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Informal Economy in Latin America and the Caribbean: Implications for
Competition Policy**

- Background Note -

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This document was prepared by the OECD Secretariat to serve as a background note for the discussion during the session *The Informal Economy in Latin America and the Caribbean: Implications for Competition Policy* that will take place at the Latin American and Caribbean Competition Forum on 18-19 September 2018 in Argentina.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

More documentation related to this discussion can be found at:
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Latin American and Caribbean Competition Forum

Session I: The Informal Economy in Latin America and the Caribbean: Implications for Competition Policy

– Background Note by the Secretariat –*

There is a consensus amongst many researchers about the negative effects of informality in the competitive process. This is obviously a concern in markets where formal and informal firms effectively compete. In these markets, informal firms gain competitive advantage over formal firms by not complying with regulations or tax obligations. These practices allow informal firms to reduce their supply costs by using means that have nothing to do with efficiencies and/or innovation, as it would be desirable in a competitive market. Formal firms, as a result, may be unable to compete with the informal firms because they simply cannot offer prices that are low enough.

It is, therefore, sensible for a competition authority to engage actively in fighting informality in industries or sectors where formal and informal firms compete. This paper looks at the questions of whether informal and formal firms actually do compete; under which conditions; and how should competition authorities address informality when implementing their advocacy and enforcement powers.

* This paper has been prepared by Iratxe Gurpegui of the OECD Competition Division. It draws where necessary on the 2009 OECD background note on Competition Policy and the Informal Economy, <https://www.oecd.org/daf/competition/44547855.pdf>.

Table of contents

Latin American and Caribbean Competition Forum Session I: The Informal Economy in Latin America and the Caribbean: Implications for Competition Policy	2
– Background Note by the Secretariat* –	2
1. Introduction	5
2. Definition of informal economy	5
3. Measuring informal economy in Latin America and the Caribbean	6
4. Causes of informal economy in Latin America and the Caribbean	9
4.1. Regulations (business registration and regulations).....	11
4.2. Labour regulation.....	12
4.3. Tax evasion.....	12
4.4. Government enforcement.....	13
5. Impact of the informal economy on the Latin American and Caribbean economies	13
5.1. Growth, productivity and the competitive process:	13
5.2. Lack of social protection and insurance:	16
5.3. Erosion of tax revenues.....	16
5.4. Integrity and the trust in public institutions:	16
5.5. Economic measurement	17
6. Competition and Informality	17
6.1. Do formal and informal firms compete?.....	18
6.2. Competition authorities’ actions to tackle the causes and negative impacts of informality (Advocacy).....	21
6.3. Competition enforcement actions involving informal firms	24
6.3.1. Informal firms as perpetrators of anticompetitive conducts	24
6.3.2. Informal firms as victims of anticompetitive conducts	26
6.3.3. The role of informality in defining markets and establishing market power	26
7. Conclusion	29
Endnotes	30
References.....	32
Further reading.....	33

Tables

Table 1. Relative Contribution of Each Causal Variable to the Size of the Informal Economy	10
Table 2. Ease of starting a business 2018	11
Table 3. Burden of paying taxes 2018.....	12

Figures

Figure 1. Estimated Size of the Informal Economy, early 2000s.....	7
Figure 2. Latin America, non-agricultural informal employment, 2009-2013	8
Figure 3. Informal Economy by Region.....	8
Figure 4. Estimated Impact of Informality on Labour Productivity	14
Figure 5. Productivity and paid employment effects of exogenous increase in formality driven by Brazil's SIMPLES program	15
Figure 6. Variation in trust in government and GDP in Latin America	17
Figure 7. Unintended consequences	19
Figure 8. The Link Between Financial Constraints and Informal Competition	20

Boxes

Box 1. Tax reforms in Colombia 2013	13
Box 2. Uruguay 2008 Social Protection Reforms	16
Box 3. Peru's Commission in charge of monitoring acts and dispositions of the Public Administration.....	22
Box 4. The role of commission agents in the distribution of Gas LP in Mexico	23
Box 5. Argentina - mate herb and beef meat market investigation	24
Box 6. Price fixing of public passenger transport service of the Cajamarca – Cajabamba route.....	25
Box 7. Alternative information sources and calculation methods used by COFECE to set fines against informal firms	26
Box 8. Chiletabacos - A cigarette distribution case (2005).....	27
Box 9. Argentinean Merger Cases.....	28

1. Introduction

1. Informality is a pervasive feature of the Latin American and the Caribbean economies. The most recent studies measuring informality have estimated that informality in Latin America and the Caribbean represented 40% of the GDP during 2010-2014 and that in 2013 informal employment in the region represented 46.8% of the total non-agricultural employment.

2. The economic literature has extensively studied the concept of informal economy, why this phenomenon occurs and its impact in the overall economy. Most researchers agree that informality reduces the overall productivity and therefore the potential growth of economies.

3. Also, and most importantly for competition authorities, a large part of the researchers agree that informality negatively affects the competitive process. This is obviously a concern in markets where formal and informal firms effectively compete. In these markets, informal firms gain competitive advantage over formal firms by evading taxes, labour, and product regulations, by providing unlicensed services or by selling goods that are counterfeit or smuggled. These practices allow informal firms to reduce their supply costs by using means that have nothing to do with efficiencies and/or innovation, as it would be desirable from a competitive market. Formal firms, as a result, may be unable to enter into or expand within a market because they simply cannot offer prices that are low enough to attract a substantial number of consumers. Firms with intellectual property can be especially hard hit, as informal firms are likely to free ride on their investments by making copies of their creative work affecting innovation and growth.

4. It is, therefore, sensible for a competition authority to engage actively in fighting informality in industries or sectors where formal and informal firms compete. But, do formal and informal firms really compete? And, if so, under which conditions? How should competition authorities tackle informality? Is competition enforcement the right tool to do so? Or, is advocacy enough? What are the policy issues that advocacy actions should address? Finally, how does informality affect competition authorities' enforcement actions? This paper tries to address these issues.

2. Definition of informal economy

5. The economic literature has not reached a consensus about what informal economy means. Different terms have been used to refer to this phenomenon, "underground", "shadow", "grey", "informal", "unofficial", "unobserved", "hidden", "parallel", "second", "black", "cash" or "household" economy.

6. According to Gerxhani, there is no single definition of the informal economy because researchers have attempted to define the informal sector in accordance with the policy concern that motivated their analysis¹. Data availability has also been mentioned as a motivation to define informality in one way or another (OECD, 2011).

7. Keith Hart, a social anthropologist, introduced (in a developing country context) the concept of the 'informal sector' as including small self-employed urban labour (Hart, 1973).

8. Regulation is a frequently used element to define the informal sector activities. The report of the International Labor Office on employment in Kenya (ILO, 1972) explains informality as the avoidance of government regulations and taxes with the aim to provide a way for families to subsist. H. De Soto 1989, and many others, studied the informal sector in a regulatory framework. Easy of entry has also been considered as one of the defining features of the informal sector by the ILO and various other researchers (Gerxhani, 2004).

9. By comparing studies on informality in developed and less developed countries, Gerxhani concludes that there is agreement in defining informality in all countries. Undeclared labour, tax evasion, unregulated or unlicensed enterprises, illegality or criminality would be the elements that best describe informality (Gerxhani 2004). Likewise, others have defined the shadow economy as including all economic activities which are hidden from official authorities for monetary, regulatory and institutional reasons (Medina, Jonelis and Cangul, 2018)².

10. The informal economy in less developed countries seems, however, to be marked by small-scale and survival activities. Contrary to developed countries, the informal sector in less developed countries generates low income, little if any accumulation and it is mainly a survival activity. (Gerxhani, 2004)

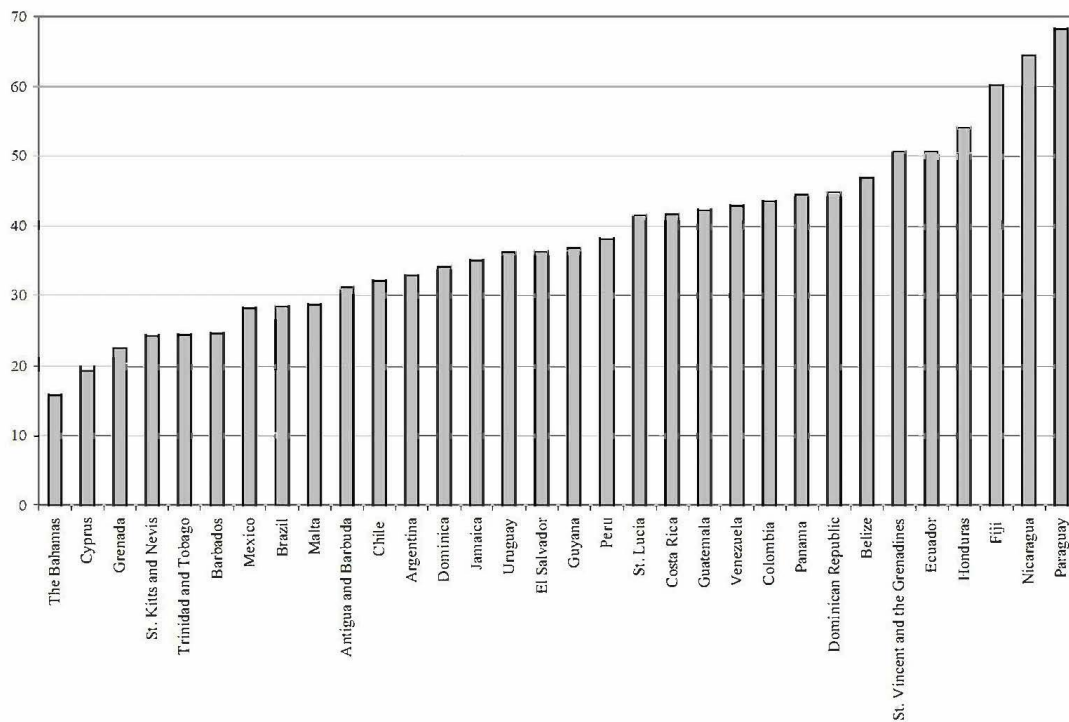
3. Measuring informal economy in Latin America and the Caribbean

11. The informal economy is, by nature, difficult to measure, as agents engaged in this type of economic activities try to remain undetected (Medina, Jonelis and Cangul, 2018) and, thus, relevant data is not always available. Moreover, terminological confusion; different elements used to define the informal economy; and several measuring methods make measuring the informal economy a tough task (Gerxhani, 2004).

12. Informality may be assessed by obtaining information in as direct a way as possible. Direct collection of information relies on either voluntary survey data or tax audits. Surveys typically ask firms to reveal voluntarily their income, impressions of tax compliance within their industry, and other aspects of their business. The Tax Auditing method determines the size of the informal economy by measuring the residual between income declared for tax purposes and that measured by institutional checks. Indirect ways of obtaining information about the informal economy include, amongst others: labour market data, which may be a good proxy for the size and composition of the informal economy workforce; the currency demand analysis, which is based on the assumption that transactions in the informal sector are made in cash; the electricity consumption analysis, which attributes the difference in growth of GDP and electricity use to the informal economy³. Finally, the Dynamic Multiple-Indicator Multiple-Causes (DYMIMIC) model is widely used to measure informality as it allows researchers to factor multiple determinants and indicators of informal economic activity.⁴ (Alderslade, Talmage, Freeman, 2006).

13. A working paper from the IMF estimated the size of the informal economy in, along with other jurisdictions, several Latin American and Caribbean countries in the early 2000s (Vuletin, 2008) showing significant differences in the size of the informal economy across countries. While in countries like Paraguay and Nicaragua the informal sector reached values around 70% of total GDP, in economies like the Bahamas, Grenada, St. Kitts and Nevis, Trinidad and Tobago, and Barbados, the informal share is below 25% of GDP (Vuletin, 2008).⁵

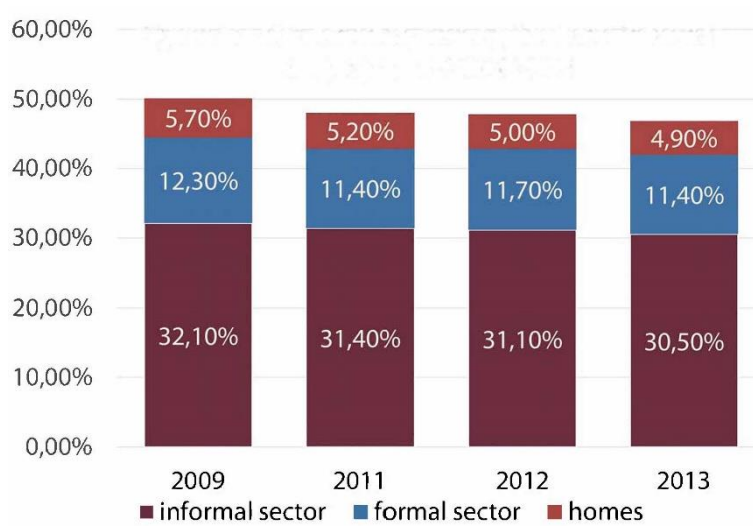
Figure 1. Estimated Size of the Informal Economy, early 2000s



Source: Vulletin, 2008.

14. In 2013, informal employment, including all informal jobs in the formal and informal sector, affected 130 million workers in Latin America and the Caribbean and represented 46.8% of total non-agricultural employment, showing a constant, though modest, downward trend since 2009 (at 50.1%). The share of informal employment in non-agricultural activities varies from country to country, ranging from 30.7% in Costa Rica to 73.6% in Guatemala. Only sub-Saharan Africa and South and East Asia have higher informality rates (European Parliament, 2016).

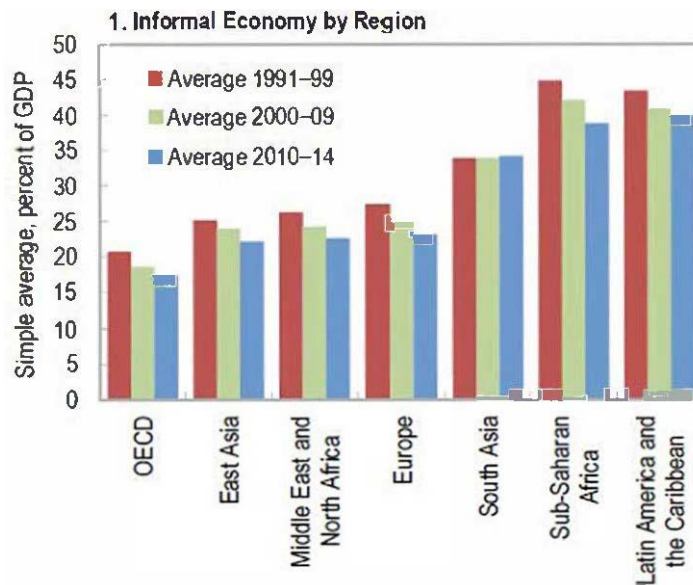
Figure 2. Latin America, non-agricultural informal employment, 2009-2013



Source: ILO, based on country home surveys.

15. The below IMF estimations figure 3 show that the unweighted average share of informal economy during 2010-2014 in Latin America and the Caribbean represented 40% of the GDP followed by sub-Saharan Africa at 38%, South Asia at 34%, Europe at 23% and member countries of the OECD at 17%. (Medina, Jonelis and Cangul, 2017)

Figure 3. Informal Economy by Region



Source: IMF staff calculations.

16. The above figures seem to suggest that informality fall with the level of income, likely reflecting higher government capacity and better incentives toward formality in higher-income economies. While per capita income level is, on average, an important indicator of informality, it is not a determining indicator, as demonstrated by similar informality levels in sub-Saharan Africa and Latin America and the Caribbean (Medina, Jonelis and Cangul, 2017). In the same line, J. Friesen and K. M. Wacker (2013) have concluded that a large informal sector is characteristic of many developing, emerging and transition economies. Based on estimations of Schneider et al. (2010) more than 30 percent of the developing world's GDP is generated in the informal sector and informality represents up to 60 percent of economic activity in some of those countries (Friesen and Wacker, 2013).

4. Causes of informal economy in Latin America and the Caribbean

17. As described above, informal economy in Latin American and Caribbean countries represent a large part of the economy, with serious implications in terms of productivity and overall economic growth.

18. The economic literature has analysed extensively the causes of this phenomenon and seems to agree on the fact that the level and quality of regulation and the effectiveness of enforcement efforts play a major role on the existence of informality.

19. However, other social, demographic and macroeconomic factors have been identified as relevant to the development and extent of informality in developing countries. These factors include, but are not limited to, low economic development, survival reasons to fight mass poverty and unemployment, availability of skilled labour, a production structure heavily based on agriculture and other rural activities.

20. An IMF study focusing on the causes of informality in, among others, several Latin American and Caribbean countries concluded that a burdensome tax system, rigid labour markets, dominance of the agriculture sector and, to a lesser extent, inflation were the key factors in determining the informal economy in the region (see table 1 below).⁶ The results of this study also confirmed that a higher degree of informality reduces labour unionization, the number of contributors to social security schemes, and enrolment rates in education. (Vulletin, 2008)

Table 1. Relative Contribution of Each Causal Variable to the Size of the Informal Economy

Country Tax	Tax burden	Labor rigidity index #1	Importance of agriculture	Inflation
The Bahamas	0.0	54.6	42.3	3.1
Cyprus ⁷	32.2	0.0	63.5	4.3
Grenada	57.1	0.0	40.9	2.0
St. Kitts and Nevis	34.0	32.4	28.1	5.5
Trinidad and Tobago	61.4	26.5	6.5	5.6
Barbados	65.6	0.0	31.2	3.2
Mexico	52.4	14.4	5.4	27.8
Brazil	31.1	19.6	27.5	21.8
Malta	52.2	42.1	2.6	3.1
Antigua and Barbuda	60.5	31.3	17.6	12.9
Chile	36.1	27.6	30.2	6.0
Argentina	45.6	15.3	38.3	0.7
Dominica	43.2	24.7	30.7	1.4
Jamaica	36.2	33.3	17.6	12.9
Uruguay	22.8	15.4	43.0	18.9
El Salvador	32.1	30.3	32.8	4.8
Guyana	46.3	0.0	47.6	6.1
Peru	31.9	36.7	24.4	7.0
St. Lucia	32.9	16.4	48.7	2.0
Costa Rica	30.8	35.6	22.0	11.6
Guatemala	31.4	23.0	39.5	6.1
Venezuela	33.9	24.9	1.1	40.1
Colombia	36.4	35.3	15.2	13.1
Panama	29.0	23.1	47.1	0.8
Dominican Republic	23.9	44.4	26.3	5.4
Belize	22.9	26.7	49.3	1.1
St. Vincent and the Grenadines	33.8	23.9	41.0	1.2
Ecuador	21.1	35.7	22.2	21.0
Honduras	19.8	31.2	37.4	11.7
Fiji	22.8	29.6	45.8	1.7
Nicaragua	18.5	37.1	38.9	5.6
Paraguay	10.4	52.4	32.7	4.5
Mean	34.6	26.4	30.8	8.2

Source: Vuletin, G. (2008).

21. A large variety of factors can, thus, affect the incentives to operate informally but deciding to join the informal sector is the result of a cost-benefit analysis of those factors. Economic agents take the rational decision of joining the formal or the informal sector after evaluating the relative costs and benefits of being in the formal economy system. (Basak, 2006). The benefits of formality consist potentially of police protection against crime and abuse, recourse to the judicial system for conflict resolution and contract enforcement, access to legal financial institutions for credit provision and risk diversification. Formality may also reduce the need to pay bribes and prevents penalties and fees, to which informal firms may be more often subject to. Firms will most probably resort to informality in a context where the state imposes high costs to entering and remaining in the formal realm (through license fees, registration requirements, taxes, red tape, labour, environment and various other regulations) and where the benefits of formality mentioned above do not offset the costs.

22. Notwithstanding the multi-faceted causes of informality, the following sub-sections of this note analyses more in detail the determinants of informality that are related to the level and quality of regulations, tax rules, and governance enforcement.

4.1. Regulations (business registration and regulations)

23. Many researchers have pointed out that some regulations are cumbersome, unnecessary or go beyond what is necessary to achieve their policy objectives. Overly burdensome or inefficient regulation can, in turn, significantly increase the cost of both joining the formal economy and operating within it.

24. Lengthy, expensive, complicated business registration procedures and excessively high licence fees increase firms' entry costs in the formal sector, incentivising informality. Policy makers should, therefore, pay special attention to ease the formal business registration and licensing procedures to fight informality.

25. To help measure the ease of doing business within a country, the World Bank publishes the Doing Business Indicators (DBI)⁸ each year. The DBIs are designed to capture the ease of doing business in eleven areas, one of which monitors the ease of starting a business⁹. Doing Business records all procedures officially required, or commonly done in practice, for an entrepreneur to start up and formally operate an industrial or commercial business¹⁰, as well as the time and cost to complete these procedures and the paid-in minimum capital requirement. The ranking of economies on the ease of doing business is determined by sorting their distance to frontier scores. The frontier represents the best performance observed on each Doing Business topic across all economies and years included since 2005. An economy's distance to frontier is indicated on a scale from 0 to 100, where 0 represents the lowest performance and 100 the frontier.

Table 2. Ease of starting a business 2018

Region	Ranking ease of starting and business (Distance to Frontier)
East Asia & Pacific	82.32
Europe & Central Asia	90.62
Latin America & Caribbean	78.09
Middle East & North Africa	82.05
OECD high income	91.35
South Asia	83.27
Sub-Saharan Africa	76.82
East Asia & Pacific	82.32
Europe & Central Asia	90.62

Note: Data in Doing Business 2018 are current as of June 1, 2017

Source: World Bank Doing Business 2018.

26. As shown by the table 2, the Latin American and Caribbean region scores at the lowest performance levels on the ease to start a business in 2018, only surpassed by Sub-Saharan Africa.

4.2. Labour regulation

27. Labour regulations cover hiring, firing, severance pay, minimum wage, and overtime hours as well as mandatory benefits packages, social security payments, rights of association and collective bargaining rights, among others. They are often enacted and designed to protect workers from unfair and discriminatory actions. While governments try to find the right balance between protecting workers and ensuring labour market flexibility, most developing countries have excessively rigid labour regulation to the detriment of businesses and workers alike (Basak, 2006). Businesses, as a result, are more likely to hire informally when regulations are less flexible.

4.3. Tax evasion

28. The literature frequently cites tax evasion as a key reason for firms to operate informally. Firms evade taxes when they under-report their income or profits or fail to pay valued added, sales, real estate or other taxes. There are multiple reasons to evade taxes but excessively high tax burden in terms of the level of tax rates, the number of taxes, number of tax payments and total tax payment are directly linked to tax evasion and, thus, to informality. This, in turn, results in poor public service provision and/or an increase in tax rates for firms that remain in the formal sector. This creates a vicious cycle making the incentive to evade taxes and join the informal economy stronger. (Ali and Najman, 2016).

29. The World Bank's DBI on taxes measure the overall burden of a medium-size company to comply with all tax regulations taking into consideration tax rates, time and number of payments and the requirements to comply with post filing procedures (e.g. VAT refund and tax audits). As shown in the table 3 below, Latin America and the Caribbean ranked among the three least performing regions in terms of burden on paying taxes in 2018, South Asia and Sub-Saharan Africa performing at lower levels.

Table 3. Burden of paying taxes 2018

Region	Ranking burden of paying taxes (Distance to Frontier)
East Asia & Pacific	72.42
Europe & Central Asia	75.78
Latin America & Caribbean	60.16
Middle East & North Africa	74.31
OECD high income	83.07
South Asia	59.55
Sub-Saharan Africa	57.49

Note: Data in Doing Business 2018 are current as of June 1, 2017

Source: World Bank Doing Business 2018.

30. Colombia's 2013 tax reform offers a good example to illustrate how reducing taxes can increase formality (box 1).

Box 1. Tax reforms in Colombia 2013

Colombia implemented a tax reform in 2013, which included the reduction of payroll contributions paid by employers by 13.5 percentage points. This reform improved firm employment and led to the creation of 213 000 formal jobs in the short-run (Bernal, Eslava and Meléndez, 2015; Medina and Morales, 2016). In addition, the informality rate dropped between 2.0 and 3.1 percentage points for workers in 13 main metropolitan areas. This translated into a decrease in the informality rate between 1.2 to 2.2 percentage points for the whole country (Fernández and Villar, 2016).

Source: www.oecd-development-matters.org/2016/12/19/informal-is-normal-in-latin-america-taxes-matter/

4.4. Government enforcement

31. Business regulations, labour regulations, and taxes impact the cost and benefit calculations that firms make and ultimately influence firms' decision to participate in the formal economy or not to do so. These factors, however, only form one set of incentives. Government effectiveness in enforcing those regulations also influences this decision. When insufficient resources are dedicated towards audit and collection programs for example, the incentive of firms to evade the rule of law increases. Low and inconsistent penalties also encourage such behaviour. Studies have shown that the size of the informal economy tends to be largest in nations that have a high degree of regulation in the economy coupled with ineffective enforcement. Some authors have even concluded that the size of the informal economy has more to do with the quality of enforcement than with the degree of regulation (Basak, 2006; Johnson, Kaufmann and Zoido-Lobaton, 1998; Loayza, Oviedo and Servén, 2005; Almeida and Carneiro 2006)

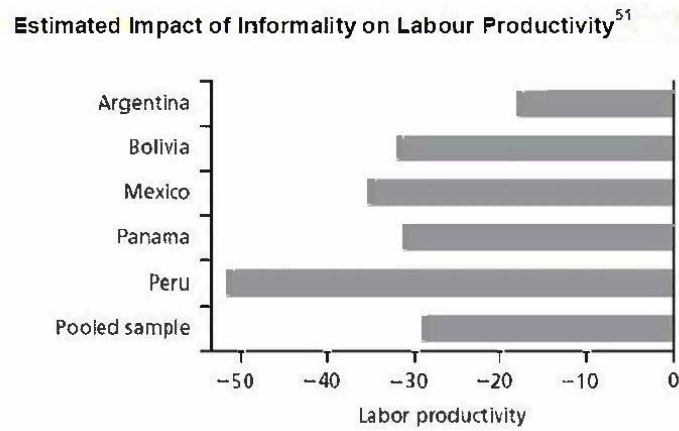
5. Impact of the informal economy on the Latin American and Caribbean economies

32. The impact of informal activities on the overall economy is wide-ranging. The economic literature has identified both negative and positive effects of informality. This part of the note mentions some of them by drawing special attention to the effect of informality in growth, productivity and the competitive process:

5.1. Growth, productivity and the competitive process:

33. Production in the informal sector often generates inefficiencies, either because firms in order to avoid detection limit their size to below their optimal efficiency scale failing to achieve economies of scale and scope – or because they use backward production technologies, partly reflecting their sub-optimal size (Dabla Norris et al., 2007). In addition, informal firms may fail to comply with intellectual property rights, undermining incentives for formal sector firms to engage in innovation, develop new products, and invest in branded products (OECD, 2009).

34. The difference in labour productivity between firms that were initially informal but later joined the formal economy and the ones that have always operated formally is 29 percent, on average for seven Latin American and Caribbean countries. The effects are largest in Peru (50 percent). (Perry et al, 2007)

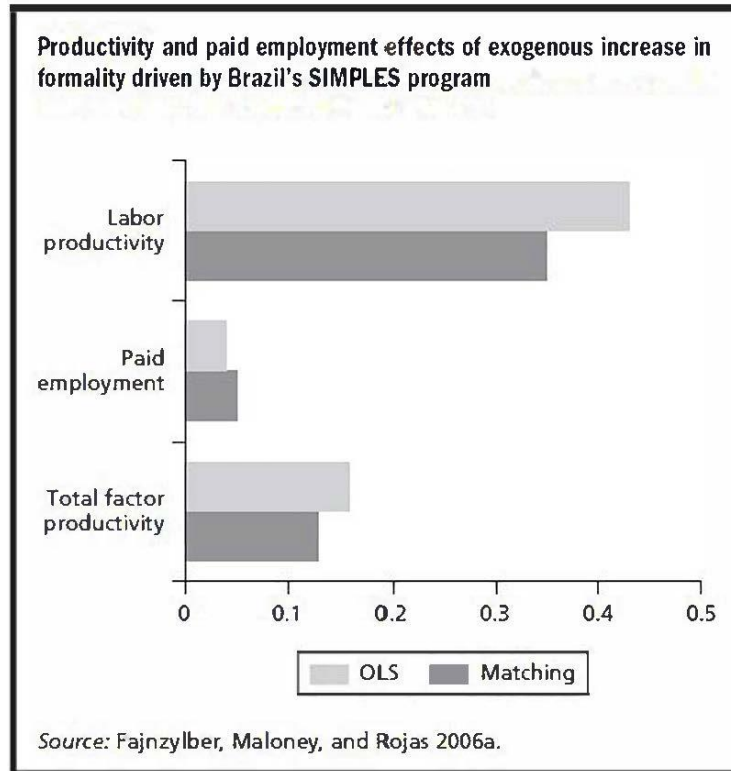
Figure 4. Estimated Impact of Informality on Labour Productivity

Note: The figure reports coefficients on formality indicators in regressions of the log of the output per worker on a dummy for not having formally registered at the time of starting up, controlling for employment size, time in business, and sector and region dummies.

Source: Perry et al (2007)

35. In Brazil, Fajnzylber, Maloney, and Rojas (2011) showed that increases in formality driven by the SIMPLES programme, consisting of a simplified tax and registration system for micro- and small firms, were associated with a higher use of paid labour, higher levels of capital intensity, and increased labour and total factor productivity. In particular, increases in the rates of micro-firm registration that can be attributed to SIMPLES are estimated to be associated with a 5 percent increase in paid employment, a 15 percent boost in total factor productivity, and a 35 percent increase in labour productivity (see figure below).

Figure 5. Productivity and paid employment effects of exogenous increase in formality driven by Brazil's SIMPLES program



Source: Perry et al (2007)

36. According to a large number of authors, the relative cost advantages enjoyed by informal firms through tax evasion and avoiding the costs of regulatory compliance may allow them to stay in business despite their low productivity and potentially affect the competitive process in a negative way. This would, however, mostly be the case in markets where formal and informal firms effectively compete. As shown below, some markets and some companies will be less likely to face informal competition. Informal competition, where it exerts real competitive pressure on formal firms, is damaging to overall economic performance since the competitive advantage of informal firms is the result of ignoring business regulations and not of innovation and/or cost efficiencies.

37. By contrast, some authors have argued that informality may also have a positive impact by providing a pressure-valve in the face of overly excessive barriers in the formal economy, which, in absence of the informal sector, would have resulted in a far greater waste of resources (Loayza, Serven and Suwagara, 2010). This is likely to be particularly relevant for small firms, which tend to be affected disproportionately by poorly designed regulations (OECD, 2001). For example, if start-up costs are binding, the informal sector may be beneficial for growth, to the extent that it allows small entrepreneurial firms, which may grow to be successful formal sector firms, to avoid paying the costs of being formal (e.g. taxes, social security contributions, minimum wages etc.). Another alleged positive “side effect” of the informal economy is that incomes generated in the informal sector, to the extent that these incomes would not have been generated otherwise, are spent in the formal sector and, thus, provide a boost for the formal economy (Frey and Schneider, 2000).

5.2. Lack of social protection and insurance:

38. Informal labour translates into high levels of insecurity and vulnerability for workers as they often lack access to social, employment protection and insurance systems, which can mitigate the impact of adverse shocks and provide income security in old age (Perry et al., 2007). In addition, informal workers are in a poor bargaining position vis-à-vis their employer and have lower access to on-the-work-training hindering their productivity.

39. However, some authors argue that informality has a positive effect on employment. It provides families facing high levels of poverty (in particular, in less developed countries), that would otherwise stay out from the formal employment market, with a job, enabling them to meet their basic needs, and increase their well-being. (Gerxhani, 2004).

40. Uruguay offers a good example of how improving the social protection of formal employees can enhance formalisation.

Box 2. Uruguay 2008 Social Protection Reforms

In Uruguay, a 2008 reform extended the health benefits to include dependent children of formal employees. This led to a decrease in informality rates by 1.3 percentage points by providing more value for the contributions made to the healthcare scheme.

Source: www.oecd-development-matters.org/2016/12/19/informal-is-normal-in-latin-america-taxes-matter/

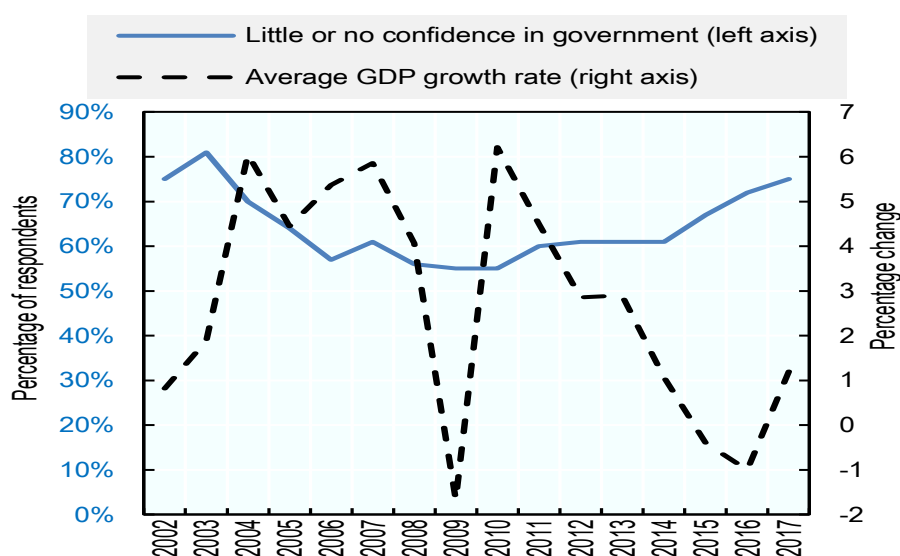
5.3. Erosion of tax revenues

41. As mentioned above, a high degree of tax evasion implies that formal firms will have to face higher tax rates if public spending remains at the same level. Moreover, if investments in public infrastructure are growth enhancing and informal activities utilise already congested public infrastructure without helping to replenish it, a larger informal sector will imply lower growth (Loayza, Servén and Suwagata, 2010). Higher tax rates and poorer public infrastructure and service would, in turn, create a vicious cycle encouraging firms to further evade taxes, thus, increasing informality.

5.4. Integrity and the trust in public institutions:

42. Non-compliance with tax collection and market-supporting regulation erodes the rule of law and the integrity of public institutions. This can limit a society's ability to address collective needs and undermine social norms, increasing the cost of law enforcement. The resulting loss of social capital/trust may also reduce the ease and certainty of doing business and adversely affect growth (e.g. Aghion, Cahuc and Algan, 2011).

43. As shown by figure 6 below, the rates of lack of trust in government have remained high in Latin America during 2002-2017¹¹.

Figure 6. Variation in trust in government and GDP in Latin America

Source: OECD/CAF/ECLAC based on data from IMF (2016), World Economic Outlook; World Bank (2017a), World Development Indicators; and Latinobarometro (2015).

5.5. Economic measurement

44. The informal economy implies that certain transactions are omitted from official economic statistics. This may affect the accuracy of estimates of the value of transactions and the price indices used to produce measures of real activity, possibly leading to sub-optimal economic policy decisions. (OECD, 2011)

6. Competition and Informality

45. The economic literature has concentrated most of its efforts in defining the informal economy and determining the causes and the effects of the informal sector activities. However, there is little published information about the interface between informality and competition law and policy and on whether competition authorities are dealing with this phenomenon and/or how should they approach it.

46. As mentioned above, a large number of authors agree that informality reduces economic growth, productivity and distorts the competitive process by allowing less productive firms to gain market share. This is, of course, less obvious in markets where formal and informal firms do not effectively compete. Where they do so, it is reasonable for competition authorities to devote efforts to tackling the informal economy.

47. Competition authorities in general deal with obstacles and distortions to the competitive process not caused by competition law violations through advocacy efforts. These efforts can take the form of market studies, market investigations, non-binding opinions, etc. Competition authorities often use this tool to inform governments on problematic markets and recommend areas of improvement, by for example proposing the adoption of policy reforms, policy actions, new regulations or changing existing regulations. (OECD, 2015) Therefore, advocacy seems to be the best suited tool to help governments fight informality.

48. Although competition enforcement may play a role in the decision of informal firms to join the formal sector (for example, unregistered informal firms suffering from exclusionary conducts may have an incentive to become formal in order to be able to report the anticompetitive behaviour to the competition authority), this note does not argue for using competition enforcement as a mean to tackle informality. It seems, however, important for competition authorities to know how and under which situations informal firms may affect or be affected by their enforcement activities and the challenges that this entails. This note identifies, in a non-exhaustive way, some of these situations:

1. Informal firms can be the perpetrators of anticompetitive conducts in markets characterised by the exclusive presence of informal firms or in markets where both formal and informal firms coexist.
2. Informal firms can be the victims of anticompetitive conducts perpetrated by formal or informal firms.
3. Informal firms may play an important role in the market definition and determination of market power in merger and abuse of dominant position cases.

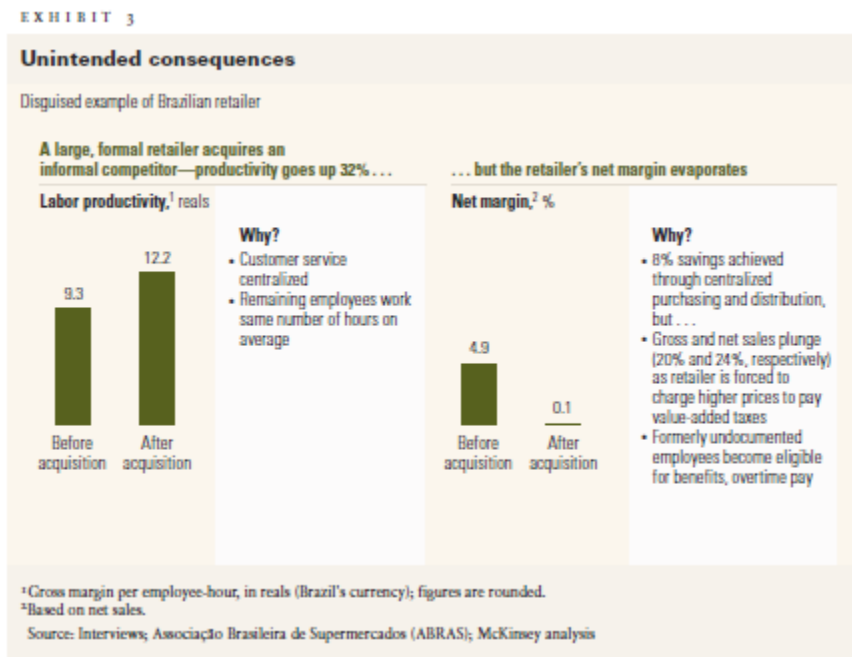
49. Competition advocacy to confront informality and most of the situations where enforcement actions would be affected by informal firms would only be relevant if we concluded that formal and informal firms effectively compete with each other. Whether and under which conditions effective competition between formal and informal firms exists is, therefore, a crucial question that needs to be addressed before analysing the implications of informality for competition authorities. This part of the note starts by answering this question. It then identifies competition advocacy actions that are best suited to help governments fight informality and finally analyses the difficulties that competition authorities may encounter when enforcing competition law in markets where informal firms operate.

6.1. Do formal and informal firms compete?

50. The dual economy theory, mostly supported by early economic literature on informality, suggests that informality dissipates as countries develop and that informal and formal firms do not compete. The works supporting this theory indicate that there is a “strict” separation between formal and informal firms in what or how they produce or who they serve (Lewis, 1954) (La Porta and Shleifer 2008). Other authors talk about a strict size and productivity dualism (Rauch 1991): the smallest formal sector firm is larger than the largest informal sector firm. Similarly, the least productive formal sector firm is still more productive than the most productive informal sector firm.

51. Other works contradict this strict separation of the formal and the informal sector. Some authors have concluded that the cost advantages obtained from operating informally would allow informal firms to effectively compete with formal firms. La Porta and Schleifer (2008) have described this conclusion as the “parasite” view. Although informal firms are less productive than formal ones and even though they use inefficient production techniques, the Mackinsey Global Institute (MGI) research has found that the substantial cost advantage that informal companies gain by avoiding taxes and regulations more than offsets their low productivity and small scale (Farrell, 2004). For instance, MGI showed that in Brazil, formal supermarkets would not be able to acquire profitably informal players, because of the loss of cost advantage. Although supermarkets could increase the productivity of the acquired informal businesses, their small scale drives net margins to zero once tax obligations have to be paid.

Figure 7. Unintended consequences

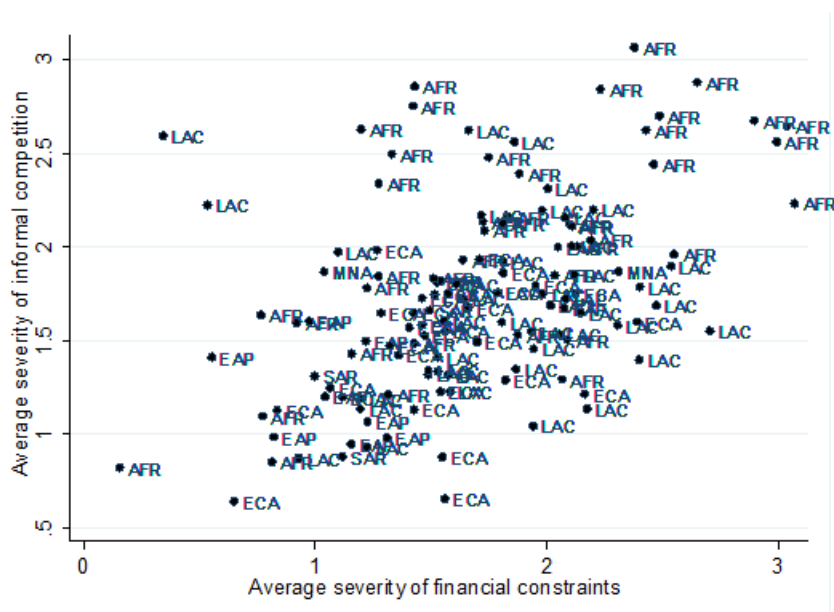


Source: Farrell (2004)

52. Other authors present a more nuanced view than that of the “strict” dual and “parasite” approaches. González and Lamanna (2007) concluded that formal firms in Latin America and the Caribbean most resembling informal ones (i.e. usually small, credit constrained and operating in industries with low entry costs) are most likely to be affected by informal competition. The empirical results of this study also showed that industries with high fixed costs such as chemicals, electronics, machinery and equipment, paper and paper products and manufacturer of non-metallic minerals products, are generally less concerned about informal competition than are industries in sectors with lower fixed costs such as textiles, food products, or garments.¹²

53. By using cross-sectional data from the World Bank Enterprise Surveys covering 42,000 firms in 114 developing and transition countries for the period 2006 to 2011 and by taking discrete responses on the perceived severity of financial constraints and informal competition for the empirical analysis, Friesen and Wacker (2013) found that the most financially constrained formal firms were more sensitive to competition from informal firms. According to this study, financial constraints are the most important reason why firms suffer from informal competition (see figure below). Other influential variables are ill-designed labor market regulations, corruption, and firm size.

Figure 8. The Link Between Financial Constraints and Informal Competition



Note: Average values displayed at the country-level for 114 countries covering 42,038 firms. AFR: Africa, EAP: East Asia and Pacific; ECA: Eastern Europe and Central Asia, LAC: Latin America and the Caribbean, MNA: Middle East and North Africa, SAR: South Asia.

Source: Friesen and Wacker (2013)

54. According to Alin and Najman (2016), informal competition could have productivity enhancing effects on formal firms. Competition from informal firms can sometimes drive formal firms to become more productive. Informal competition would push formal firms to become more productive and more competitive, for instance, by investing in stronger human and financial capital and by improving their internal organisation.¹³ Firms operating in the informal sector may find it more difficult that formal firms to access finance through traditional channels leading to under-investment in physical capital, as well as research and development and to attract qualified workers. However, productivity-enhancing effects from informal competition seem to be more the case for small and medium size companies. By contrast, formal large and very productive firms that already have economy of scales face a very weak intensity of competition from the informal sector. This also applies to firms protected by regulations and firms operating in industries with very high entry costs.

55. Finally, Allen, Schipper and Nataraj 2018¹⁴ model reaches several important conclusions about competition between formal and informal firms. The data from the World Bank Enterprise Surveys indicate that at least half of formal sector firms report competing with informal firms and informal competition is even greater for smaller firms. However, the model developed in this paper shows that the existence of informal firms within an industry does not necessarily imply that they actually compete. The authors are, however, able to show competition between formal and informal firms under certain conditions. First, larger more productive formal firms lose fewer profits to informal firms. Second, industries with higher fixed costs will contain more productive formal firms and have a smaller percentage of informal firms. This would suggest that bigger and more productive firms active in high fixed cost industries are less likely to face competition from informal firms.

56. The economic literature would, thus, suggest that formal and informal firms are more likely to compete in markets where the following conditions are met: presence of small and medium size companies, low productivity levels, credit constrains and low fixed costs.

6.2. Competition authorities' actions to tackle the causes and negative impacts of informality (Advocacy)

57. In 2009, the OECD identified areas where policy makers could target efforts to reduce the size of the informal economy, by reducing the costs of entering the formal sector and increasing the benefits of operating formally, thus, increasing productivity and competition. It is, therefore, sensible to suggest that competition authorities have those policy areas in mind when implementing their advocacy powers:

- *Advocate for comprehensive regulatory review programmes.* In order to enhance productivity within the economy and better harness the benefits of vigorous competition, competition authorities could advocate for the implementation of comprehensive regulatory review programmes.
- *Reduce product market distortions.* Policies that place firms on equal footing can increase competitive intensity and productivity. By contrast, policies that establish special advantages for small, informal firms (by, for example, by restricting the trading hours of firms according to size or creating different tax rates or exemptions for firms selling the same product) may protect them from larger, more productive, and more efficient firms. Competition authorities can help government in identifying distortions to competition. The OECD Competition Assessment Toolkit provides for a general methodology for identifying unnecessary regulatory restraints and developing alternative, less restrictive policies that still achieve the government objective.
- *Reduce or eliminate excessive labour regulations.* Overly burdensome labour regulations raise the cost of employing formal labour and reduce labour market flexibility, pushing firms to hire “off the book” or not hiring at all.
- *Reduce overly burdensome tax systems.* When making investment decisions, firms focus on after-tax profit rates of return. Overly burdensome tax systems therefore impede productivity-improving capital investments and hence impact levels of innovation and thus competition. Simplifying tax systems make it easier for firms to comply with the law and allow them to reallocate resources away from tax compliance and towards other higher priority areas.
- *Reduce the total impact of overly burdensome fees.* Removing obstacles to starting a business are pertinent to incentivise entry or permanence of firms in the formal sector. The cumulative impact of fees required for starting a business can be high. Governments could consider taking steps to ensure that the total impact is not overly onerous, pushing firms towards the informal economy or keeping them out from joining the formal economy in the first place.
- *Streamline administrative processes:* Long delays and costly procedures for establishing a business are obstacles that firms must overcome to join the formal sector. Promoting easy entry and exit encourages vigorous competition in markets and encourages productivity-improving investments. Particularly in concentrated

markets, competition authorities should recommend government to take steps to reduce the barriers to enter the formal economy.

- *Increase competition and productivity through procurement programs.* Because governments often have company registration requirements, procurement programs can be used to encourage firms to register their business, operate formally, and make productivity-enhancing investments. Consequently, competition authorities should work together with governments to lower costs of registration, through internet-based technologies for example, and avoid unnecessary restrictions for qualified providers to participate in procurement processes.
- *Enhance access to capital.* Access to capital is a key input in well-functioning, competitive economies. When access to capital is unnecessarily restricted, it can substantially reduce productivity, innovation and competition in markets and impact the incentive to operate formally. Access to credit can be increased by improving collateral laws and enforcement powers and enhancing credit information.

58. Advocacy is a very important activity for most competition authorities. Competition authorities should pay special attention to the policy areas mentioned above when their advocacy actions target industries most affected by informality.

59. Because of its specific institutional design¹⁵, Indecopi (the Peruvian Competition Authority) incorporated a Commission of Bureaucratic Barriers equipped with strong powers to remove regulatory barriers in Peru. This Commission can impose binding decisions to remove unreasonable restrictive regulations to public entities, thus, contributing to reduce the informal economy.

Box 3. Peru's Commission in charge of monitoring acts and dispositions of the Public Administration

Indecopi (the Peruvian Competition, Consumer Protection and Intellectual Property Authority) has a Commission exclusively dedicated to monitor illegal or non-reasonable acts, dispositions and actions of the entities of the Public Administration that establish requirements, limitations, payments and prohibitions that impact the access or permanence of firms in the formal market. Likewise, it is responsible for carrying out the ex-post monitoring of compliance with the rules and principles of administrative simplification by State entities and identifying those local taxes that restrict the free transit of persons, goods and merchandise in the national territory.

This Commission has the power to adopt binding resolutions and require a public entity to eliminate administrative barriers to entry he formal sector.

Source: www.indecopi.gob.pe

60. COFECE is also committed to promote regulations and public policies that impose unnecessary barriers to competition, thus, contributing to the reduction of informality. In its document "Miscellanea of regulatory obstacles to competition: analysis of state regulation", COFECE identified, among others, laws and regulations that limit entry, grant exclusive advantages, restrict supply or reduce capacity to compete in the agricultural and

fishing sector, in public purchases, in urban development, in public transport and professional services.

61. COFECE has also made recommendations to other public entities specifically aimed at reducing informality in order to improve competitive conditions in a given market. Informality makes the entry of new competitors more complicated because there is less statistical information to analyse a market and, therefore, greater uncertainty when deciding to enter the market as a new competitor. Along this line of thinking, COFECE analysed the role of commission agents in the distribution of Gas LP in Mexico (see box 4).

Box 4. The role of commission agents in the distribution of Gas LP in Mexico

Commission agents act as a link between authorised distributors and the final consumer and, they mostly operate informally and sometimes even illegally. There are discrepancies about their independence and role in the Gas LP distribution market. Some commission agents seem to operate as pure agents of registered distributors, acting in the name and on behalf of the latter. However, others seem to act independently as informal distributors (without distribution authorisation) competing in the market with authorised distributor. According to COFECE, this may induce misleading inferences about the degree of competition in the market. COFECE also concluded that the informality and, at times, the possible illegality in which some commission agents operate, dissuades the entry of new competitors and puts at a disadvantage distributors operating in compliance with the law. This situation could, in turn, favour distributors who use the commission agents as a distribution channel.

COFECE recommended the CRE (Energy Regulation Commission) to require those distributors that contract or have commercial links with commission agents to report prices and quantities sold at the municipal level with the objective of having the necessary elements for the proper monitoring of their activities and the market.

Source: "Transición hacia Mercados Competidos de Energía: Gas LP". Available at : https://www.cofece.mx/wp-content/uploads/2018/06/Libro-GasLP_web.pdf#pdf

62. The Argentinean competition authority (Comision Nacional de Defensa de la Competencia, CNDC) has in recent market investigations on mate herb and beef addressed the impact of the informal economy on the market.

Box 5. Argentina - mate herb and beef meat market investigation

In the mate herb market investigation, the CNDC indicated that the mate herb market presented high levels of informality in its primary stage of green leaf production. According to CNDC, the price regulation of the green leaf and the surplus production in this sector incentivised informality. Under these market circumstances, green leaf producers charged prices and agree on payment conditions that were different from those imposed by the regulation creating risks of market distortions.

In the case of the beef market, the market investigation concluded that the high degree of informality in the different stages of the meat production chain and in the retail sector generated important asymmetries among suppliers, causing serious distortions to the competition. Informality in this sector was linked to tax evasion resulting from the sale and purchase of meat in the black market and under-invoicing of weight, prices and categories of meat.

Source: CNDC, “Análisis de las condiciones de competencia en el sector yerbatero argentino”, Informe de la Dirección Nacional de Promoción de la Competencia, 2017.

CNDC, “Mercado argentino de la carne vacuna” Resumen de la Dirección Nacional de Promoción de la Competencia, 2016. Sobre la base del estudio realizado por el Dr. Guillermo Sabbioni.

6.3. Competition enforcement actions involving informal firms

63. This part of the note identifies the challenges that competition authorities face when enforcing competition law in markets involving informality.

6.3.1. Informal firms as perpetrators of anticompetitive conducts

64. There does not seem to be any reason that would justify an exclusion of the application of competition law to informal firms. Competition law would apply to all economic activities and undertaking’s activities in the market, including practices of informal firms that adversely affect or restrict competition in a given market. This seems to be the view of most of the Competition Authorities in Latin America and the Caribbean.

65. In its contribution, Peru mentioned that during the last five years, Indecopi has solved antitrust cases where the participation of informal agents was taken into consideration in the substantive analysis of the anticompetitive behaviour. The box below illustrates one of the cases where informally operating firms were sanctioned for infringing the competition law and the challenges faced by the competition authority when enforcing competition law to informally operating companies in that specific case.

Box 6. Price fixing of public passenger transport service of the Cajamarca – Cajabamba route

In April 2018, five companies were sanctioned by Indecopi for having fixed the prices of the public passenger transport service of the Cajamarca - Cajabamba route between October 2014 and March 2015. The total fine was set at 110 117.7 USD. Two of the five companies were operating informally without a valid authorization to offer the passenger transport service on the investigated route.

The fact that these companies did not have the required authorization and that the evidence used to initiate the case (list of prices) did not contain the complete name of the transport companies involved, made it difficult for Indecopi to identify the informally operating companies. The competition authority was, thus, obliged to make additional efforts consisting in interviews with representatives of the Regional Government of Cajamarca, other passenger transport companies and drivers operating the route to uncover the identity of the two informal firms. As a result, Indecopi could open infringement proceedings against them.

Source: Resolución 024-2018/CLC-INDECOPI. Best practice on boxes: see page 20 of the [OECD Style Guide](#). Do not forget to delete or replace this text.

66. Competition authorities in all jurisdictions agree that obtaining compliance with competition agency decisions is crucial to the agency's credibility and to the deterrence effect and effectivity of enforcement actions. However, competition authorities may face practical limitations when taking legal actions against informal firms. Informal firms are often mobile and non-registered. Notifying any type of decision to informal companies without a permanent legal address may become a difficult task. Ensuring that these firms comply with injunctions, cease and desist orders, commitments or settlements may also be tough. The same applies to the collection of fines.

67. For example, COFECE, in its contribution¹⁶, indicates that it faces serious difficulties when notifying decisions to informal companies as the location indicated by the latter for notification purposes is most of the times incorrect or non-existent. When notifying decisions to open formal proceedings against informal companies, the impossibility to personally notify those decisions has serious effect in the duration and efficacy of COFECE's enforcement actions.

68. Moreover, when imposing fines competition authorities generally refer to the relevant or the global turnover as the basis for the calculation of fines. Estimating turnover may be complicated in the case of informal firms that generally do not declare all or part of their revenues. Non-declared and non-registered financial data may also undermine informal firms' possibility to claim and submit evidence of their inability to pay the fines; putting them in a worse position than formal firms.

69. COFECE's contribution makes a specific reference to this challenge when sanctioning informal firms. It is calculation of the fines, COFECE has to take into consideration different element to establish the seriousness of the conduct. Those elements include the size of the affected market(s) and the financial capacity of the sanctioned companies. In view of the lack of reliable financial and tax information about informal firms, COFECE uses alternative sources of information and estimation methods to calculate the fine. (see box below)

Box 7. Alternative information sources and calculation methods used by COFECE to set fines against informal firms

In the case of sanctions imposed against passenger car transport companies in the state of Chiapas for price fixing, some of the companies involved in the cartel activity did not submit information about their income or the information presented (tax returns) did not adequately reflect their economic capacity. Instead, COFECE used the information provided by those companies in the replies submitted during the investigation to COFECE's requests for information to determine their financial capacity.

In relation to sanctions imposed against companies active in the production, distribution and commercialisation of tortillas, COFECE used information published by the Mexican National Statistics Institute (INEGI) to estimate the average annual income of each tortillería (retail points where tortillas are commercialised) in the municipalities where the companies involved were operating. This allowed COFECE to prove the financial capacity of the informal companies involved in the anticompetitive conduct.

Source: COFECE's contribution.

6.3.2. Informal firms as victims of anticompetitive conducts

70. As explained above, informal firms, in general, breach labour and other regulations and/or evade taxes and, therefore, try to remain undetected. Informal firms that are being excluded from the market as the result of an anticompetitive conduct or that are victims of a cartel may, therefore, have no interest in formalising a complaint before the competition authority and becoming "noticed". This may be the reason for many anticompetitive conducts not to be detected and investigated by competition authorities. Anonymous complaint systems already in place in many jurisdictions may be, however, useful in promoting the reporting of anticompetitive conducts that adversely affect informal firms' ability to compete.

71. Moreover, informality may undermine the deterrent effect of private enforcement of competition law. Private enforcement seeks to provide compensation for victims of competition infringements. Under most tort systems, compensation is a natural consequence of an illicit act that caused damage to a victim. But private enforcement can also play a role in deterrence. Informal firms that have suffered loss from an anticompetitive conduct but want to remain outside the radar of public authorities, would, most likely, be reluctant to exercise their right to claim damages for the suffered loss.

6.3.3. The role of informality in defining markets and establishing market power

72. Market definition, market share estimations and establishing market power can be difficult even in instances in which informality does not play a role. This becomes even harder when informal firms are involved. Firstly, the competition authority should determine to what extent informal firms are effectively competing in the formal market in order to take them into consideration in the market definition and, thus, in the market share calculation and market power determination. As mentioned above, informal firms are more likely to compete with formal firms in markets where small and medium size companies, low productivity levels, credit constrains and low entry costs exist.

73. When informal firms have been considered as part of the relevant market, their sales should be taken into account to calculate market shares. However, informal firms under reporting sales may frustrate any attempts from the competition authority to calculate accurately market participation.

74. In its contribution to the 2009 Global Competition Forum roundtable on informality and Competition, Chile presented a tobacco distribution case where the investigated company used the alleged competition from informal distributors as a defence to argue a significant reduction of its market power (see box 8 below).

Box 8. Chiletabacos - A cigarette distribution case (2005)

The investigation on the Chilean cigarette distribution market was initiated following a complaint from Philip Morris (subsidiary of the Altria Group) against Chiletabacos (the dominant firm in Chile with more than a 90% market participation and a subsidiary of British American Tobacco) for abusing its dominant position through a series of vertical restraints, such as dealing and exclusivity contracts.

During the investigation, Chiletabacos argued that its dominant position was contested by the black market cigarette sales⁴, which represented 7% or 8% of the consumption. The Competition Court did not accept this argument.

Source: OECD 2009.

75. In its contribution¹⁷, Argentina mentions that the impact of informality in the market definition and market power determination has been raised by notifying parties in an important number of merger cases. However, the CNDC has not yet incorporated the informal sector in its substantive analysis of merger or antitrust cases. The box below illustrates this by describing some Argentinean merger cases where the informal sector was not taken into consideration for the market definition and where despite being taken into account, the informal sector was considered insignificant to offset the competition concerns raised by the merger.

Box 9. Argentinean Merger Cases

Adidas-Salomon/Reebok and Vulcabras/ Dass Nordeste Calçados

In a merger operation involving the acquisition by Adidas-Salomon AG of 100% of the shares of Reebok International LTD, the CNDC held that the illegally produced sports shoes were not part of the relevant product market of sport shoes where the notifying companies were operating. The CNDC argued that illegal products could not be considered as substitutes of legally produced sport shoes due to significant differences in technology.

The CNDC used the same argument to exclude the informal sector from the relevant market definition of sport shoes in the merger operation involving the acquisition by Dass Nordeste Calçados E V E Artigos Esportivos S.A. of 100% of the shares of Vulcabras Azaleia Argentina S.A.

Correo Argentino/ International Mail Corporation

Within the framework of the evaluation of the acquisition of 69.23% of the class B ordinary shares of Correo Argentino S.A. by the International Mail Corporation, the CNDC took into consideration the informal companies in the assessment of the impact of the merger. In view of the lack of information on unregistered firms, the CNDC considered information submitted by the notifying parties about the number of non-registered operators, which were possibly overestimated. The CNDC concluded that the inclusion of the informal sector in the assessment of the merger did not have any relevant impact on the concerns raised by the market concentrations resulting from the operation. The CNDC, thus, blocked the merger.

Source: Dictamen CNDC N° 542, Resolución N° 57/2006 de la Secretaría de Coordinación Técnica en el expediente caratulado “ADIDAS-SALOMON AG, RUBY MERGER CORPORATION Y REEBOK INTERNATIONAL LTD S/ NOTIFICACION ART. 8 LEY 25.156 (Conc. N° 542)”; Dictamen IF-2018-28708426-APN-CNDC#MP, Resolución SC: RESOL-2018-461-APN-SECC#MP en el expediente caratulado “DASS NORDESTE CALÇADOS E V E ARTIGOS ESPORTIVOS S.A., VULCABRAS AZALEIA S.A. S/ NOTIFICACIÓN ART. 8° LEY 25.156 (Conc. 1289)” and Dictamen CNDC N° 226, Resolución N° 226/2001 de la Secretaría de Defensa de la Competencia y el Consumidor en el expediente N° 064-010116/2000 (C.C. 170)”.

76. According to COFECE, informal (or illegal) companies are in general considered as precarious and instable competition in the relevant market analysis of merger cases.

77. In its contribution¹⁸, CARICOM indicates that when players in the informal sector have a significant impact on a market the Jamaica Fair Trading Commission relies on information from formal firms to estimate market shares. This is similar to the approach adopted by the CNDC in the Correo Argentino/ International Mail Corporation merger, where the competition authority relied on estimations from the notifying parties to assess the impact of informal firms on the market.

7. Conclusion

78. Informality is largely present in the Latin American and the Caribbean economies. Informality reduces productivity and innovation in markets and negatively affects the competitive process. This is more obvious in markets where formal and informal firms effectively compete. The economic literature agrees that formal and informal firms compete in markets where the following conditions are met: presence of small and medium size companies, low productivity levels, credit constrains and high fixed costs.

79. Although competition enforcement may have a positive impact on reducing or eliminating informality from markets, this note does not suggest that it should be used as a tool to fight informality. It does, however, mention some of the challenges that competition authorities may face when enforcing competition law in markets where informal firms operate. These difficulties may result in under enforcement in markets exclusively operated by informal firms or in markets where both formal and informal firms compete. When an important part of the economy is *de facto* immune to the application of competition law, competition authorities' credibility and the deterrent effect of sanctions and infringement decisions are seriously harmed. Competition authorities should therefore, work in finding solutions to effectively apply competition law to informality.

80. To reduce the size of informal economy, competition authorities should rather consider focusing their efforts on competition advocacy. When dealing with industries most affected by informality, advocacy actions should pay special attention to tackle the causes of informality (overly burdensome tax, labour and product regulations, long and costly administrative processes for setting up and operating businesses or difficult access to capital). The World Bank's Doing Business Indicators may provide a useful tool to prioritise cross-sector regulations that have the effect of encouraging informality.

Endnotes

¹ Policymakers and researchers who approach the informal economy from a social protection perspective tend to focus on employment, where one or more of the legal requirements are not complied with (e.g. mandatory contributions to social security and pension schemes). By contrast, if the potential tax revenue losses associated with informality are of concern, a definition of informality that focuses on the types of firms and individuals having greater scope to be engaged in untaxed activities may be more useful.⁴ Finally, if the aim is to more accurately estimate GDP or identify the impact of informality on growth, a broader conception of informality is required (OECD 2011).

² Monetary reasons include avoiding paying taxes and all social security contributions, regulatory reasons include avoiding governmental bureaucracy or the burden of regulatory framework, while institutional reasons include corruption law, the quality of political institutions and weak rule of law. For our study, the shadow economy reflects mostly legal economic and productive activities that, if recorded, would contribute to national GDP, therefore the definition of the shadow economy in our study tries to avoid illegal or criminal activities, do-it-yourself, or other household activities (L.Medina, A.W. Jonelis and M. Cangul (2018)).

³ After empirically showing electricity consumption and GDP share the same elasticity, the difference in growth of GDP and electricity use is attributed to the informal economy.

⁴ All methods described above consider only one indicator or manifestation of the informal economy, e.g., electricity consumption, money or cash demand. However, there often exist several indicators showing up simultaneously. The DYMIMIC approach explicitly considers several causes, as well as the multiple effects of the informal economy.

⁵ Loayza, Servén and Sugawara 2009 arrives at the same conclusion “*there is large heterogeneity in the extent of informality across countries in Latin America. In all of them, however, informality is much more widespread than in the USA, and some countries in the region are among the most informal economies in the world. The typical country in Latin America produces about 40% of GDP and employs 70% of the labor force informally*”

⁶ The relative contribution of each cause variable to the informal economy varies significantly across countries. For countries like Antigua and Barbuda and Trinidad and Tobago, the most important factor influencing the size of the informal economy is the tax burden. For other countries like St. Vincent and the Grenadines, St. Lucia, and Belize, the importance of the hard-to-regulate agricultural sector appears to be one of the most important elements; while for economies like Paraguay and Dominican Republic, the significance of labour rigidities appears to be crucial.

⁷ *Note by Turkey*

The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the “Cyprus issue”.

Note by all the European Union Member States of the OECD and the European Union

The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

⁸ www.doingbusiness.org/

⁹ The eleven areas identified by the World Bank include: starting a business; starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency and labour market regulation. See the 2018 Doing Business Report, Comparing Regulations in 190 economies, at www.doingbusiness.com. The 2018 Doing Business Report does not measure features of the labour market regulation.

¹⁰ These procedures include the processes entrepreneurs undergo when obtaining all necessary approvals, licenses, permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities.

¹¹ Unweighted averages for all variables for a sample of countries comprised by: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

¹² This study analysed data from the 2006 Latin American regional roll-out of the World Bank's Enterprise Surveys. The data covered over 6,400 formal manufacturing firms from 14 countries in South and Central America. The data provide information on the business environment in each economy, details of firm-level operations, and specifics on the quality of services and infrastructure that these firms use. The study also used the DBI to obtain measures of the regulatory burdens in each country and the World Bank Institute's Worldwide Governance Indicators (Kauffman, Kraay and Mastruzzi, 2007) index to assess each government's ability to effectively enforce laws and regulations on their books.

¹³ This mechanism draws on the importance of formal firms' human and financial capital.

¹⁴ The model uses survey data from the World Bank's Enterprise Surveys. These surveys are a stratified random sampling of manufacturing and retail firms with five or more employees in the formal sector. This survey data is supplemented with macroeconomic indicators from the World Bank and the United Nations Development Programme. The vintage of the Standardized Data contains countries surveyed between 2006 and mid-2016. In total, the data spans 140 different countries and over 124,000 firms.

¹⁵ Indecopi's institutional design does not only integrate the functions associated with the defence and promotion of competition, but also the authority's powers related to protection of intellectual property, elimination of bureaucratic barriers, unfair competition, consumer protection, bankruptcy proceedings and dumping, subsidies and elimination of non-tariff trade barriers.

¹⁶ See COFECE's contribution: [https://one.oecd.org/document/DAF/COMP/LACF\(2018\)15/es/pdf](https://one.oecd.org/document/DAF/COMP/LACF(2018)15/es/pdf) (i.e. LACCF programme webpage: www.oecd.org/competition/latinamerica/programme/).

¹⁷ See Argentina's contribution: [https://one.oecd.org/document/DAF/COMP/LACF\(2018\)13/es/pdf](https://one.oecd.org/document/DAF/COMP/LACF(2018)13/es/pdf) (i.e. LACCF programme webpage: www.oecd.org/competition/latinamerica/programme/).

¹⁸ See CARICOM's contribution: [https://one.oecd.org/document/DAF/COMP/LACF\(2018\)9/en/pdf](https://one.oecd.org/document/DAF/COMP/LACF(2018)9/en/pdf) (i.e. LACCF programme webpage: www.oecd.org/competition/latinamerica/programme/).

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