Day 1.2.: Note on applications of definition and methods in Mexico

Rodrigo Negrete/Lilia Guadalupe Luna (INEGI)

WIEGO 20th. Anniversary Research Conference/Cambridge Mass. November 10-12, 2017

Mexico is a complex country in many senses starting with its structural characteristics beneath its economic and social landscape: a country where the diverse modalities of informality either premodern or modern take place and explain a lot of Mexico's labor market characteristics in a way that other conventional indicators such as the unemployment rate cannot. To identify and measure the size of informality has been a long standing goal for its national statistical office (INEGI) which follows the conceptual frame of the International Conference of Labor Statisticians (ICLS) and participated actively in the guidelines to implement it. Given the strengths and scope of its Labor Force Survey (ENOE), the path taken consisted in adapting some of its contents to identify the labor base of informality and its components, clearly distinguishing between traditional informal sector employment from other forms of informal labor. This way Mexico is one of the few countries in the world producing timely data series on the phenomena at both national and state level with an impact on both public debate as well as public policy.

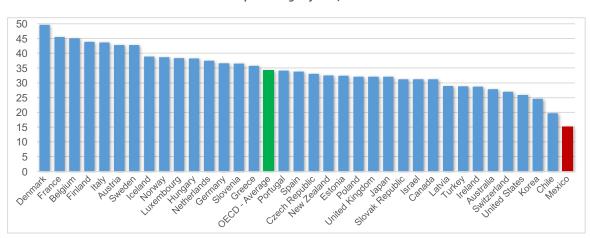
Why informality matters so much in Mexico?

In speaking about any national reality one has to take into account its shades and in the case of Mexico the caveat is even more pressing considering its regional, ethnic and structural complexity where distinct modes of production coexist, going from automobile and air & space industry on one hand to subsistence agriculture, street vendors and cottage industries on the other. At the same time it is tempting to think that the modern side of the economy and the not so modern are some sort of parallel realities. However the way Mexico was so vigorously incorporated in the wave of globalization in the nineties demands a deeper understanding of the relationships between the formal and informal worlds. Globalization allowed Mexico a shifting from commodities-petrol based exports to manufacturing exports (the manufacturing sector in Mexico is the leading exporter in Latin America, surpassing Brazil which had that place in the region during the second half of the 20th century). However as it is well known, Mexico's competitive advantage is based mainly on labor's low cost but also on its salary lag. Salaries are almost systematically below the inflation rate so lose ground in terms of relative prices. In that context the informal sector is by means of its widespread presence in the urban landscape an ad hoc supplier -both in competitive price and opportunity terms- of a significant segment of the low paid labor force for whom the formal supply of equivalent goods and services are out of reach otherwise. Thus informal sector plays in Mexico a key role in the social process of the daily reproduction of a significant part of the labor force, filling the latter's constraints on consumption.

This is a case in point in terms of the links between sectors. There is also a well-grounded suspicion that some traditional formal manufacturers in an open economy such as Mexico have opted for informal distribution for at least part of their production so as to remain in the market while dodging taxation. However informality goes beyond sectors. It also has to do with labor practices and these practices do not take place exclusively within the realm of the informal sector mode of production. A trend to informalize labor relationships even in the formal sector has taken place worldwide and

Mexico is not an exception. Both legal and illegal ways to conceal labor relationships within a formal economic unit on a part of the labor force engaged in its processes needs to be taken into account as well. One of the merits of the 17th ICLS (ILO, 2003) was to open up the door in that direction looking for labor informality beyond the boundaries of the Informal Sector (15th ICLS, ILO, 1993). This extension of the concept of informality is contested till today not the least by developed country representatives before ILO who otherwise have to admit that informal labor is part of their reality too, a growing one besides.

In terms of policy making this has consequences of concern. Pervasive huge informal transactions either in terms of goods and services traded (informal sector) or labor (informal sector and beyond) are a factor (by no means the only one) behind the weak fiscal base of government finance. Amongst OECD countries Mexico is the one with the lowest tax revenue as percentage of GDP (around 15%) whereas the OECD's average is more than twice as high (around 34%).



Graph 1

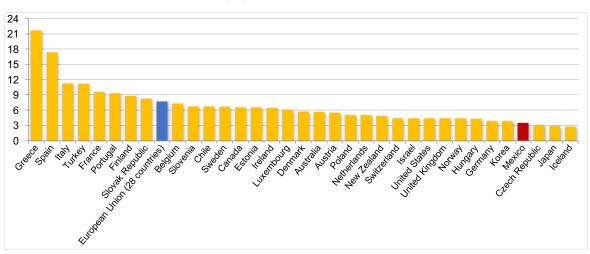
Tax revenue as percentage of GDP, OECD's countries

On the other hand these irregular situations are obstacles to a significant part of the population effectively accessing key social protection rights which in practice are dependent on the modalities of labor insertion despite the fact that the Constitution enshrines them. (Mexico's Constitution is not a liberal one just focused in civil rights but also encompasses social rights such as health care). This everlasting condition of a never fulfilled social program embodied in the Constitution weakens in turn the rule of law. : A historical as much as strategic problem in Mexico's governance is in the extent to which law is seen in social practices more as a theoretical device than a daily effective background informing both agency and interaction.

Another concern is Mexico's aging demographics, posing the imminent problem of all those who have been operating outside pension schemes, and whose families are no longer big enough to work as a *de facto* social protection net, as it was before when the sheer size of a family helped pooling resources and efforts in caring for the elders. Moreover the extent pensions lack the size they should, savings in turn don't reach the critical mass needed to fully consolidate a financial system with competitive interest rates in support of investment; all have an impact on economic growth.

Being informality is such a strategic topic in terms of governance and policy making it is not less so in terms of analysis and understanding the nature of Mexico's labor market. Standard analysis is so

focused on the unemployment rate that looking at its level, again amongst OECD countries, either leads to wrong conclusions or bewilderment



Graph 2
Unemployment Rate, OECD's countries

It is clear we cannot asses Mexico's labor market strength as well the labor conditions of its labor force by means of the sheer level of the unemployment rate. That rate is not the starting point to understand anything, rather it is the outcome of a complex interplay of multiple factors (Negrete, 2011): the absence of national unemployment benefits schemes; the persistent salary lag above mentioned; the important stream of migration to the US (which no doubt eased recently some pressure on Mexican labor markets); the dispersed population still important in Mexico which is strongly rooted in both subsistence agriculture and cottage industries (this means job seeking —a key feature in the unemployment definition— is something taking place mainly in the dynamic urban centers and less so in backward rural areas where job opportunities rarely came up).

No less important is the double role of informality: on one hand the informal sector as such is a survival strategy in producing goods and services in absence of unemployment benefits and also an alternative, especially for women, to be economically active combining household chores with labor in a way that is not accommodated by a salary job (unqualified part-time salary jobs in Mexico are rather rare given the remuneration level). On the other hand informal employment of paid dependent workers—mainly a masculine option-gives a touch of wild flexibility to the labor market dynamics. The very low level of Mexico's unemployment rate conceals all these factors. To understand fully the low unemployment rate requires taking into account the presence and size of informality in all its modalities: modern as well pre-modern.

Conceptual frame

The 17th ICLS (2003) set a classification mechanism to determine what part of employment is formal what other informal and under which modalities the latter cases are, so as to achieve a holistic classification of the labor landscape with no exceptions left. That mechanism is the so call Hussmanns Matrix

The underlying logic behind the H. Matrix. is to apply operational criteria depending on the status of employment.

- Independent workers are classified by enterprise based criteria. If the activity is a non-registered, non-criminal entrepreneurial activity then we identify individuals engaged in the informal sector.
- Dependent workers (either the jure or the facto) are classified considering whether or not their current employment relationship provides them or (in law or in practice) basic or standard employees guarantees. If lacking those guarantees they are informal labor, no matters if the economic unit is one of the informal sector, formal sector or household.

Now what is the common denominator in all this? Although never fully explicit in the foundation papers of the 17th ICLS, it is clear the informal concept in its broadest sense encompasses those forms of labor market insertion where risks are personal *stricto sensu*; not diffused nor buffered by any institutional way of protection. In other words the concept points to situations where certain economic insertion modalities do not provide persons with the basic or standard guarantees for either their transactions or labor relationships.

There are many reasons why this is so. The point is that the final outcome or situation ought not to be confused with whatever causes it (breaking the law; not knowing the law; blind spots in the law; ways to circumvent the law; new realities left behind the law, etc.).

The other point to highlight is that the informal concept becomes a practice or set of practices that, in principle, might be widespread all over the economy; no longer taking place only in a special part of it.

The challenge

In operational terms the aim is to fill out the H. Matrix cells with robust data. More specific is to distinguish informal employment components in order to make visible how much of the most vulnerable ways of labor insertion pertain to one way or another of informal insertion. It is worth mentioning that it is less difficult to identify informal employment in gross terms than to distinguish components or specific modalities such as the informal sector (the specific component encompassing non-register, non-criminal entrepreneurial activities). Employment gravitating around informal sector is not always easy to identify because it is based on enterprise characteristics,, namely the thorny issues of registration/type of accounts kept in conducting an activity (rudimentary ones are a clear signal of a typically informal sector activity)

•

Therefore the statistical approach (filling up the H. Matrix) runs in parallel alongside two tracks: situation of the worker and situation of the economic unit. How to coordinate two different approaches in a complementary way by no means is an easy thing.

There are many ways to do so. Each with its strength and weaknesses.

- Mousehold surveys (i. e. LFS)
- © Establishment surveys and censuses

- Mixed household and enterprise surveys
 - Mixed modular surveys
 - Mixed independent surveys
- Methods of indirect estimation
 - Residual balance techniques
 - Macro-economic estimation techniques

The LFS approach: Mexico's strategy

INEGI (Mex.) opted for this approach for three reasons specific to its LFS (ENOE).

- Sample size (120 thousand dwellings).
- © Continuity (Quarterly basis).
- Special design of its section 4, which includes questions on certain characteristics of the economic unit the person is working for in order to, give some inkling of its nature.

Among its strengths are the following:

- © Fills out the Matrix H cells in one stroke, each Quarter.
- © Yields statistical series amenable to both short term and structural data analysis.
- Makes easier any contrast against formal employment.
- © Gives all the socio demographic context of the individual as well on his household.
- Supply the labor matrix input needed by national accountants so to calculate the informal economy size (share of GDP) on an annual basis.
- No additional costs in collecting and disseminating data available at national level (including rural areas) as well at states (provinces) level.

Two potential weaknesses-though not insurmountable need to be taken into account:

- Proxy respondent (in some cases the person may not know or answer inaccurately questions on characteristics of the economic unit).
- The Industry structure of the Informal sector in particular at certain levels of disaggregation (i. e. beyond two digit level) should be taken with caution, because the sample of the LFS was not designed so to take into account that specific structure.

In this regard the sheer sample size of ENOE (LFS) provides for the use of statistical techniques in case of higher non response rate for some specific types of respondents (i.e. probabilistic Hot Deck) to infer the likelihood of informality based on the subset of households sharing the same characteristics where an unambiguous answer was obtained.

There are also ways to deal with intentionally wrong or misleading information. So for example with regard to the informal sector activity, the core question addressed is not if the economic unit is registered, nor directly the type of accounts, but if the services/advice of an accountant or a person with related experience has been required in conducting the activity. Given the intricacies of Mexico's fiscal system, it is rather difficult to be registered before tax authorities without taking this kind of advice.

There is also another probing question to correct the data which asks about the basic ways of keeping accounts.

Data on Employment

The approach taken yields timely data for the H. Matrix. In what follows data (millions) correspond to the second quarter, 2017. Rows are the type economic units; columns in green, status in employment (dependent, independent). Yellow cells are data for informal employment cases; golden, their consolidation in main components. Blue cells contain figures on formal employment; gray cells are either illogical combinations or the ones that by definition cannot accrue. Noteworthy is the golden column on the right side. Of total employment of 52.2 million; 29.5 are informal one way or another. From the latter 14.1 million corresponds to the informal sector There are other pre modern modalities (paid domestic services and peasant agriculture) however there are 7.2 million not protected workers, with no access by virtue of their jobs to health care systems and pension schemes operating for formal economic units.

Figure 1

H. Matrix, Second Quarter 2017 (millions)

Classification according to type of economic unit	Classification by status in employment											
	Paid dependent workers								Auxiliary		Total	
	Salary workers		Dependent workers not salary paid		Employers		Own account workers		non-paid workers		TOTAL	
	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal
Informal sector	3.92		0.79		0.88		7.50		0.98		14.08	
Paid domestic work	2.27	0.07	0.02	0.00							2.29	0.07
Corporations, Government and Institutions	5.72	18.84	0.89	0.21		1.15		1.66	0.60		7.20	21.87
Agriculture	2.41	0.38	0.15	0.02		0.37	2.46		0.91		5.93	0.77
Subtotal	14.32	19.29	1.85	0.24	0.88	1.52	9.97	1.66	2.49		29.50	22.70
Total	33.60		2.08		2.40		11.63		2.49		52.20	

Among 14.3 million informal salary workers (first yellow column on the left), almost 40 per cent (5.72 million) correspond to formal economic units broadly classified in three branches: unincorporated formal business¹; incorporated enterprises (societies, corporations) and non-profit Institutions (either public or private). Almost 73 per cent are concentrated in unincorporated small scale businesses coping with competitors in the domestic market. A not negligible more than

enterprise. A person operating as free-lancer could be another example. Strictly speaking only market oriented non- registered unincorporated enterprises are in the informal sector. Mexico's statistics take this distinction into account within the domain of unincorporated enterprises; many other countries simply ignore it when reporting informal sector data using a criteria solely based on small scale operation (i.e. less than 10

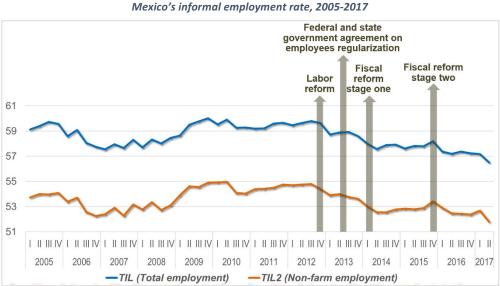
persons engaged in the activity) which is by no means conceptually rigorous.

1

¹ The term unincorporated in this context means that the activity is not constituted as an enterprise, that is, it does not have a foundational document of partnership agreement. However the tax system recognizes in many countries that there are either family or personal businesses that are registered without such a constitutive document. It is the case of a registered convenience store, an example of a formal unincorporated

900,000 (16.3 per cent) are linked with incorporated enterprises and what remains (10.7 per cent: more than 600,000) to non- profit institutions, even public ones. In case of the unincorporated business (for instance a convenience shop) it is possible that mutual arrangements between employer and owner take place so instead of paying employer's payments to social security part of it is given in cash to the employee. On the other hand (enterprises and institutions) triangular arrangements between brokers of labor services and the economic units end up in situations where neither take charge of social contributions. Other non- standard ways of paid employment such as seasonal workers might play a role as well.

The impact in the public realm of these data was felt from the beginning, triggering a sequence of reforms shown in the next graph. It is noteworthy that since they were put in place some decline in informal employment has occurred. The fact that the economic growth before and after were about the same (and average of 2.3 per cent) suggest this measures have had some effect.



Graph 3

The data so collected and disseminated are important not only for the final user but also as an input for national account purposes. ENOE provides the total mass of hour worked by sector (formal and informal) which combined with income coefficients from the income-expenditure surveys by status in employment and sector yields a labor account. The starting point to estimate what part of the residuals detected in the national account system -that is those levels of consumption not explained by registers on residents economic activities nor by household's indebtedness – can be allocated to informal transactions. The annual estimations gave to informal activities about a 23.6 per cent contribution to Mexico's GDP (2015); 11.3 per cent specifically to the informal sector; 12.3 per cent for the rest of informal modalities with most of the latter informal labor arrangements.

28 24 20 15.4 14.5 15.2 15.0 14.0 14.2 14.9 15.1 13.6 15.8 12.3 16 12 11.8 11.7 11.3 11.3 11.2 11.3 11.2 8 10.4 9.5 4 0 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Otras modalidades de la informalidad Sector informal

Graphic 4

GDP: informal shares

Summing Up

Mexico (INEGI) produces regular data on informal employment and its components with national coverage, distinguishing urban from rural areas and also available at state-regional level. All are disseminated on a quarterly basis.

Both sample size and special design of Mexico's LFS (ENOE) allow this, supplying as well the national account system the labor base required in order to achieve completeness and infer the size of the informal economy within GDP.

Informality is a key factor underneath Mexico's socioeconomic as well labor market landscape. About 56.5 per cent of total employment is informal one way or another. Of the total amount of 29.5 million people with this type of insertion in the economic activity, less than half (14.1 million) correspond to the informal sector (small scale unregistered entrepreneurial activities). Of the remaining employed, 2.3 million are paid domestic workers hired by households; 5.9 million peasant agriculture and 7.2 million is informal labor operating for formal economic units (5.7 m. salary workers). Altogether informal employment explains somewhere between a fifth and a fourth of Mexico's GDP.

Most of informal labor operating for formal economic units is allocated in either family or personal enterprises however registered, suggesting this is one small scale activities' strategy to cope with the domestic competitive environment of an open economy. However if less pervasive, the phenomena of loose or nonexistent obligations for some segments of their labor force is detected as well in both incorporated enterprises and non-profit institutions.

Coda: the Future

Given the conceptual frame, a key point for statistics on informal employment is the outcome of the ILO expert group in updating the classification of status on employment (ICSE). That it so because certain labor market insertion modalities such as dependent contractors could be classified as informal, insofar they are seen as *de facto* employees (thus lacking labor rights). On the other hand if they considered some sort of independent workers or self-employed, then everything is in order about them and, in that extent, part of formal employment.

De Jure and de Facto distinctions becomes more than ever a hot issue to deal with, creating an explicit tension between legalistic and non-legalistic ways of understanding informality.

References

- INEGI. (2003-2015). Measuring the Informal Economy. Obtenido de http://www.inegi.org.mx/est/contenidos/proyectos/cn/informal/default.aspx
- INEGI. (2005-2017). Labor Informality. Obtenido de http://www.beta.inegi.org.mx/proyectos/enchogares/regulares/enoe/
- International Labour Organization. (2012). *Measuring Informality: a Statistical Manual on the informal sector and informal employment*. Geneva: International Labour Office.
- Maloney F., W. (2004, July). Informality Revisited. World Development, 32(7).
- Moser, C. (1978). Informal Sector or Petty commodity Production: Dualism or Independence in Urban Development? *World Development, 6* (9-10).
- Negrete, R. (2011, enero-abril). El indicador de la polémica recurrente: la tasa de desocupación y el mercado laboral en México. *Realidad, Datos y Espacio. Revista Internacional de Estadística y Geografía, 2*(1).
- Tokman, V. (1978). An Exploration into the Nature of the Informal-Formal Sector Relationship. *World Development*, 6(9-10).
- Zaid, G. (1981). El Progreso Improductivo (Tercera ed.). México: Siglo XXI.