more to GDP growth, informal activities tend to be substituted by formal activities. In manufacturing, informal activities, such as sweatshops, unlicensed factories and outsourced and subcontracted work linked to global value chains, may be proliferating alongside formal activities, in some cases making formal jobs informal. In countries where manufacturing and agriculture drive growth, informality may persist or even increase.

Figure 2.4. There is a relationship between informality and the sectoral composition of GDP



Notes: Controls include geography, infant mortality rate, life expectancy, education, labour productivity, SIGI 2014, 2017 Ease of doing business index, number of start-up procedures, share of youth (aged 15-24) and KOF Economic Globalisation Index. Controls do not include GDP per capita in order to reduce the effect of multi-collinearity on regression results.

Sources: For informal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for GDP growth, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

Drivers of informality are diverse and vary across countries, time periods and segments of the informal economy

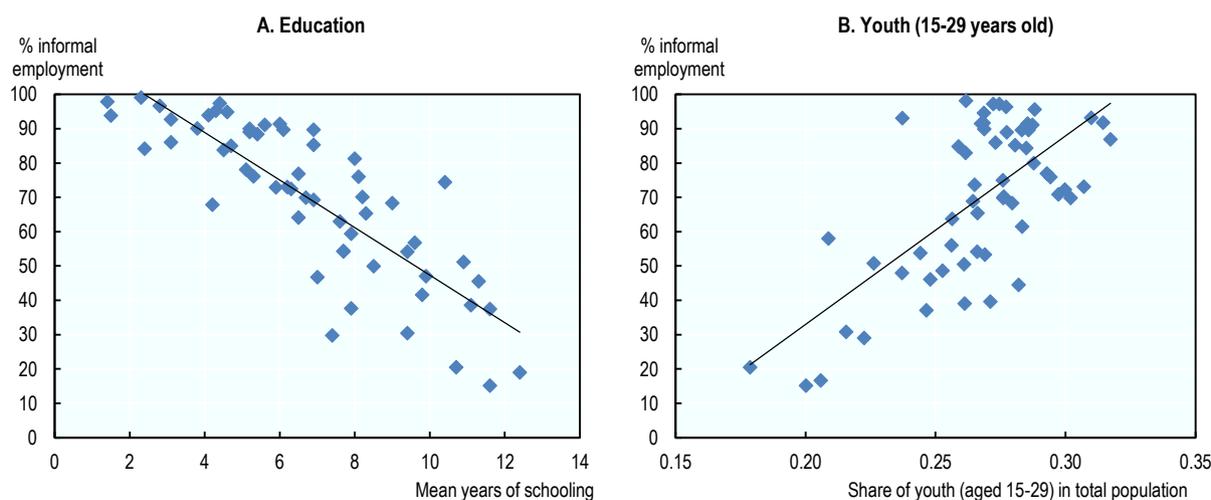
While informality is the norm in developing and, to some extent, emerging countries, the heterogeneity of informal activities elicits a variety of perspectives on the underlying causes and the policies states should pursue. Drivers of informality may be structural (e.g. pressure exerted by labour surplus and increased global competition), legal and institutional (e.g. regulations, taxes and weak law enforcement) or behavioural (typically, decisions to become informal/formal are based on workers', firms' and households' valuation of the net benefits of formality, awareness and trust). Research shows that these factors are important and can reinforce each other, yet their relative importance varies across countries, periods and types of informal activity.

Labour surplus and global competition are major drivers of informality

The pressure exerted by surplus low-skilled labour continues to be a major driver of informal employment in many developing countries. When good jobs (usually high-skilled jobs in the formal economy) are scarce, a large number of people – often the least educated, who cannot compete – engage in low-productive and informal jobs as part of a survival strategy (Lewis, 1954^[10]; Harris and Todaro, 1970^[11]; Rauch, 1991^[12]). This segmentation in the labour market, which prevents low-skilled workers from taking formal jobs with state-mandated benefits, is illustrated by, respectively, a strong negative and positive correlation between the level of informal employment and the mean years of schooling (Figure 2.5A) and the share of youth aged 15-29 in the total population (Figure 2.5B). In other words, in countries with lower educational attainment and a large share of young labour market entrants, the share of the informally employed workforce is higher.

Figure 2.5. Informality correlates positively with a large surplus of low-skilled labour

Predicted values of informal employment from multivariate analysis, by educational attainment and share of youth population



Note: Controls include GDP per capita (2011 PPP), composition of GDP, geography, infant mortality rate, life expectancy, ILO estimates of labour productivity, SIGI 2014, 2017 Ease of doing business index, number of start-up procedures, share of youth (aged 15-24) and KOF Economic Globalisation Index.

Sources: For informal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang-en/index.htm; for education, UNDP (2016^[7]), *Human Development Index*, hdr.undp.org/en/data; for share of the youth population, UNDESA (2017^[13]), *World Population Prospects: 2017 Revision*, population.un.org/wpp/.

Global trade and investment patterns have dramatically affected employment relations and work arrangements. While economic globalisation can generate new opportunities for workers in the informal economy, in many instances, it produces a rise in informality (Portes, Castells and Benton, 1989^[14]). To increase global competitiveness, investors are restructuring production and distribution to generate more flexible, productive systems and higher efficiency gains, including through outsourcing or subcontracting productive and labour processes within global value chains. This can trigger formal firms to shift formal wage workers to informal employment arrangements and creates a demand for goods and services from small production units that may operate in the informal economy and tend to outsource some of their work to isolated informal workers. As a result, a large

share of the workforce in key export industries may end up working in export processing zones, factories or from their homes, at risk of operating under informal employment arrangements (Carr and Alter Chen, 2002^[15])

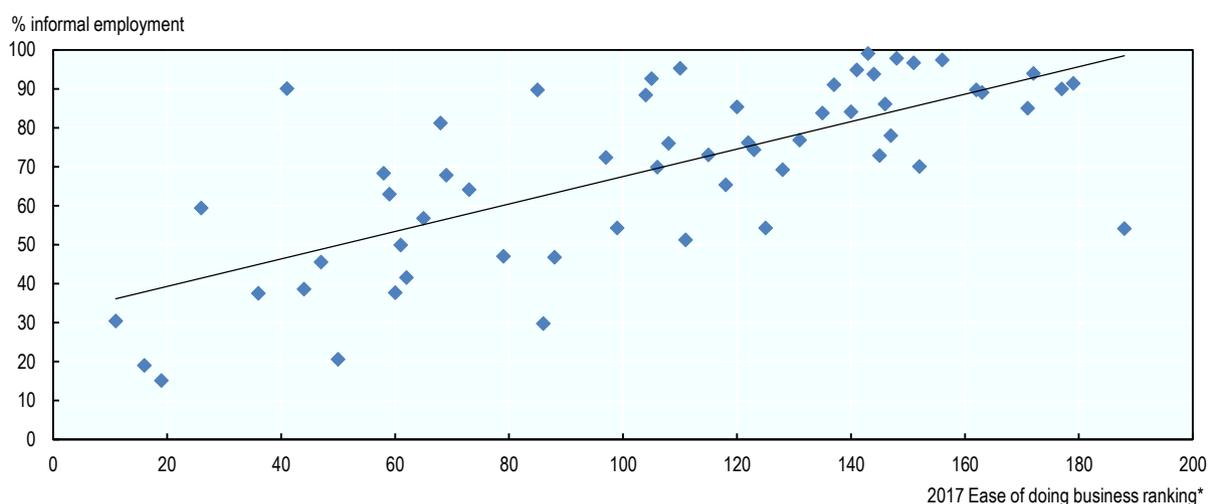
Legal and institutional factors affect informality, from regulatory inadequacies to excessive taxes to weak law enforcement

Another reason for a large informal economy can be the high cost of formality triggered by regulatory inadequacies, combined with low benefits of formalisation. In some countries, bringing informal actors in line with regulations can entail extensive and cumbersome administrative procedures, paperwork and bureaucracy that cost time and resources. These costs may be dissuasive when weighed against expected benefits (De Soto, 1989^[16]), especially in countries with a poor track record of public service delivery. Levels of informality correlate negatively with ease of doing business (Figure 2.6). That is, in countries with simpler regulations and stronger property rights protections, the share of the workforce working informally is lower.

Several countries have introduced measures to incentivise formalisation of enterprises and regulations to simplify business registration. For instance, Brazil's *monotax* single tax payment system for micro and small enterprises extends access to social security and provides simplified taxation and accounting for formal operators (ILO, 2014^[17]). In the same vein, Peru revised its Régimen Único Simplificado [RUS] for SMEs in 2016 and created a new simplified regime (OECD, 2016^[18]).

Figure 2.6. Informality correlates positively with the difficulty of doing business

Predicted values of informal employment from multivariate analysis, by Ease of doing business index ranking (2017)



*0 = greatest ease of doing business.

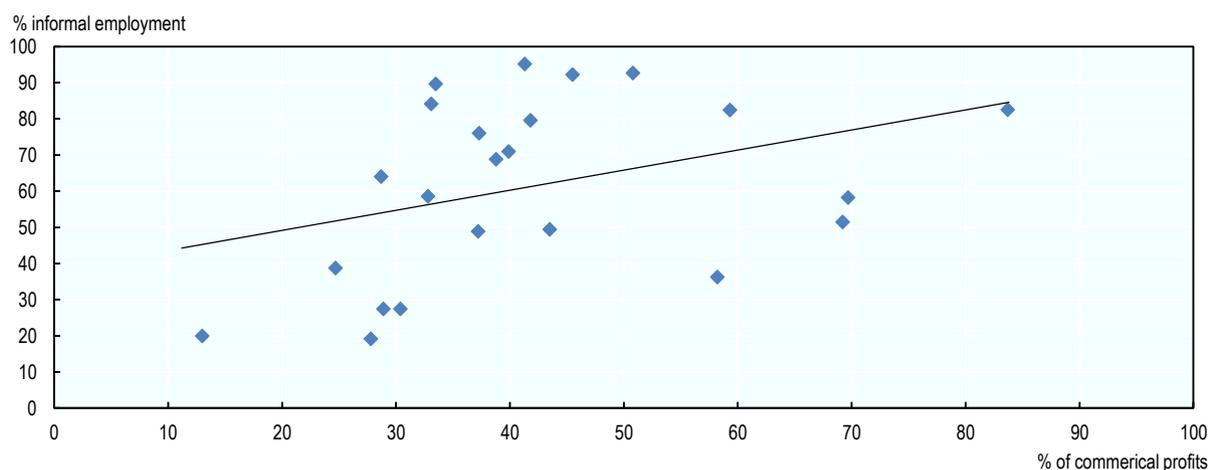
Note: Controls include GDP per capita (2011 PPP), composition of GDP, geography, infant mortality rate, life expectancy, education, ILO estimates of labour productivity, SIGI 2014, share of youth (aged 15-24) and KOF Economic Globalisation Index.

Source: For informal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for ease of doing business indicator, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

Tax systems can also encourage informality. Where compliance is not strictly enforced, a rising tax burden can incentivise informality, expanding the informal economy and creating a vicious cycle by further inclining governments to push up taxes to keep up revenues. The total tax rate, measured as the amount of business taxes and mandatory contributions as a share of commercial profits, correlates positively with the predicted level of informal employment across countries (Figure 2.7). As the tax burden rises, informal employment increases.

Figure 2.7. The higher the total tax rate, the higher share of informal employment

Predicted values of informal employment, by business taxes and mandatory contributions as a share of commercial profits



Note: Controls include GDP per capita (2011 PPP), composition of GDP, SIGI 2014, 2017 Ease of doing business index, share of youth (aged 15-24), education, geography, KOF Economic Globalisation Index, life expectancy, infant mortality rate, poverty headcount ratio at Intl. USD 3.20 per day, World Justice Project Rule of Law Index, Regulatory Enforcement (Factor 6), number of start-up procedures and cost of starting a business.

Source: For informal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for total tax rate, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

Payroll taxes are one way taxes can have a distortionary effect on formal employment (Levy, 2008^[19]). A small number of econometric studies have assessed this relationship using reliable identification methodologies. Evidence on the effects on formal employment is inconsistent for both developing and developed economies (Pagés, 2017^[20]). Reducing payroll taxes has been associated with an increase in the share of formal jobs and reduced informal employment in Colombia (Fernández and Villar, 2016^[21]; Kugler, Kugler and Prada, 2017^[22]), France (Bunel and L'Horty, 2011^[23]) and Turkey (Betcherman, Daysal and Pagés, 2010^[24]). Other countries, such as Argentina (Cruces, Galiani and Kidyba, 2010^[25]), Chile (Gruber, 1995^[26]) and Sweden (Egebark and Kaunitz, 2013^[27]), show no effect. A recent study on entrepreneurship in 142 countries rejects the hypothesis that informality is associated with high taxes and points to the importance of institutional factors (Williams and Kedir, 2018^[28]). This evidence suggests that a narrow focus on reducing taxes may miss more important institutional factors that can facilitate the transition to the formal economy.

Some studies caution against a potentially distortionary effect of value-added tax (VAT) on formal employment (Emran and Stiglitz, 2005^[29]). Results cast doubt on the indirect

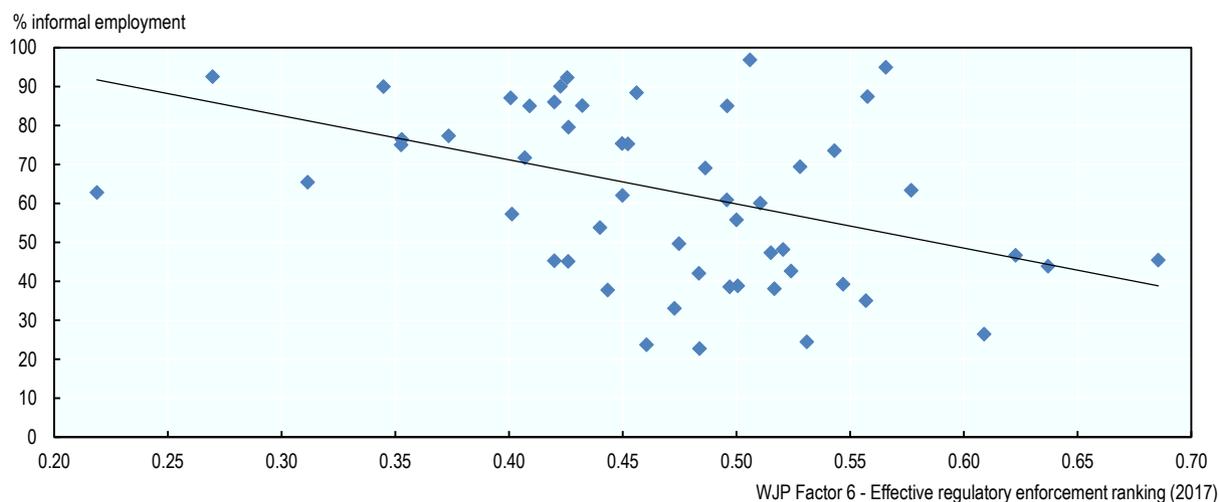
tax reform, pursued in many developing countries, that favours a reduction in trade taxes and an increase in VAT.

While some attribute the size of the informal economy to regulations and taxes, others argue that weak law enforcement allows it to flourish. The capacity to enforce regulations and the rule of law varies significantly across the developing world, but it is well established that enforcement, especially of labour regulations, is less than perfect (Kanbur, 2009^[30]). Effective enforcement should make informal employment less attractive by making it more costly, instead of driving economic units and workers to informality by increasing the costs of formal labour. There is a strong correlation between the extent to which regulations are fairly and effectively implemented and enforced, as measured by the World Justice Project Regulatory Enforcement Index, and the level of informality across countries at various stages of development (Figure 2.8). As regulations and administrative provisions are enforced effectively and without improper influence by public officials or private interests, formal employment increases.

Detailed econometric studies on labour regulations suggest that the impact of labour inspections on informality depends on workers' valuation of the benefits being enforced. In Brazil, there is evidence that stricter enforcement leads to increased formal sector employment and non-employment and reduced informal sector employment (Almeida and Carneiro, 2012^[31]), likely as labour inspectors enforce compliance with regulations highly valued by workers.

Figure 2.8. The higher the regulatory enforcement, the lower the level of informality

Predicted values of informal employment from multivariate analysis, by Regulatory Enforcement Index ranking



Notes: Controls include GDP per capita, composition of GDP, share of youth (aged 15-24), education, life expectancy, infant mortality, number of start-up procedures, KOF Economic Globalisation Index, geography and labour productivity.

Sources: For informal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for World Justice Project (2017^[32]), *Regulatory Enforcement Index* (database), <http://data.worldjusticeproject.org/>.

While many factors influence the costs and benefits of informality, often it is their comparison that matters. As the costs and benefits of informality vary across countries, periods, firms and nature of informal activity, so too will the net benefits. It has been

argued that firms and individuals compare the costs of formalisation with the expected benefits to choose their optimal level of engagement in the formal economy, rather than refer to the absolute costs and benefits of formalisation (Hirschman, 1970^[33]; Perry et al., 2007^[34]). For instance, micro entrepreneurs with low productivity working in parallel with the formal sector may see low net benefits from complying with complex and often costly business and tax regulations. Larger firms may perceive insignificant net benefits of fully formalising when, as the result of weak enforcement, private gains from tax evasion outweigh the costs of non-compliance. Furthermore, low-paid workers may have little incentive to become formal when what they expect to get in formal jobs does not outweigh the reduction in formal wages from payroll taxes or the greater flexibility and wages they may get as informal workers, often underestimating the value of social protection from formal employment. Perceived low net benefits of formalisation may be particularly important when low-paid workers have access to informal support or non-contributory, tax-financed social protection programmes that partially substitute for contributory benefits, or when the quality of services individuals and firms receive in exchange for taxes and mandatory contributions is considered too low. It is essential that formalisation policy design takes such considerations into account in adjusting incentive structures to favour transition to the formal economy.

Besides incentives, the digital transformation is also likely to play a non-negligible role on formalisation, both as a challenge with the development of the gig economy and the spread of non-standard employment, and as an opportunity, by facilitating registration procedures.

The role of the informal economy in development is not well recognised or understood

The contribution of informality to economic and social development is an important question. Observers tend to focus on the survivalist aspects of the informal economy; its contribution to development beyond resilience draws less attention. It is often argued that, although the informal economy contributes to economic growth and provides livelihoods for billions of people in developing countries who may be unable or unwilling to formalise, it is a very unproductive sector, provides inferior working conditions and leads to domestic tax evasion and unfair competition between formal and informal firms. The reality is more complex and merits closer investigation.

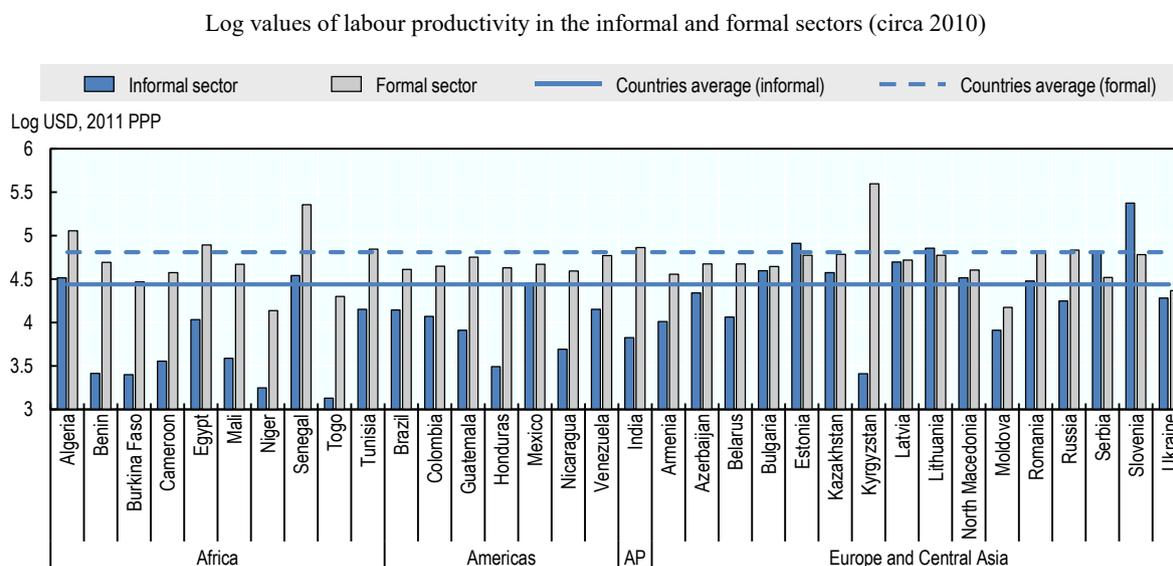
The informal sector in many countries is less productive and absorbs more unskilled workers

Labour productivity is much lower in the informal than in the formal sector in many countries. As labour productivity levels are highly heterogeneous across countries, logarithmic values instead of absolute numbers are reported to facilitate comparability (Figure 2.9). On average, labour productivity is more than two times lower in the informal sector relative to the formal sector: USD 27 527 (United States dollar; USD 2011 PPP [purchasing power parity]) vs. USD 64 715. That is, 2.4 informal sector workers reach the output level of one formal sector worker.

However, the global estimate masks remarkable disparities across countries and regions. Countries with the lowest informal labour productivity relative to formal labour productivity are mostly located in Africa: the ratio does not exceed 28.7% in Algeria and is as low as 5.2% in Benin, 6.7% in Togo, 8.2% in Mali, 8.6% in Burkina Faso and 9.5% in Cameroon. Other regions surpass ratios for Africa but contain the worst-performing

countries: 6.9 informal sector workers to 1 formal sector worker in Guatemala, 8 to 1 in Nicaragua, 11 to 1 in India, 14 to 1 in Honduras and up to 154 to 1 in Kyrgyzstan. Europe and Central Asia has the highest levels of informal sector productivity. In a number of countries, levels surpass the formal sector: 120.6% in Lithuania, 137.9% in Estonia, 194.7% in Serbia and 389.3% in Slovenia. These results point to the heterogeneity of the informal sector and show that, depending on the country, informality should not be viewed solely as subsistence-based activities of necessity and last resort.

Figure 2.9. Labour productivity is lower in the informal than in the formal sector



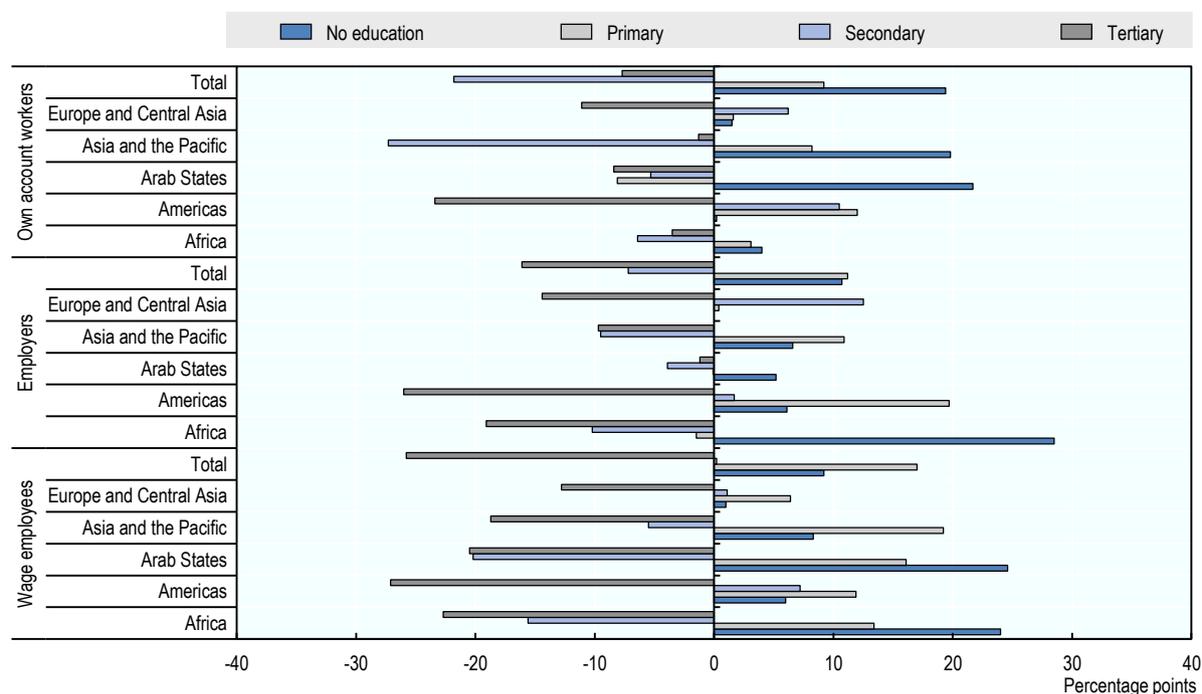
Notes: Log values are reported for readability. Labour productivity of informal and formal employment estimates refer to value of GDP from the informal or formal sector divided by total employment in the informal or formal sector. Labour productivity corresponds to GDP divided by total employment, expressed in Intl. USD, 2011 PPP. Informal contribution to GDP values are obtained by multiplying the percentage contribution to total GDP of each sector by total GDP in absolute terms. Agriculture is included in the calculation of labour productivity in both sectors, where available. Averages refer to simple arithmetic (unweighted) mean of all countries displayed. AP = Asia and the Pacific.

Source: Authors' calculations based on estimates of contribution of informal sector to GDP compiled by Charmes (2016^[35]), "The Informal Economy: Definitions, size, contribution and main characteristics", *The informal economy in developing nations: hidden engine of innovation?*; for estimates of informal and formal employment, ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for estimates of GDP, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

A relatively low-educated workforce is a key driver of the low level of productivity in the informal economy. Human capital is an important source of the productivity gap that merits closer investigation. Around the world and across comparable employment statuses, the informal economy absorbs more unskilled labour (Figure 2.10). Regardless of location or employment status, the proportion of workers with tertiary education is much lower in the informal than in the formal economy, while the proportion with no education is much higher. The distribution of informal and formal wage employees and employers with secondary education shows some disparities across regions: in the Americas, a higher proportion work in the informal economy. The reverse is true in Africa, the Arab States and Asia and the Pacific, and the distribution is equal in Europe and Central Asia, regardless of employment status.

Figure 2.10. There are large education gaps between informal and formal workers

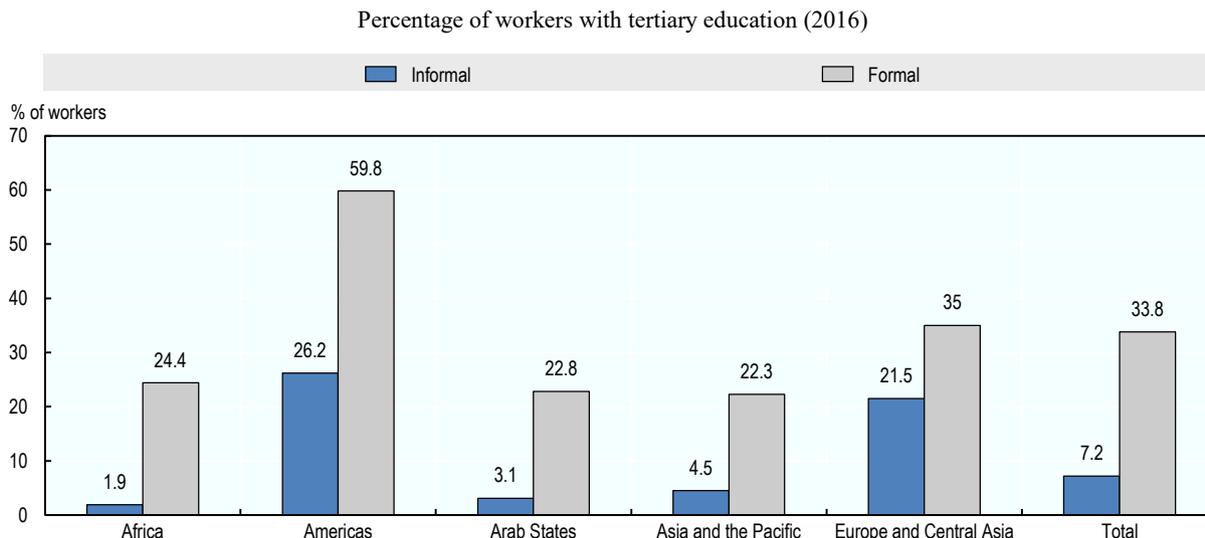
Difference in the distribution of informal and formal workers in various employment statuses, by educational attainment (2016)



Notes: Contributing family workers not represented, as they are in the informal economy. Estimates based on data for 107 countries representing 86% of the world's employed population.

Source: ILO (2018^[4]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm.

Still, a small portion of the informal economy absorbs and, in some cases, attracts highly educated workers. Around 2016, the average proportion of workers with tertiary education stood at 7%, compared with 34% in the formal economy (Figure 2.11). The capacity of the informal economy to absorb the highly educated varies substantially across regions and depends on countries' and regions' overall education profile. The proportion of workers in the informal economy with tertiary education is 26% in the Americas, 21% in Europe and Central Asia, from 3% to below 5% in the Arab States and Asia and the Pacific, and below 2% in Africa. While the informal economy includes a fairly significant and productive segment in some countries, it has a largely survivalist aspect in others.

Figure 2.11. A small proportion of the informal economy absorbs tertiary-educated workers

Note: Estimates based on data for 107 countries representing 86% of the world's employment.

Source: ILO (2018^[41]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm.

The negative connotation of low tax revenues from the informal economy is weakly documented empirically

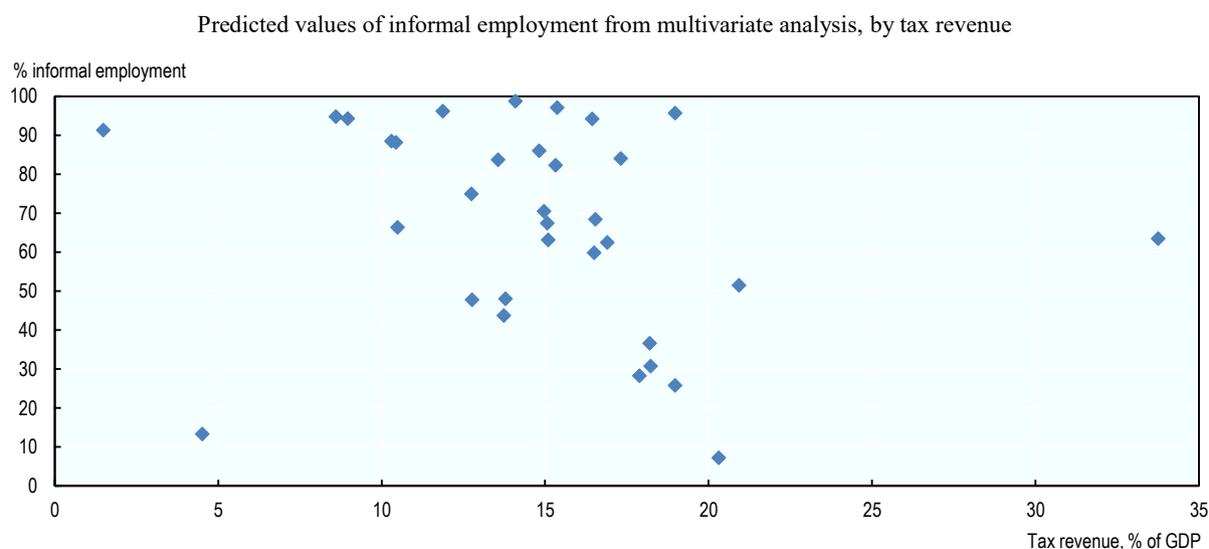
Taxation of the informal economy has received increased attention in recent years. Often, the focus is on perceived large tax evasion and a corrosive effect on tax morale. Generating revenues through direct taxation in the form of personal or corporate income tax is a challenge in the informal economy. According to some estimates, on average, direct taxation of households comprises 18% of total tax revenues in developing countries and 45% in developed countries (Olken and Singhal, 2011^[36]; Gordon and Li, 2009^[37]). It is often assumed that informal workers and firms contribute little to tax collection. Several studies attempting to estimate the tax gap in the informal sector¹ suggest that taxation of the informal economy could represent an important source of government revenue (Schneider and Klinglmair, 2004^[38]; Schneider, Buehn and Montenegro, 2010^[39]). However, several tax experts have been somewhat sceptical about the value of taxing directly the informal economy, given the limited revenue potential, high cost of collection and potentially adverse impact on small firms (Keen, 2012^[40]). Much of the argument for taxation of the informal economy is therefore grounded in more indirect revenue benefits, in particular building a culture of fair competition and tax compliance among small and medium-sized enterprises (Joshi, Prichard and Heady, 2014^[41]).

Although it is hard to assess the contribution of the informal sector and of workers informally employed outside of the informal sector, some evidence suggests that they contribute to direct and indirect tax collection. A study on more than 5 000 informal businesses in Ghana shows that about 35.0% of employers pay VAT, especially when buying from formal enterprises, while about 23.6% pay personal income tax (Anuwa-Amarh, 2015^[42]). The difficulty of taxing the informal economy directly is why governments tend to rely on indirect taxes, such as VAT on consumption. The importance of the informal economy as a source of indirect taxation operates through the links between the formal and informal sectors. When the formal sector buys inputs from the

informal sector, it can lead to increased production, which in turn increases its tax contribution. Likewise, the informal sector buying goods and services from the formal sector increases VAT contributions (Abel, 2016^[43]). This is why indirect taxation of the informal economy tends to represent a significant source of tax revenue in many developing countries, especially when the informal sector constitutes a large share of GDP. Small informal firms also contribute to tax collection through presumptive taxes, which are based on a simplified indicator of the tax base and are increasingly used in developing countries (Joshi, Prichard and Heady, 2014^[41]).

Despite the negative relationship often assumed, there is no straightforward relationship between the share of informal employment and tax revenue across countries (Figure 2.12). These results are consistent with the findings of other recent econometric studies utilising large cross-section and panel datasets that show that the assumed negative relationship between tax revenues and informality vanishes when controlling, among other factors, for tax enforcement (Elgin and Solis-Garcia, 2015^[44]).

Figure 2.12. There is no straightforward relationship between informality and tax revenue



Note: Controls include GDP per capita, composition of GDP, share of youth (aged 15-24), education, life expectancy, infant mortality, number of start-up procedures, KOF Economic Globalisation Index, geography and labour productivity.

Sources: For informal employment, ILO (2018^[41]), *Women and Men in the Informal Economy: A Statistical Picture*, www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm; for tax revenue, World Bank (2018^[6]) *World Development Indicators* (database), data.worldbank.org/products/wdi.

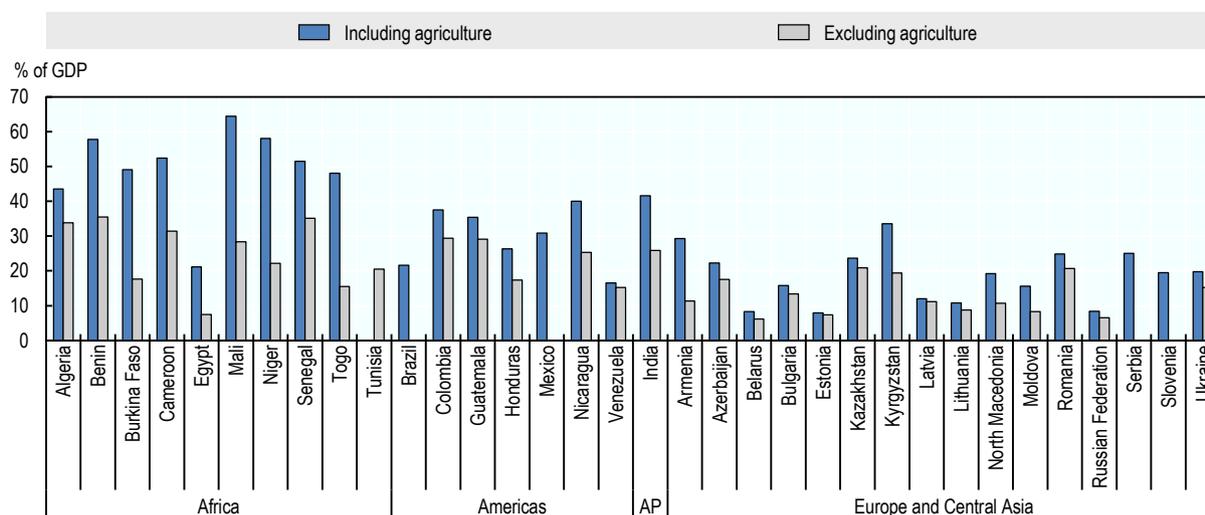
Estimates of formal taxes may also understate the true tax burden faced by households and firms in the informal economy. There is evidence that the informal economy supports other taxes through labour and monetary payments outside the formal tax system that contribute to the provision and maintenance of local public goods in developing countries. Such informal taxation systems are coordinated by public officials, although enforced socially rather than legally. Empirical evidence from ten developing countries shows that 20-50% of households make informal tax payments, often exceeding households' formal direct tax payments, and that informal taxation constitutes a substantial share of local revenue, especially in rural areas (Olken and Singhal, 2011^[36]).

Informal economy workers contribute substantially to GDP growth and basic skills provision

The informal sector contributes to economic growth in several direct and indirect ways. First, traditional agriculture remains an important source of economic growth in many developing countries and is often carried out informally. Second, the output of informal enterprises outside the agriculture sector, often linked with the formal sector, represents a significant share of the value added of national trade in developing countries. Third, the informal economy, by allowing households to reconcile care burdens with limited labour income, entails a systemic transfer of hidden subsidies to the formal economy, largely through a high time tax on women.

Estimating the share of the informal sector in GDP is an important way to recognise the contribution of the informal economy to economic development. The literature suggests several ways to assess the informal economy or, at least, the informal sector. Estimates for 34 countries, reported by Charmes (2016^[35]), measure the informal sector's contribution as a share of GDP including and excluding agriculture in the 2000s (Figure 2.13). However, as they exclude the output of informal employment outside the informal sector, they do not capture the total contribution of the informal economy. These estimates nonetheless show that, on average, the informal sector constitutes a significant share of GDP: about 30% including agriculture and 17% excluding agriculture. There are large disparities across countries, with the contribution ranging from 6.2% in Belarus to 64.4% in Mali including agriculture and 6.2% in Belarus to 35.5% in Benin excluding agriculture.

Figure 2.13. The informal sector contributes to a large share of GDP
GDP contribution of the informal sector (2000s)



Notes: AP = Asia and the Pacific. Latest data available: Estonia (2014); Algeria, Mali Niger, India, Belarus, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Romania, Russian Fed., Ukraine (2013); Armenia, Azerbaijan, Benin, Burkina Faso, Egypt, Guatemala, Latvia, Tunisia (2012); Bulgaria, Macedonia, Nicaragua, Togo (2011); Mexico, Cameroon (2009); Serbia (2008); Brazil, Colombia, Venezuela (2006); Slovenia (2005); Senegal (2000). Estimates of the share of the informal sector excluding agriculture as a percentage of GDP not available for Brazil, Mexico, Serbia and Slovenia; estimates including agriculture not available for Tunisia.

Source: Estimates compiled by Charmes (2016^[35]), "The Informal Economy: Definitions, size, contribution and main characteristics", *The informal economy in developing nations: hidden engine of innovation?*.

Informality provides a training ground for many people, especially youth. In many developing countries, where access to formal vocational training systems is limited and often does not provide skills needed in the market, a very high proportion of workers in the informal sector are trained in the sector itself. Moreover, skills development provided by the sector extends beyond informal workers; for instance, many young people benefit from informal apprenticeships, particularly in Africa (ILO, 2012^[45]; Walther, 2011^[46]). According to a qualitative survey carried out by the Agence Française de Développement, 60% of 110 youth association leaders from Central Africa with a Bachelor's or Master's degree enter the labour market through on-the-job experience or an apprenticeship in the informal sector (Walther and Tamoifo, 2009^[47]). Evidence further shows that skills acquisition in the informal economy occurs even in the absence of cultural traditions of informal apprenticeship (e.g. Kenya) (King, 1977^[48]). Several countries, notably in Africa, have adopted approaches to assess, upgrade and expand existing informal apprenticeship systems (whether or not embedded in norms, customs and traditions) as a cost-effective way to make large-scale gains in enhancing the skills base. Thus, countries such as Benin or Tunisia have built on existing apprenticeship practices in the informal economy to address deficiencies without driving out existing good practices (ILO, 2012^[45]; ILO, 2015^[49]).

Notes

¹ See, for instance, Danquah and Osei-Assibey (2018^[50]).

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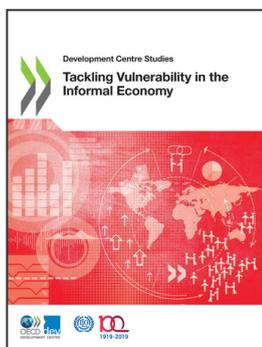
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