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## Informality in Mexico

**Nicola Brandt**

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**by Nicola Brandt**

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**ABSTRACT/RESUME**

**Informality in Mexico**

Mexico has a relatively large informal sector by OECD standards. While this is in part a symptom of limited development and low productivity, it can also be to some extent its cause, as informal firms stay small to hide their activities and have limited access to productivity-enhancing government services, such as protection of property rights and training. A long-term and broad-based strategy with education at its core is needed for Mexico to reach its productivity potential and fight informality. Lowering the costs of formality, while enhancing its benefits and increasing the cost of non-compliance with labour and tax laws, will be an important part of this strategy. This would include more flexible labour laws, a further reduction in the business regulatory burden and a rethink of the social security package to enhance its attractiveness for low-wage workers and limit costs by making service provision more efficient.

This Working Paper related to the 2011 OECD Economic Survey of Mexico. ([www.oecd.org/eco/surveys/Mexico](http://www.oecd.org/eco/surveys/Mexico))

*JEL classification:* H55, I15, J23, J32/

*Keywords:* labour markets; informality; social security.

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**L'économie informelle au Mexique**

Le secteur informel est relativement ample au Mexique par rapport à la situation observée généralement dans les pays de l'OCDE. Cette situation est en partie le symptôme d'un développement limité et d'une faible productivité, mais elle peut aussi dans une certaine mesure en être la cause, étant donné que les entreprises informelles restent petites pour dissimuler leurs activités et ne disposent que d'un accès limité aux services rendus par les administrations publiques qui sont sources de gains de productivité, tels que la protection des droits de propriété et la formation. Une stratégie globale à long terme, centrée sur l'éducation, est nécessaire pour que le Mexique puisse concrétiser son potentiel en matière de productivité et lutter contre l'économie informelle. Réduire les coûts de l'appartenance au secteur formel de l'économie, tout en renforçant les avantages qui en découlent et les coûts du non-respect du droit du travail et de la législation fiscale, constituera une composante importante de cette stratégie. Pour y parvenir, il faudra assouplir le droit du travail, alléger encore les obligations réglementaires des entreprises et repenser le système de sécurité sociale afin de le rendre plus attractif pour les travailleurs faiblement rémunérés et limiter les coûts, en améliorant l'efficacité des prestations de services.

Ce Document de travail se rapporte à l'Étude économique de l'OCDE du Mexique 2011 ([www.oecd.org/eco/etudes/Mexique](http://www.oecd.org/eco/etudes/Mexique)).

*Classification JEL :* H55, I15, J23, J32

*Mots clefs :* le marché du travail ; l'économie informelle ; la sécurité sociale.

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## INFORMALITY IN MEXICO

by Nicola Brandt<sup>1</sup>

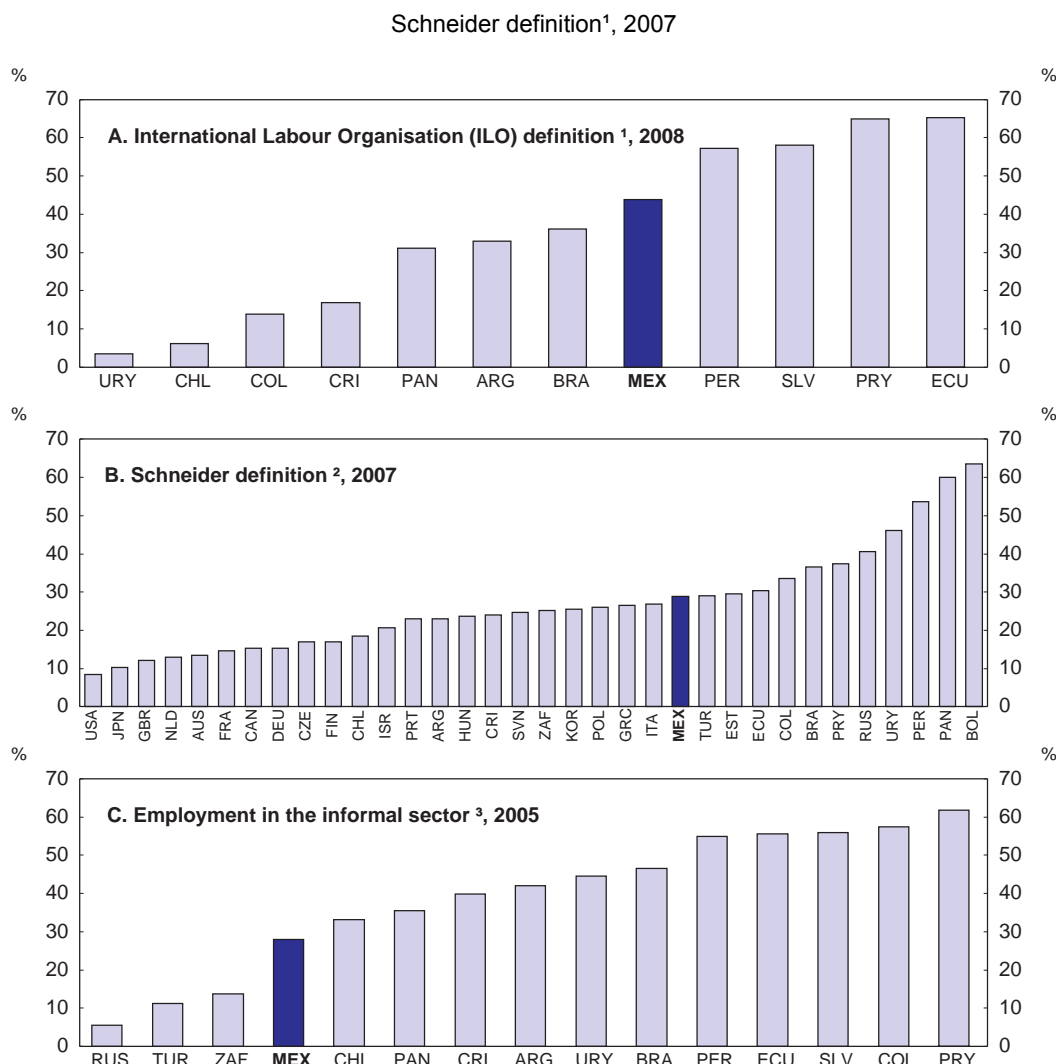
### **An active strategy to fight informality is warranted**

1. Mexico has a relatively large informal sector by OECD standards (Figure 1, Panel B). Many firms are not registered and do not comply with business and tax laws or regulations. It is important to note, however, that there are different degrees of informality. A firm can be completely informal, when it does not declare its activity or its workers and does not comply with any of the laws and regulations that apply to it. But a firm may also be registered, while still evading taxes to some extent and declaring some, but not all of its workers. Finally, a firm may be in compliance with most tax and labour laws, but prefer working with self-employed workers rather than salaried employees to avoid complying with – and paying for – social security. This implies that a significant part of the population is not covered by pensions and health care provisions, either because they are self-employed or undeclared dependent employees (Figure 4.1, Panel A). Reflecting the different degrees of informality and the variety of aspects associated with them, there are many different measures of informality and the estimate of the share of informal employment or production can vary widely, depending on which measure is chosen. While there is nothing illegal about self-employment as such, independent workers are sometimes classified as informal, precisely because they are not covered by social security, but also because in fact many of them do not comply with labour and tax laws at least in developing and emerging countries where the informal sector is large. Alcaraz *et al.* (2008) correct the measure that relates informal employment to a lack of coverage with work-related pension and healthcare (Figure 1, Panel A) by eliminating those self-employed workers, who are registered with tax or local authorities or with a business association. This correction lowers the statistic for Mexico by roughly 10 percentage points to around 43%. The statistic for other countries in this graph is not corrected and does include self-employed workers who are registered. Figure 1, Panel C shows the share of employees in informal enterprises. In most countries' definitions, this does not include unregistered employees in larger or registered enterprises. Thus, this measure is generally lower than the measure of informal employment in Panel A.

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1. Nicola Brandt is a Senior Economist on the Mexico/Chile desk in the Economics Department of the OECD. This paper was originally produced for the 2011 OECD Economic Survey of Mexico and published in May 2011 under the authority of the Economic and Development Review Committee (EDRC) of the OECD. The author would like to thank Andrew Dean, Bob Ford, Partick Lenain and members of the EDRC for valuable comments and discussions. She would also like to thank Roselyne Jamin for statistical assistance and Heloise Wickramanayake and Olivier Besson for secretarial assistance.

Figure 1. Informality across countries



1. ILO definition. Urban population without coverage for health and/or pension in 2008. For Mexico this measure is corrected by subtracting those self-employed workers who are registered with tax or local authorities or with a business association, as in Alcaraz *et al.* (2008).
2. The Schneider definition of the shadow economy uses multiple indicator multiple cause (MIMIC) model to estimate the shadow economy econometrically with a structural equation with one latent variable. It is an attempt to estimate all market-based legal production of goods and services that are deliberately concealed from public authorities to avoid payment of income, taxes, social security contributions, respect of legal labour market standards and administrative procedures. While the method relies on strong assumptions and results thus have to be interpreted with caution, this is the only indicator of the informal economy that allows a comparison across a wide range of countries.
3. The indicator counts individuals as informal, who are employed in an unincorporated enterprise in the non-agricultural sector with fewer than 5 employees that is not registered. Some countries' definition, including Mexico's, differs from the harmonised definition suggested by the International Labour Organisation and the data are thus not strictly comparable. 2005 or nearest year.

Source: ILO (2009) Labour Overview - Latin America and the Caribbean; Schneider, F., A. Buehn and C. Montenegro (2010), "New Estimates for the Shadow Economies all over the World", International Economic Journal, 24:4; ILO, Keys Indicators in the Labour Market.

2. While informality is to a large extent a symptom of limited economic development and low productivity, it can also reinforce low productivity growth leading into a vicious cycle. This is why policies to support formality are warranted. Strong education and training would be an important element of a

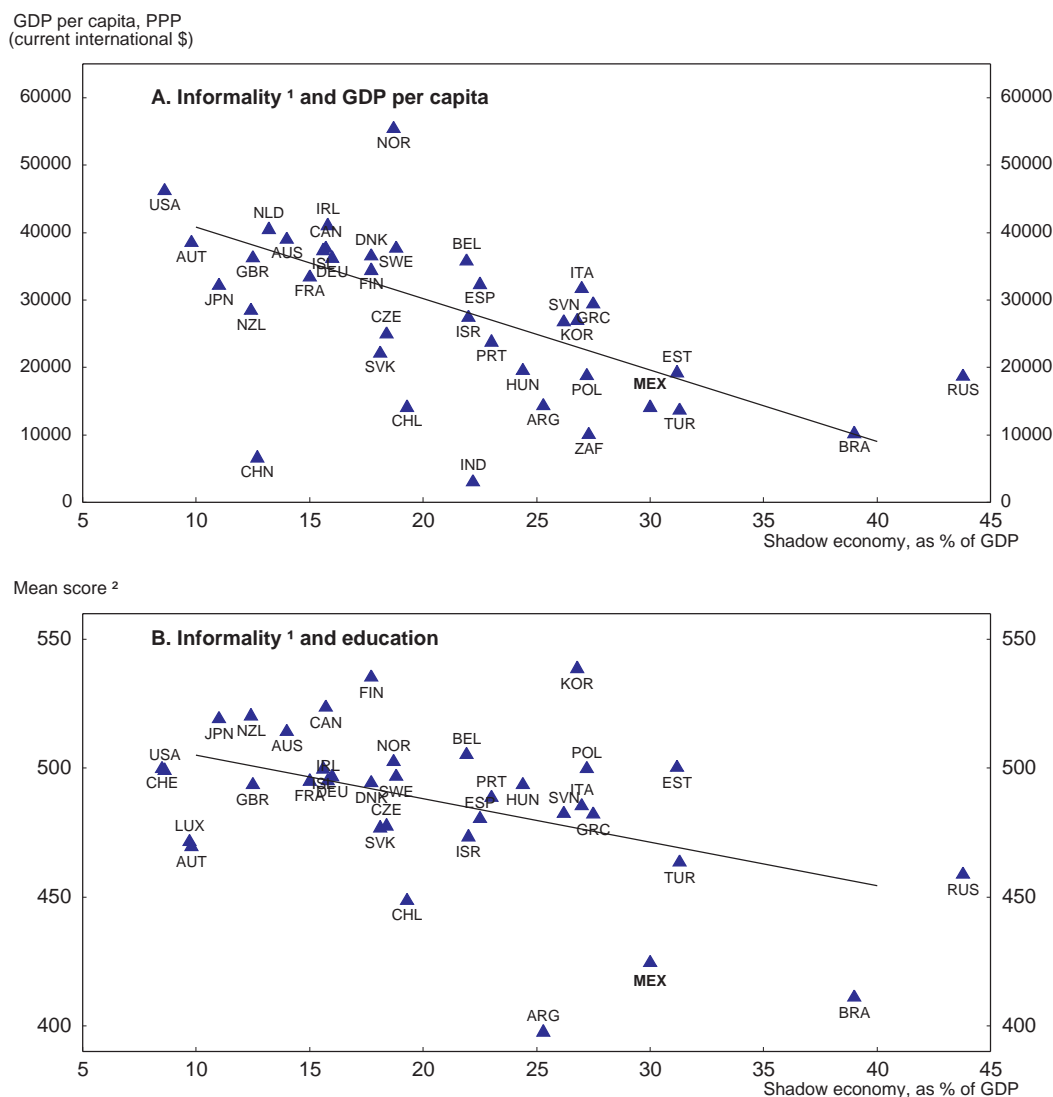
strategy to fight informality, as this would help more people to develop their full productivity potential and thus thrive in the formal economy. Policies to strengthen education are discussed in chapter 3 of the 2011 Economic Survey of Mexico. This chapter discusses first the risks that a large informal sector poses to productivity. It then reviews policies that can help promote formality by reducing its costs and strengthening its benefits, while increasing the costs of informality through stronger enforcement. Measures to enhance the benefits of formality by making the social security package more attractive for low-wage workers are discussed in the final part of the chapter.

### **Informality can be a symptom, but also a cause of lower productivity**

3. The size of the informal economy is strongly related to economic development, in particular income per capita and –to a lesser extent - learning results, as measured by PISA (Figure 2). One explanation would be that relatively unproductive workers, of which there are more in less developed countries, have difficulties producing profitably or finding employment in the formal economy given the costs of taxes and regulation. This is supported by evidence that informal firms are very small and unproductive compared to even the smallest formal firms, but especially so in comparison with larger formal firms (La Porta and Shleifer, 2008). The same authors find that formal firms are run by much better educated managers. A second important factor in less developed countries is the limited enforcement capacity. Agencies that enforce labour and tax laws in poorer countries are often less well-managed than in richer countries or they lack sufficient qualified personnel. In many cases there are problems with corruption. While this would suggest that informality can disappear over time as a country develops and is able to enhance its enforcement capacity, there are reasons to view informality as a problem in its own right that merits specific action, as it is likely to be not only a symptom, but also a cause of lower productivity – hindering economic development – and it is associated with social problems.



**Figure 2. Informality and economic development**



1. The Schneider definition of the shadow economy uses multiple indicator multiple cause (MIMIC) model to estimate the shadow economy econometrically with a structural equation with one latent variable. It is an attempt to estimate all market-based legal production of goods and services that are deliberately concealed from public authorities to avoid payment of income, taxes, social security contributions, respect of legal labour market standards and administrative procedures. While the method relies on strong assumptions and results thus have to be interpreted with caution, this is the only indicator of the informal economy that allows a comparison across a wide range of countries.
2. Average score in reading, mathematics and science.

Source: World Bank, World Development Indicators 2009 and Schneider, F., A. Buehn and C. Montenegro (2010), "New Estimates for the Shadow Economies all over the World", *International Economic Journal*, 24: 4, 443 — 461; OECD, PISA 2009 Results.

4. Individual workers may sometimes choose an informal over a formal job (Box 1) and deliberately renounce social security coverage, because they find benefits are not valuable enough given the costs or because they cannot afford to insure income and health risks, for example if their earnings barely cover their basic needs. Yet, this can lead to negative outcomes from a societal point of view, such as widespread poverty in old age and poor public health, impinging also on productivity. Without social assistance or effective unemployment insurance workers without savings who are hit by an income shock may feel compelled to remove their children from school with negative effects on their education and their ability to

develop their productivity potential. Low coverage can also increase the cost of social security for those who do contribute, since they have to provide for those who are not covered through tax-financed schemes or because the risk pool is weaker with fewer contributors. That can lead to lower net benefits for contributors and thus stronger incentives to stay informal.

**Box 1. The formal versus the informal labour market in Mexico**

Empirical evidence on the informal labour market shows that a large number of workers move frequently between the formal and informal sectors in both directions, suggesting that some may choose informality voluntarily given their financial constraints and their opportunities (Maloney, 1999; Pages and Stampini, 2009), though available information is not conclusive about the relative importance of voluntary informality. The relative expansion of the informal sector in downturns is almost entirely explained by reduced job finding rates in the formal sector, which in richer OECD countries is the main factor explaining the increase of unemployment in downturns (Bosch and Maloney, 2008). Comparing probabilities to switch across different employment states with a benchmark that would be observed under no segmentation, Pages and Stampini (2009), however, do find evidence that workers prefer formal over informal jobs: the probability of moving from the informal to the formal sector exceeds the benchmark, while it is close to the benchmark for movements in the reverse direction.

For Mexico there is evidence that employees in the informal sector suffer a wage penalty, which may to some extent be indicative of a productivity gap. Observing workers who switch between the formal and informal sectors Alcaraz *et al.* (2008) find that formal sector wages are on average 13% higher than informal sector wages for the same worker. Bargain and Kwenda (2010) find largely the same wage penalty for salaried employees, while self-employment is associated with an earnings premium of around 15% on average compared to salaried employment in the formal sector according to their findings, although it is negative in the lower 15% of the earnings distribution. Pages and Stampini (2009) find a lower wage penalty of informal versus formal salaried work, around 5% for low-skilled workers and 10% for high-skilled workers, while the wage premium of self-employment is positive only for low-skilled workers. It should be noted that higher earnings for the self-employed do not necessarily imply higher productivity or utility, as the valuation of social security benefits that are available only for formal salaried workers would need to be taken into account. There may also be a risk premium for self-employment. Conversely, given that the evidence for a positive wage differential in formal salaried work compared to informal salaried work is rather robust, this can be taken to some extent as an indication of a productivity differential between the formal and informal sectors, as the valuation of benefits and lower risk would have to be added to higher formal sector wages.

5. Informal firms use and congest public infrastructure without contributing to the resources to build and maintain them, as tax evasion among informal firms is widespread. According to World Bank Enterprise Surveys informal firms in various developing countries consider that typical firms in their sector evade around 75% of their tax liability, compared to 22-35% depending on firm size in a sample of formal firms (La Porta and Shleifer, 2008). Tax evasion hampers the capacity to spend on public investment in infrastructure and in education. Yet, these investments are needed to lay the foundations for stronger productivity growth and thus also a greater capacity of firms and workers to take part in the formal economy and pay taxes.

6. Informality can impinge on the productivity of firms who act in this sector. First, the need to hide their activities is a constraint on their growth which may inhibit otherwise efficient vertical and horizontal integration and internal firm growth. In sectors with increasing returns to scale this would hamper productivity growth. However, informal firms are likely to locate in industries where efficiency losses are limited, helped by the fact that the demand for capital-intensive goods is lower in less developed countries (World Bank, 2007). What is probably more important, though, is that small firm size is likely to hamper access to finance and thus possibilities to invest in modern equipment. Mexican data on micro firms and small enterprises show that no more than around 10% of small Mexican firms report having received credit from a formal financial institution or from informal sources (Fajnzylber *et al.*, 2006). Small firms are also much less likely to adopt new technologies (López Acevedo, 2002) or invest in training of their employees than larger firms (World Bank, 2006), which is likely to affect their productivity negatively. Mexican firms' investment in training for their employees has been shown to have a positive impact on productivity (López Acevedo *et al.*, 2005). This effect is especially strong for formal external training. In part, the fact

that training is rarer in smaller companies may well be related to the fact that informal firms in particular have very limited access to training sponsored by the government or business associations.

7. Moreover, informal firms' ability to interact efficiently with providers, customers and the government is limited as they lack not only access to finance, but also to government services, such as enforcement of property rights and government training programmes, which should enhance the efficiency of production. Although sales lost to theft are high in developing countries compared to industrialised countries, World Bank data suggests that informal firms spend heavily on security and protection payments to gangsters, but make little use of the police, as they report less than 15% of cases. In contrast, such reporting rises quickly with firm size. Formal firms, in particular large ones, are also much more likely to use courts to settle payment disputes than informal firms (La Porta and Shleifer, 2008).

8. Informality can also hurt aggregate productivity growth via the effects of unfair competition. While informal firms tend to be small and less productive, avoiding taxes and business regulation helps them to lower their costs. If this outweighs their disadvantage in productivity, this would allow them to gain market share from more productive formal competitors (Farrell, 2004, OECD, 2007b) in inefficient ways and slow the process of creative destruction of unproductive firms (World Bank, 2007), thus lowering aggregate productivity. World Bank Enterprise Surveys indicate that close to 20% of Mexican firms identify informal and anticompetitive practices as the main obstacle to doing business (World Bank, 2006). This share is higher among larger firms, which may suggest that this perception is partly due to informal firms exploiting their competitive advantage related to tax evasion and avoidance of regulation. However, it should be noted that the concern can also refer to anticompetitive behaviour from formal competitors, as the survey question does not differentiate between informality and anticompetitive practices by formal firms. Moreover, it is not uncommon for formal and informal firms to be linked, for example through subcontracting arrangements. This seems to be a widespread phenomenon in Mexico and the government has recently reacted with a law proposal to combat the practice of firms using subcontractors to bypass labour laws, as discussed further below. Because of these linkages it is not always possible to distinguish the effects of informality on formal and informal firms.

9. Distortions that increase the informal sector may distort the allocation of labour and capital in the economy with a negative effect on aggregate productivity. This can be the case, for example, if one cause of informality is that workers value social security benefits at less than their cost (see Levy, 2008). This would drive a wedge between the cost of labour (wages and social security benefits) and its marginal productivity in the formal sector, as workers try to switch into the informal sector. As a result, there would be an inefficiently high number of informal workers and wages and marginal productivity in this sector would fall, while increasing in the formal sector. Aggregate productivity would be lower than in the efficient case, as marginal productivity would differ across the two sectors. Higher wages in the formal sector would also reduce capital profitability in that sector, creating incentives for inefficiently high investment in the informal sector. A similar argument would hold if the benefits of registering a business were valued below their costs, for example because the judicial system was inefficient and there was widespread corruption. As businesses and workers try to avoid the cost of formalisation an inefficiently large number of resources would then be employed in the informal sector that could yield higher returns in the formal sector.

10. A relation between high informality and lower productivity is empirically well established, although causality is not always clear. Firm level estimates show that firms which report having started operating without registering exhibit on average much lower output per worker even after controlling for firm size, time in business, sector and region (World Bank, 2007). In Mexico this difference is as high as 30%. Moreover, each 10 percentage point increase in the tax and social security evasion rates in a sector or region is related to a reduction of labour and total factor productivity of 7 and 10% respectively in a panel of Latin American and Caribbean countries (World Bank, 2007). Fajnzylber *et al.* (2006) find that

micro firms reporting taxes exhibit higher levels of profits even after controlling for employment, size and capital stock.

### **A broad-based strategy is needed to reduce informality and enhance productivity**

11. A broad-based and long-term strategy is needed to combat informality. One element will be stronger enforcement. This is particularly important for informal labour that is provided within relatively well-performing formal businesses, for example through subcontracting arrangements or under-declaration of workers. However, as many workers and firms operating in the informal sector are particularly unproductive, they might not be able to survive in the formal sector given its costs and benefits. Therefore, a strategy to combat informality also needs to comprise measures to reduce the costs of formality, such as compliance costs with regulations, and to strengthen its benefits, including the quality of government services when it comes to protecting property rights, but also health and education services. This would make it easier for relatively unproductive firms to survive in the formal sector. In fact, many of these measures are likely to help both formal and informal firms and workers to become more productive. When complemented with further support for small, unproductive firms to enhance their efficiency, such as technical assistance to comply with tax and labour laws (Box 2), education and training, this should help increase firm performance and labour productivity across the economy. A strategy to combat informality also needs to include strong efforts to improve the quality of basic and adult education and training, as one of the key determinants of informality is the low productivity of firms and workers operating in this sector.

#### **Box 2. Helping small firms to increase productivity**

Establishing business development centres can help to provide the smallest enterprises with advice and basic training to foster their productivity. Evidence suggests that there is a positive role of business associations and training on the profitability of small firms in *Mexico* (Fajnzylber *et al.*, 2009)

Training and technical help, including with compliance with tax laws and regulations, can foster formalisation. In *South Africa* a programme offering training for small informal businesses coordinated by producers of investment goods is an interesting example (Kenyon, 2007). The organisers provide a package of training and credit conditional on formalisation to help expand their own market.

Support by business associations also facilitated formalisation of firms in the north of *Italy*. These associations provided technical assistance to comply with tax rules at the beginning. Later they helped with product market certification and access to finance. Similar help is provided by *Spanish* business associations in coordination with the tax agency. This programme targets small businesses that entered in the special tax regime.

*Mexico* has developed these kinds of services through its programme *Mexico Emprende* with web-based information and a number of business centres that attend micro as well as small and medium-sized enterprises throughout the country.

### ***Easing regulatory hurdles and streamlining procedures***

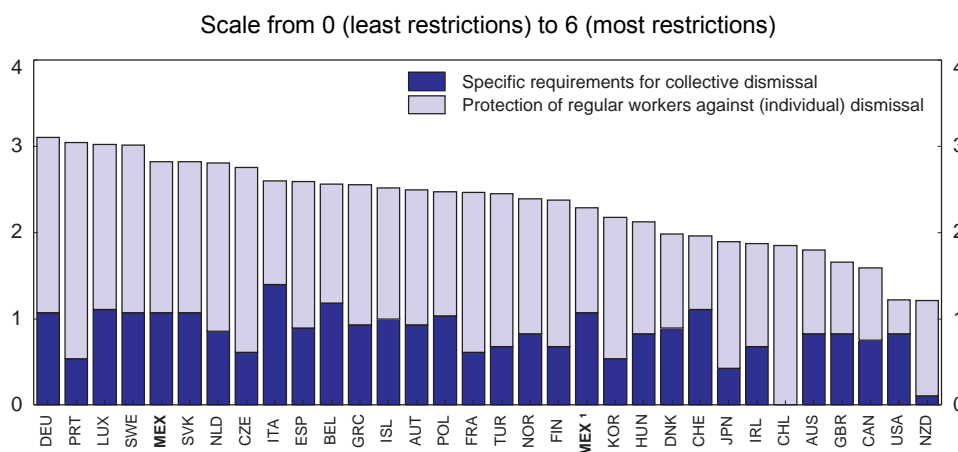
12. Making regulation simpler and easier to comply with should help all agents in the economy to enhance their productivity, while strengthening formalisation. Overly burdensome regulation can make it costly for firms to formalise, but it can also hamper competition and thus productivity in the wider economy. This may be a factor limiting formalisation in *Mexico*, as labour regulations as well as business registration procedures are perceived as somewhat stringent, despite significant recent improvements.

13. Dismissal regulations for regular employment are relatively strict in *Mexico* compared with most OECD countries. Labour court procedures are complex, lengthy and costly. It is very difficult to establish in court that redundancy or poor performance is a valid ground for dismissal, leading to unfair dismissal

litigation. This along with strict provisions relating to collective dismissal can create incentives to rely on undeclared employees, outsourcing to temporary work agencies or self-employed workers. This is relatively easy as temporary work agencies are largely unregulated. In fact, firms that do not necessarily hide their activities and are therefore part of the formal sector in principle often use subcontracting and outsourcing to temporary work agencies as a means to rely on cheaper, informal workers that are easier to dismiss. Relaxing the provisions for regular employment somewhat, while strengthening those for temporary employment should help avoid this kind of behaviour, as firms' incentives to rely on regular labour would rise. This could also lead to higher aggregate productivity, as incentives to invest in personnel are stronger when workers are employed on longer term contracts.

14. A recent labour reform proposal in Mexico would address some of these issues. It limits the accumulation of due wages during labour trials to 6 months. Currently, there is no limit, which raises incentives for dismissed workers and their lawyers to prolong labour trials. This has even led to cases of corruption where judges agreed to prolong the trial in return for sharing accumulated due wages. The average resolution time for a case of unjustified dismissal under federal jurisdiction is now around 38 months, and even longer for cases under state jurisdiction. The new provision would limit the costs of dismissal and the uncertainty surrounding it. Evidence from other OECD countries suggests that uncertain administrative and legal procedures may impose a higher burden on dismissals than direct costs (OECD, 2007a). Therefore, the new provisions may entice employers to hire more workers under formal arrangements. The law would introduce short-term trial and training contracts, ranging from one to six months. This may raise employers' incentives to consider more unskilled and inexperienced workers, especially young people, for formal employment. The reform would also make it easier to contract employees for intermittent tasks, such as seasonal work and work that does not have to be performed the full week, month or year. The reform is still under discussion in Congress, but if it were implemented along the lines of the original proposal, this would ease the burden of employment protection legislation quite substantially (Figure 3) and would give more legal certainty in terms of hiring and dismissal.

**Figure 3. Employment protection legislation (EPL) for regular workers, 2008**



1. Estimate takes into account the proposed reform.

Source: OECD, OECD Indicators on Employment Protection database.

15. Implementing the reform proposal would be a step in the right direction. Reducing the cost of unfair dismissal litigation is welcome. In the medium term, Mexico should also consider reducing the scope for unfair dismissal litigation, by making it easier to succeed in court when bringing forward repeated poor performance and redundancy as legal grounds for dismissal. To gain support for such a reform, Mexico could envisage strengthening the protection for unemployed workers, which is very weak

and has undesirable side effects on pension income (Box 3). One way to do that would be to further increase the government's contribution to strengthen the unemployment component of the pension accounts. In addition, a tax-financed insurance component could be added to the system, similar as in Chile. Tax-financing would avoid that a stronger unemployment component weakens pension income. A stronger unemployment benefit system could strengthen incentives for workers to formalise, although it would have to be carefully designed to avoid that a weakening of work incentives results in higher unemployment. An alternative way to strengthen the protection of unemployed workers would be to introduce a social assistance-type cash benefit as suggested in chapter 2 of the 2011 Economic Survey of Mexico, although this would be challenging reform involving important administrative changes. However, with such a scheme in place it would no longer be necessary to allow unemployed workers to draw on their pension savings with beneficial effects on their retirement income.

### **Box 3. Strengthening protection for unemployed workers in Mexico**

A well-functioning unemployment insurance system can help workers avoid large drops in consumption during an unemployment spell (Gruber, 1997). It can also have productivity-enhancing effects as the income replacement gives workers time to search for employment which matches their skills well (Acemoglu and Shimer, 2000). In the case of Mexico, it can allow workers to take the time to find a new job in the formal sector and thus avoid moving into the informal sector, where they are likely to be less productive, as recent empirical work on workers switching between the formal and informal sectors suggests (Alcaraz *et al.*, 2008). On the downside, an insurance-based unemployment benefit system that is too generous can limit job search incentives to such an extent that costs outweigh benefits.

Mexico has currently no separate unemployment benefit system, but workers are allowed to draw on their individual pension accounts during a maximum of three unemployment spells, if they have contributed at least for three years. The government eased access conditions for this withdrawal and increased the maximum amount that is allowed to be withdrawn in the recent recession. At the same time, it increased the government subsidy for pension accounts, the *cuota social*, and targeted it more strongly on low- and medium income workers.

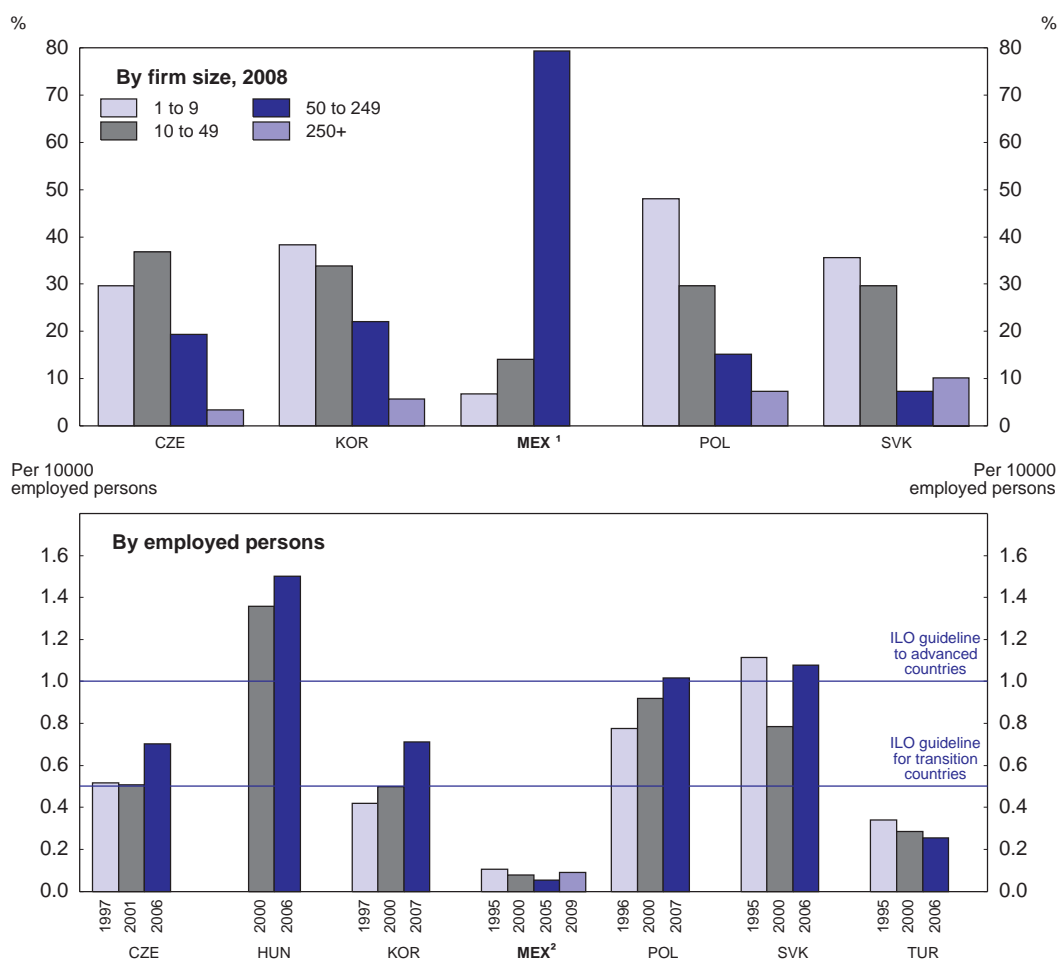
This arrangement is similar in principle to individual unemployment accounts and it shares its advantages compared to traditional unemployment insurance where the risk is pooled. In particular, the costs of unemployment benefits are internalised, as workers draw on their own savings which will reduce their pension replacement rate later on (Hartley *et al.*, 2010; Stiglitz and Yun, 2002). Negative effects on workers' incentives to search, which may occur in insurance-based unemployment benefit systems should thus be limited, provided the worker is not strongly myopic neglecting the effect on income during old age.

However, the system is also likely to share the disadvantages of unemployment benefits based on individual accounts, which can be particularly pronounced in economies with large informal sectors and wage inequalities. The experience with the Chilean individual account system has shown that those workers who are most likely to be affected by unemployment, in particular employees with short-term contracts and frequent moves into and out of formal employment, are also those who are least likely to have accumulated sufficient amounts in their individual savings accounts to provide for effective protection during an unemployment spell. In fact, a large number of individual accounts had accumulated less than one monthly minimum wage in Chile in 2008. It is for this reason that Chile recently eased access to the Solidarity Fund, which complements the individual accounts with a traditional unemployment insurance based on risk pooling. Stiglitz and Yun (2006) show that it is optimal to complement unemployment insurance based on withdrawal from pension savings with a tax-funded insurance element, except in the unlikely case where workers are completely risk-neutral. The insurance element should be bigger the bigger the risk, that is the length of the unemployment spell compared to the length of the working life in formal employment.

In Mexico, similar as in Chile, lower-wage workers are more likely than wealthier peers to have unstable employment relationships with frequent moves into and out of formal employment and thus a low balance in their pension accounts. Drawing on these savings is likely to jeopardise their retirement income even further. While ensuring sufficient retirement income for all will require completing the pension reform process that Mexico has initiated, there is also a rationale for Mexico to devote more funds to the combined pension and unemployment savings account and perhaps complement the latter with a tax-financed insurance element.

16. The reform also imposes stricter regulations on firms that resort to outsourcing, but the capacity of the labour inspectorates may need to be stepped up for the reform to become effective. Firms using outsourcing or subcontracting arrangements are obliged to verify if the subcontractor complies with labour and social security laws. This complements a similar provision, that was introduced in the social security law in 2009, with increases in fines. More generally maximum fines for infractions of the labour law would be increased almost 16-fold with the reform. The new law proposal also includes numerous provisions to improve working conditions for workers, including longer resting periods for household workers and anti-discrimination provisions. While all these measures are welcome, Mexico may have to step up the capacity of its labour inspectorates to ensure enforcement of the new regulations. The reform proposal would require firms in high-risk activities to be certified by private verification units that are approved by the government. This would be a step towards strengthening the capacity of labour inspection in Mexico. Although Mexico has increased the number of labour inspectors by more than 70% in recent years, staffing levels remain much lower than in other lower-income OECD countries (Figure 4). The largest part of labour inspections is conducted in bigger firms, although these are less likely to be informal.

**Figure 4. Labour inspections**

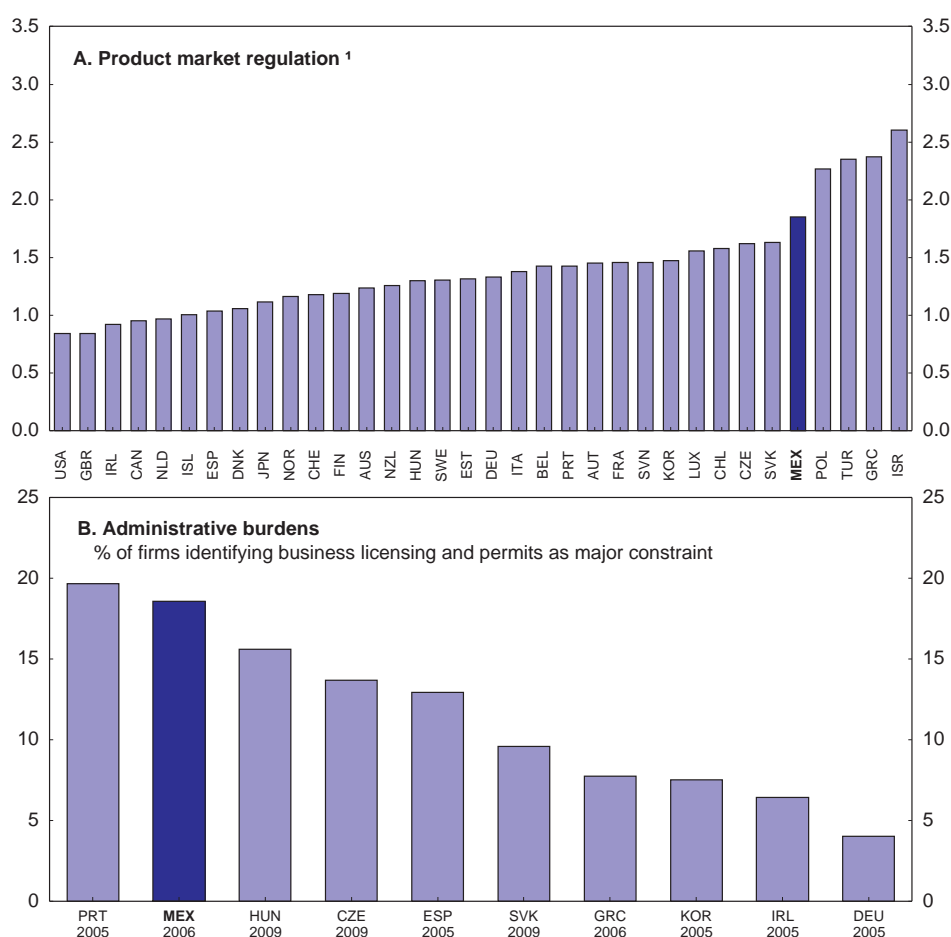


1. For 50 and more.
2. Federal labour inspections only.

Source: OECD (2008), *Employment Outlook*, OECD, Paris, update from Mexico for 2009.

17. Mexico is making notable progress in reducing the time and costs required to register a new business. Administrative burdens are often perceived as relatively high in Mexico. The percentage of firms identifying business licensing and permits as major constraints is high in international comparison and so is the score of the OECD Product Market Regulation indicator, pointing to relatively restrictive regulation and burdensome procedures (Figure 5). However, Mexico is making progress on this. The recent introduction of an on-line one-stop shop *tuempresa.gob.mx* to comply with federal regulations to start up a new business is discussed in chapter 3 of the 2011 Economic Survey of Mexico. Research on previous efforts in Mexico to reduce the time required to comply with municipal start-up regulations under a scheme called SARE, “Sistema de Apertura Rápida de Empresas” suggests that this can have some positive impact on formality. The reduction in the number of days required to register a business from 30 to 1.4 lowered formalisation costs. Evidence suggests that this led to a moderate but robust increase of firm registration. Kaplan *et al.* (2007) estimate an increase in the flow of newly registered firms of about 4-8% based on data from the social security agency IMSS, corresponding to about 12 to 19 new formal jobs created per municipality and month as a result of SARE. Bruhn (2008) finds a higher impact based on employment surveys, which include data on entrepreneurs in addition to salaried employees. The estimated effect corresponds to an increase in the stock of registered firms by 6%.

**Figure 5. Product market regulation and administrative burdens**



1. Overall indicator, the scale of the indicator is 0-6 from least to most restrictive of competition.

Source: OECD, Product Market Regulation database and World Bank Enterprise Data.

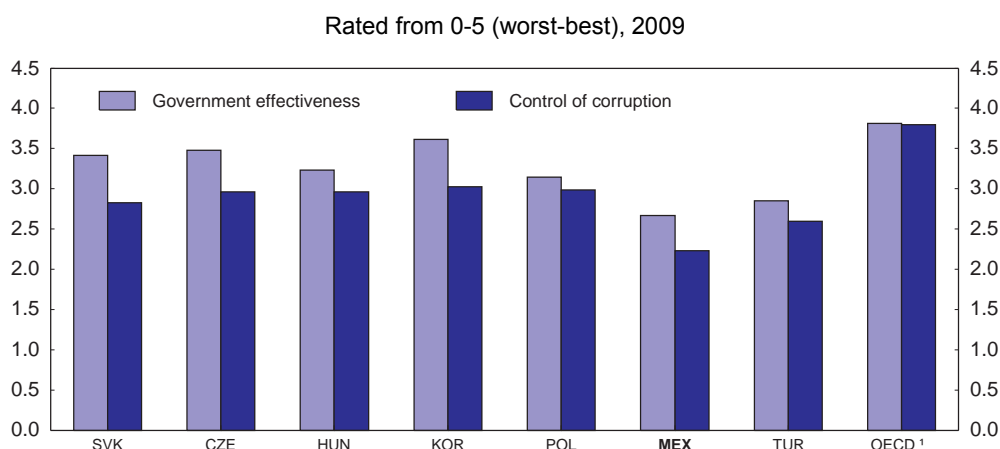


18. However, the reform seems to have done little to promote formalisation of previously informal firms. Most of the effect comes from start-ups instead. One possible explanation for this would be that costs of formality, for example social security contributions and taxes, are more important than registration costs. Unproductive firms would then still have an incentive to avoid formalisation. In fact, both studies discussed before provide evidence that informal business owners are of lower ability than those of the formal firms or wage earners in the formal sector.

19. Corruption may limit the benefits of greater ease of registration. If corruption is widespread firms may prefer to hide simply to avoid contact with officials who may ask for bribes. Moreover, the benefits of formalisation might be lower as it would not enhance the enforcement of contracts to the same extent as could otherwise be expected. Kaplan *et al.* (2007) cite anecdotal evidence that health and safety regulations are often used by bureaucrats to obtain bribes, as officials search for even minor non-compliance. These authors also find that the SARE programme was less successful in municipalities with higher corruption levels. Thus, fighting corruption will be a crucial element in any programme to promote formalisation. World Bank data suggest that Mexico needs to do more to control corruption and promote the effectiveness of government to enhance the benefits of going formal (Figure 6).

20. Nevertheless, even if lowering the costs of registering has only an impact on new firms this should decrease the relative weight of informal firms over time. Mexico's efforts discussed in chapter 3 of the 2011 Economic Survey of Mexico, to reduce the costs of doing business more generally should also help promote a reallocation of resources to more productive formal firms as their costs are lowered.

**Figure 6. Government effectiveness and corrupt control**



1. Unweighed average.

Source: World Bank, Worldwide Governance Indicators Database.

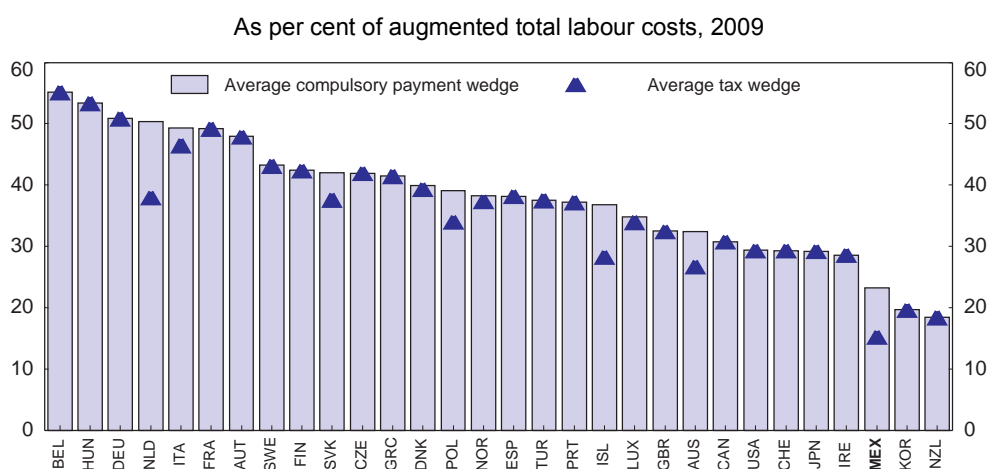
### ***Dealing with the effects of social security contributions on informality***

21. Overall, labour taxes in Mexico are moderate, but there are probably simpler ways to reach the same effect. The tax wedge on average wages in Mexico, including compulsory payments to private pension funds, is comparatively low (Figure 7) exceeding only those in New Zealand and Korea. Yet, social contributions alone are higher than this for workers earning less. Given that they are regressive mainly due to a fixed base contribution that employers have to make to the healthcare system, social contributions as a percentage of wages are largest for minimum wage earners, close to 40% (Figure 8). The share of Mexican firms citing health insurance as the biggest labour regulation barrier to formalising workers is particularly large compared to other Latin American countries (World Bank, 2007). As social

contributions declining with income at the lower end of the pay scale are unusual, social contributions on low wages are actually high in Mexico in international comparison. This effect is compensated by an in-work tax credit, the *subsidio para el empleo*, however, which is higher than the lump-sum health contribution for the lowest wages. Mexico has recently introduced further income tax deductions for firms hiring workers that are registered with the social security agency for the first time, the *Programa de Primer Empleo*. This would further lower the labour costs for these workers. The overall combination of low tax wedge, high social security contributions, *subsidio para el empleo* and now *Programa de Primer Empleo* implies that the wedge incorporating all of these factors is moderate, but compensating high social charges with tax credits and deductions for workers and employers is a relatively complicated way of ensuring a moderate tax burden on low-wage workers. Making social charges more progressive would be easier and more transparent.

22. Social charges on low-wage workers could be reduced by introducing a health charge that is proportional to actual wages, thus reducing the burden on lower-wage workers while increasing it for higher-wage workers. Reduced rates for the lowest-wage workers could be considered, as well. This could be implemented in a revenue-neutral way. These measures would allow reducing the tax burden on low-wage earners even further. Alternatively, tax credits and deductions could be limited to broaden the tax base, in particular if Mexico wanted to maintain a low, but positive tax burden on low-wage workers for fairness reasons. In any case, the effects and efficiency of the *subsidio para el empleo* and *Programa de Primer Empleo* should be evaluated, as well as the effects of more progressive social charges, to make these decisions.

**Figure 7. Average compulsory payment wedge and average tax wedge**



Source: OECD, Taxing Wages database.

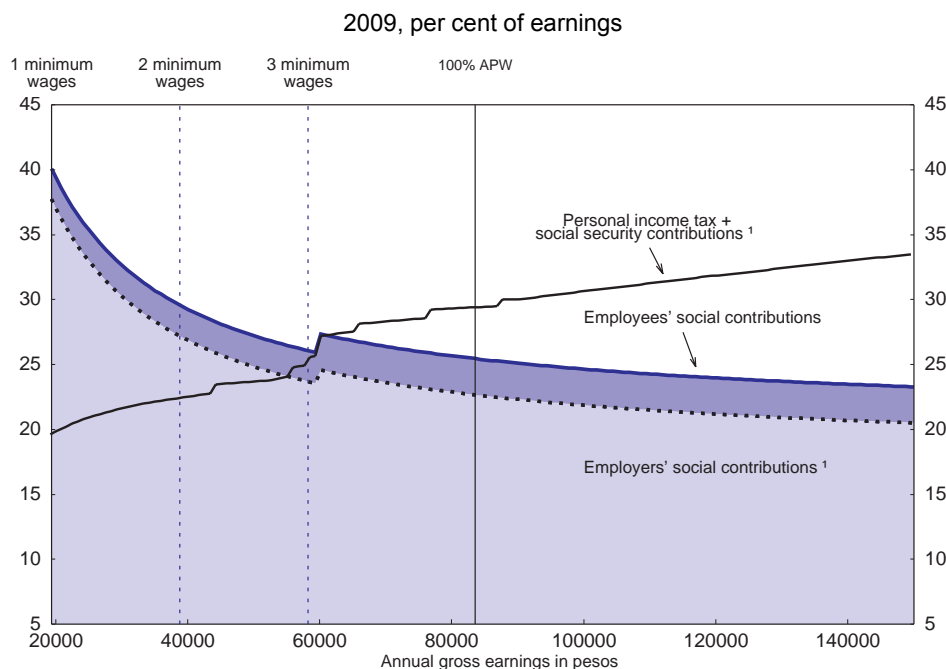
23. Although the labour tax burden does not appear to be very high in Mexico, there are a number of reasons to think that the impact of social charges on formality might be stronger than the labour tax wedge by itself suggests:

- First, social security charges are high in relation to the tax burden on small businesses. Social charges have to be paid on the first peso earned, while income of small businesses is tax-free up to four minimum wages. The *subsidio para el empleo* and *Programa de Primer Empleo* lower the tax burden on low-wage workers and in some cases their employers. Nevertheless, the structure of social charges and small business taxes increases the overall tax burden on small businesses that declare their workers, as the benefit of tax-deductibility of social charges is lower the lower

the business tax base. This is also an incentive for workers to choose self-employment over salaried employment to the extent that they do not fully value social security services. Restructuring the tax burden by lowering the burden on low-income labour while increasing other taxes, including those on small businesses, may therefore be worth considering (OECD, 2008).

- Some low-wage workers may value a number of the services included in the mandatory social security package at less than their cost. This would reduce incentives to contribute to it. Less than half of low-wage workers manage to retain jobs in the formal sector for 25 years during their working life, which would guarantee a minimum pension roughly equivalent to the minimum wage (Casal and Hoyo, 2007). In addition, savings for middle income workers are often too low to generate adequate retirement income. The capacity of the healthcare sector is low compared to other OECD countries, in terms of nurses and doctors in relation to the population and in terms of hospital beds even compared to Turkey. The fragmentation of the system across the formal and informal sectors, as well as between the public and private sectors, contributes to limitations in quality and efficiency, for example because it is difficult to share capacity. Finally, access to housing loans from the social security's housing agency, to childcare and to recreational activities is very limited, especially for low-wage workers who do not live in urban areas.
- In addition, weak enforcement capacity has to be taken into account. Low wage workers are abundant in Mexico and enforcement capacity remains relatively weak, despite recent improvements, in particular due to low levels of staffing at the labour inspectorate. This makes evasion of social charges easier (OECD, 2008).

**Figure 8. Social charges in Mexico**



1. Includes contributions made by employers to the retirement Fund (SAR) and the housing Fund (INFONAVIT) as well as for discharge and old age insurance.

Source: OECD, Taxing wages 2008-2009.

24. Taking services out of the social security package, that are better financed via general taxes, would help make it more attractive to poor and rural workers. Some services within the social security package are hardly available for poor and rural workers, who still have to contribute to their financing via social charges. They could probably be provided more efficiently if they were integrated with equivalent tax-financed programmes for informal workers. This includes housing benefits, childcare and recreational activities. Social security childcare facilities are limited and available mainly in urban areas. Sport facilities and other infrastructure for recreational activities, as well, are located in urban areas and thus hardly available for rural workers. Subsidised mortgages are allocated based on a point-system that favours higher-income workers, although the government has made some efforts in recent years to ease the access to mortgage credit subsidised by the social security housing fund for lower-income workers. There would be merit in taking housing benefits, childcare and recreational activities out of the social security package and merge them with equivalent tax-financed programmes. This would help lower social contributions removing disincentives to formalise for rural and poor workers, who now have to pay for these services although they have limited access to them. While low-wage workers would probably still have to contribute to the financing of these services when they are tax-financed, this would not depend on their labour status any more. Thus disincentives to become formal would be lowered. The government already introduced the possibility to waive a part of the social charges for rural day labourers and construction workers to make up for the fact that they have limited access to some of the services. However, taking those services out of the social security package altogether seems preferable, because the group of workers that has limited access to these services goes beyond construction workers and rural day labourers. This would allow integrating these services with equivalent tax-financed programmes that already exist for informal workers, with an opportunity to improve strategic planning and thus programme efficiency.

25. There would also be merit in considering moving towards an integrated basic healthcare regime. Currently there are two different social security health systems for the private sector (Instituto Mexicano del Seguro Social, IMSS) and the public sector (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, ISSSTE) financed via social charges, as well as a new, largely tax-financed system, *Seguro Popular*, for workers without access to social security and their dependent family members. Mexico introduced this system to ensure universal health insurance coverage as a first stepping stone towards a unified and universal system. Mexico has made important progress with extending the coverage of basic health insurance to the informal workforce through *Seguro Popular* introduced in 2003, with an expected coverage of close to 50 million people in 2011. This is welcome from a public health perspective, but working towards a more integrated health care system would increase efficiency and avoid any disincentives to formalise that could stem from differences in financing schemes. It should be noted, though, that for now most studies have found no evidence that the introduction of *Seguro Popular* has increased the informal sector (Knox, 2008, Barros, 2009 and Heckman *et al.*, 2010), although one study did find a small negative effect on formal job creation (Bosch and Campos-Vásquez, 2010). Mexico should continue to monitor this issue closely. In any case, integrating Mexico's various healthcare systems may also help improve their quality, raising incentives for workers to formalise. Each healthcare system has currently its own infrastructure and providers. Sharing this capacity has been difficult, which has led to inefficiencies. For example, some capacity is underused while there are bottlenecks elsewhere, often in the same city.

26. Mexico is already working to integrate its different healthcare systems to reap efficiency gains. The different healthcare systems have started buying patented medicines together. This has led to annual savings of around 9 billion pesos each year according to government estimates. Thanks to a new integrated database, health data can now be transferred more easily between different healthcare systems. The Health Ministry is developing clinical guidelines for 400 diseases for all three health systems to make sure that standards match. Finally, the Ministry has now developed a common tariff system for all three health systems. This will make it easier to share capacity, raising efficiency. Eventually, every health system

should be able to buy services from any provider. Continuing the integration process along these lines should help raise efficiency.

27. Moving towards tax-financing or other integrated financing schemes for a universal basic healthcare could reduce social charges significantly. In the extreme moving towards full tax-financing of the healthcare system would reduce social charges for minimum wage earners from close to 40% of wages to a little over 16% and from 28% to 16% for workers earning two minimum wages. Depending on how this is financed, it could also help reduce the tax wedge for low-wage workers even further, increasing the demand for this type of worker to the extent that the tax incidence is on the employer. However, Mexico may want to maintain a small positive tax rate on low-wage workers so that they continue contributing to the government services they use. Financing the healthcare package via progressive income taxes - higher rates or a broader base - would unambiguously reduce the tax wedge on low income workers, but other financing options could have similar effects. Withdrawing VAT exemptions and zero rates, as suggested in chapter 2 of the 2011 Economic Survey of Mexico, while compensating the lowest income deciles with targeted tax transfers would also lower the financing burden on formal low-wage workers. However, these options would require a comprehensive tax reform. To the extent that this is difficult to achieve, other financing options could be considered. For example, Mexico could limit tax-financing to a very basic healthcare package for all citizens. Alternatively, the package could be financed via fees, which could be waived for the lowest-income households. The package could be relatively narrow covering only a set of diseases with catastrophic expenses, as originally intended for *Seguro Popular*. Services that go beyond this could be financed via social charges for workers with formal employment. Alternatively, a choice of top-up insurances could be offered against fees. Mexico's efforts to extend the coverage of basic health insurance are very welcome, but sound financing needs to be ensured.

28. In Spain unifying healthcare systems while moving towards tax-financing combined with stronger tax enforcement has helped to strengthen tax revenues considerably over time, as discussed in chapter 2 of the 2011 Economic Survey of Mexico. It has also improved healthcare coverage, (World Bank, 2007; Zubiri, 2006). The associated reduction in social contributions was used to finance pensions and an unemployment benefit system, which may have helped increasing compliance with tax and labour regulations. Research has shown that strengthening public service quality can help to strengthen the willingness to pay taxes, as explained in chapter 2 of the 2011 Economic Survey of Mexico. While structural unemployment increased sharply in Spain in the wake of these reforms, this is probably not related to any of these reforms. It has more to do with different shocks, including from oil prices and the opening of the economy to the common European market, in the context of relatively rigid labour laws and thus limited wage flexibility. A number of OECD countries with low unemployment rates offer far more generous benefits than Spain.

29. In Mexico, there are opportunities to devote a larger share of social charges to pensions or unemployment benefits and this would be welcome. It may help make the social security package more attractive to workers, thus promoting formalisation. The replacement rate for pensions can be rather low, in particular for medium-income earners. Low-income earners, who often have patchy employment histories moving into and out of formal employment, often struggle to stay in the formal sector for 25 years, which is the requirement to obtain a minimum pension just above the minimum wage independently of whether funds accumulated in the pension account are sufficient to cover this. In that sense, increasing the funds that go to workers' pension accounts would be welcome. It would increase the value of the social security package for low-income workers. There is also a rationale to devote larger funds to unemployment benefits.

30. The government has submitted a proposal to Congress that would redirect resources from the housing fund to pensions and this is welcome. Currently, the housing fund, administered by Infonavit, receives 5% of gross wages; the pension account receives 6.5% plus a subsidy (*cuota social*). The proposal

would gradually redirect resources from Infonavit to a flexible-use subaccount within the pension system, until the contributions to the latter reach 10.5% of wages. Starting from 2018 Infonavit would only receive 1% of gross wages. The resources deposited within the flexible subaccount would still be available to the individual workers for housing. At the same time, the proposal would strengthen workers' saving capacity for retirement. The idea behind this is that Infonavit has improved its efficiency and it can now re-finance itself on the market. In the absence of reform, is expected to accumulate a large long term surplus. As the pension savings of many workers are too low to provide for adequate income in old age, increasing the funds that go to the pension account would be welcome.

31. However, a more comprehensive pension reform would be needed to provide effective basic pension coverage for all, while preserving incentives to save. The reform would probably need to offer a means-tested non-contributory basic pension and top-ups for those who do not manage to save sufficiently as in Chile. Such a reform has to be carefully calibrated, though, to provide sufficient incentives for low-wage earners to save. Therefore, a comprehensive reform that takes these design issues into account is preferable to uncoordinated, piecemeal reform efforts that are occurring now, as different non-contributory pensions have been introduced in single states, such as Mexico City. This could result in a dangerous run to the top, which could quickly lead to financing problems. It is also important that Mexico finishes the transition of its defined benefits pension systems to capital-funded defined contributions system before introducing a basic non-contributory pension in order to coordinate the different pillars. Very significant reform efforts have taken place that transformed the national pension system for private sector employees (IMSS), for federal government employees (ISSSTE) and for several public enterprises so that the majority of workers now participate in defined contributions system. However, the pension system of Pemex and a number of severely underfunded systems for public enterprises and state level government employees still have to be reformed. The federal government should work with the states to promote this transition and design a basic non-contributory together once a national capital-funded pillar is in place.

32. Finally extending the obligation to contribute to social security to self-employed workers could improve coverage, while limiting incentives to stay informal through self-employment. However, it would pose significant implementation challenges. Yet, it should be considered at least for higher-income workers. The share of self-employed workers in Mexico is high and universal coverage would be an important aim for some of the services provided within the Mexican social security package, including pensions and healthcare. This would probably lead to longer contribution histories for those workers who frequently move into and out of the formal sector, thus securing higher retirement income for them. In addition, this would lower incentives for businesses to use the services of self-employed rather than salaried workers. It would also reduce incentives for workers to avoid formalisation. Experiences with such a reform have been favourable in the case of the pension systems in the United Kingdom and Hong Kong China (Hu and Stewart, 2009). Chile is also working to extend the obligation to buy pension insurance to self-employed workers.

33. Fighting informality requires a long-term and broad-based strategy, which is not easy to implement and will take time to take effect. The large number of low-productivity workers in Mexico who struggle to thrive in the formal economy will not be able to enhance their skills sufficiently in a short period of time. Yet, Mexico can take a number of measures to make it less costly and more attractive to join the formal economy. This is likely to have some positive impact on the economy's aggregate productivity, independent of these workers ability to enhance their skills.

**Box 4. Main recommendations to reduce informality**

- Adopt and implement the labour reform proposal.
- Consider easing procedures to dismiss workers based on poor performance or redundancy. Review whether the labour inspectorate needs more staff to enforce labour laws.
- Continue efforts to reduce the regulatory burden for firms, to fight corruption and to promote government effectiveness.
- Consider removing childcare, housing benefits and recreational services from the mandatory social security package and merge them with equivalent tax-financed services for the general population.
- Continue efforts to integrate different healthcare packages to reap efficiency gains. Consider moving towards integrated financing of a basic universal healthcare package.
- Adopt and implement the reform proposal to channel funds from the social security housing fund to the pension account.
- Work with the states to complete the transition of defined benefits to capital-funded defined contributions pension systems and consider introducing a national non-contributory pension pillar and top-ups for workers with low balances in their pension accounts that are designed to preserve saving incentives.
- Consider extending the obligation to contribute to social security to self-employed workers.

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