The Informal Sector and National Accounts in Algeria (2001-2010): Definitions, Measurements and Estimation Methods

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Abstract

We first explore all the Algerian statistical data collected on the informal sector, with a critical assessment upon the sources and estimation methods used. We estimate the share of the informal sector in total employment designing an equivalence table that allows an institutional divide, which fits national accounts. We also identify the characteristics of informal production units and their evolution over 2001-2010 from labour force surveys conducted by the National Statistical Office. First, we apply a one-dimensional then a multidimensional analysis, according to which the informal sector in Algeria accounts for over one third of total employment during the decade under review. These small production units, without premises or a facility specially designed for this purpose, operate in retail trade, hotels and restaurants, construction, the manufacturing industry and—transport and communication.

Keywords: Algeria; Employment; the Informal Sector; Multivariate (factor) analysis; National accounts.

JEL: J21, J29.

Secteur informel et comptes nationaux en Algérie (2001-2010): définitions, mesures et méthodes d'évaluation

Résumé

Nous recensons l'ensemble des données statistiques algériennes produites sur le secteur informel, avec une lecture critique de celles-ci à la lumière des sources et des méthodes d'estimation utilisées. Nous estimons la part du secteur informel en termes d'emploi grâce à l'élaboration d'une table d'`équivalence permettant de dégager un découpage institutionnel en termes de comptes nationaux. Nous identifions les principales caractéristiques des unités de productions informelles et leur évolution entre 2001 et 2010 à partir des enquêtes nationales sur l'emploi en coupe transversale réalisées par l'Office National des Statistiques. Nous mobilisons une analyse unidimensionnelle, puis multidimensionnelle (analyse factorielle des correspondances multiples). Durant cette période, le secteur informel en Algérie occupe plus du tiers de l'emploi total. Ces–unités de production de petite taille, opérant en dehors d'un local ou d'un établissement professionnel spécialement prévu à cet effet, exercent leur activité dans le commerce, l'hôtellerie-restauration, la construction, l'industrie manufacturière ainsi que les transports et communications.

Mots clé : Algérie, analyse factorielle des correspondances multiples, comptes nationaux, emploi, secteur informel.

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Introduction

Algeria has been involved in the conferences that resulted in the adoption of definitions on employment and the informal sector; it has devoted some means for data collection on the informal sector according to definition criteria. However, knowledge remains scarce and still unclear; the challenge is get the most comprehensive and reliable measurement of this sector

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that is quite large Algeria has experienced a context that proved favourable to the informal sector. After Independence and until the mid-1960s, employment did not change much, resembling small and modest industrial activities of the colonial type. From 1967, an industrialization policy was initiated thanks to the combination of rising oil revenues and a thorough investment process, especially in priority sectors, undertaken by the State as only decision-maker. This policy reduced the unemployment rate and created tension on the skilled labour force at all levels. By the late 1970s, black market had expanded due a gap between supply and demand for many goods; it consists in purchasing products at administered prices and selling these at (black) market price. The informal sector may then be considered as a response to the imbalance on the goods market with respect to price rigidity and shortage in supply.

Taking advantage of the upturn in oil prices in the early 1980s, rising real household incomes triggered an increase in demand for goods and services. In as much as this demand could not be satisfied with domestic supply, albeit imports from the public sector were also on rise, illegal retail trade -the so-called "*trabendo*" (suitcase trade from foreign countries) increased together with the "parallel" market for exchange rate (Henni, 1991).

The implementation of economic reforms in the early 1990s paved the way for a growing trend in the private sector, which included an increasing number of self-employed, casual employees, family helps and apprentices, usually performing precarious jobs, mainly in the informal sector. Thousands (38000-45000) of registered importers shared a whopping $ 4.5 billion per annum (Hammouda 2006) and took over the informal sector.

Our paper investigates how large is the share of employment in the informal sector outside agriculture in the national accounts, according to the recommendations of the Delhi Group. In this connection, we design a table allowing the transformation of the typology issued from questionnaire surveys into the national accounting system.

We start with a literature review of the empirical studies that have focused on the definition and estimation of the informal sector in Algeria. We identify all sources of statistical information that can be used for estimating the informal sector. We discuss the relevance of some indicators we use to estimate the informal sector. Eventually, we analyse the characteristics of informal units of production.

1. An overview of empirical studies on the informal sector in Algeria

Bernard (1980, 1988 and 1992) shed light on the importance of small trade activities and non-standard forms of employment (family helps, apprentices, home work and multiple job holding). The first study on the estimation of the informal economy dates back to the late 1980s, when the CENEAP tried to measure the extent of what was then called the unorganized or informal sector (Charmes, 1988) and organized a conference on this topic in 1989. Henni (1991, 1994) has focused on the underground or shadow economy, providing macroeconomic assessment from money flows in circulation; he pointed out that the existence of a parallel (or black) market is due to the existence of an administered market.

Bounoua (1995, 1999 and 2002) analysed the transition process of Algeria to the market economy in the late 1980s. He noted that further reforms to eliminate existing informal practices during the period of the planned economy drove the amplification of informality in both the private sector (absence of billing, fraud and tax evasion, etc.) and the public sector (embezzlement of public funds, corruption, etc.), describing this situation as an "extending illegal economy."

As for estimating the informal economy, the first contribution was conducted by Lakehal and Ali Bacha (1994), followed by the World Bank report (Ighilahriz, 1997), Kelkoul (1998),

Hammouda (2002, 2006), Adair (2002), Adair and Bellache (2008) and Adair and Bellache (2009). Zidouni (2002, 2011) specifies the indirect methods used by national accountants to ensure their inclusion in the measurement of GDP. In 2004, CREAD organised a conference on employment in the Maghreb countries, the papers of which were published in a book (Musette and Charmes, 2006).

In March 2012, the Ministry of Commerce and CARE (Club d'Action et de Reflexion sur l'Entreprise), organised the first symposium on the informal economy in Algeria, the title of which prefigured the discussions of the 2014 International Labour Conference on "the transition of the informal economy to the formal economy" (BIT, 2014).

Charmes and Remaoun (2014) recall the origins of the concepts and definitions of the informal economy; they have computed several estimates from various data sources of employment in the informal economy in Algeria and its components, and they measured its contribution to GDP from the national accounts data. They estimate the informal sector contributes 30.4 per cent of non-agricultural GDP and 27.1 per cent of total GDP in 2003.

2. Methods of direct observation of the informal sector

Since the invention of the informal sector concept in 1972, statisticians are struggling to refine their statistical definitions of the sector and develop appropriate survey methodologies. Direct methods, reliable and with a little cost for data collection were developed hinging on the main types of surveys: the household survey that collects direct information from individuals, investigations with institutions and joint investigations or two phases.

2.1. Household surveys

2.1.1. The Population Census (RGPH)

This source is not very useful to gauge the informal sector. However, indirect comprehensive information on housing allows national accountants to design estimates for self-construction.

2.1.2. Labour Force Surveys

These specialised sample surveys are conducted among households. Statistics on employment are subject to the definitions recommended by the ILO. This type of survey is conducted by the National Statistics Office (ONS) in Algeria almost every year since 1982. Questions regarding secondary employment have always been included, but due to the small numbers involved (between 100,000 to 200,000 according to surveys), their treatment is not systematic. Special attention is given to female employment in 1985. In 1992, a better capture of the informal economy is supported by including some additional items in the questionnaire: the size of the establishment, the status of the institution, and the administrative and tax registration. However, the questionnaire surveys change overtime, which makes uneasy a comparison (See Table A1 in Appendix).

2.1.3. Income Surveys

These surveys are conducted to estimate household's expenditure and incomes. Employment is included in a relatively detailed manner. This kind of surveys is conducted once every ten years. The confrontation of available goods for final consumption, and / or imported by formal enterprises with the quantities consumed by households can identify the value of expenditure in the informal economy. In 1988, a question about the place of acquisition was explicitly included and it allowed to quantify the turnover of informal trade.

2.1.4. Living Standards Measurement Survey

This type of survey - LSMS 95(ONS, 1995) and CENEAP (2005) - is designed to answer many questions about the behavior of households as regards consumption and production as

well as savings and investment. These surveys can shed new light on the informal sector in Algeria. However, they pose a problem of comparability with the labour force surveys in as much as they do not share the same methodology (See Table A1 in Appendix).

2.2. The Establishment Surveys

2.2.1. The Economic Census

In 2011, the first economic census was conducted in Algeria in order to acquire better knowledge on the structure and evolution of the Algerian economy including the informal economy (ONS, 2012). Statistical design targeted all private and public economic sectors operating with premises, regardless its formal or informal status excluding the agricultural sector. Questions on administrative registration (NIS[4], NIF[5], etc.) bookkeeping and the size of the business were included to estimate the share of the informal economy. However, ONS has not identified certain businesses that do not depend on premises or workshops, in particular in transport and the construction industries.

2.2.2. Business surveys

This type of survey is focusing on the production of goods and services. It usually takes place once in a year. An aggregate component on employment is inserted in the questionnaire survey. It captures better the distribution of employment by industry, but not much about the informal production (ONS, 2014).

The ONS also conducts another investigation once in a year on businesses focusing on wages (ONS 2011). A national sample of public and private companies is surveyed with a questionnaire sent by post office. It investigates all economic activities excluding agriculture and the administration. The objective is to determine the level of net monthly wages and the gross salary structure (base salary, bonuses and allowances) for all staff by activity and qualification of legal public and private sectors.

In recent years (ONS 2014), the ONS also conducted a few light surveys covering several areas that are not covered by usual surveys, focusing on the situation and outlook in the manufacturing and trade industries. These opinion surveys collect qualitative data from business leaders that are not quantified.

2.3. Two phases mixed surveys

These are mixed surveys on households and businesses; specifically designed to measure the volume of the informal economy and provide detailed information for different types of long-term informal activities. They are carried out in two phases. During the first phase, informal sector businesses and their owners are identified thanks to the population census (household survey). During the second phase, a sample of business owners is selected and a questionnaire collects information on the characteristics of their business (establishment survey). It is important to shorten the maximum interval between the two phases of the investigation.

The advantage of these surveys is to combine different observation units: households and their members, on the one hand and the informal sector entrepreneurs and businesses on the other hand. However, these investigations cannot be conducted frequently given their size, complexity and the high costs incurred for their achievement. Unfortunately, this kind of survey has never been conducted in Algeria, although the ONS developed a technical dossier in July 2000 with the collaboration of Ministries of Labour and Social Welfare and that of SMIs-SMEs. This investigation should be coupled with the 2000 survey on consumer

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[4] Statistic registration number.
[5] Tax registration number.

expenditure, which was completed in March 2001.

3. Cut into institutional sectors of the labour market in Algeria

3.1. Institutional Sectors

The basic problem of the informal sector in the economic analysis of developing countries lies in the fact that this concept did not integrate macro-economic issues at first. The surveys used described the characteristics of the informal sector, but they could not grasp its dynamics.

The need to introduce the informal sector in the national accounts was emphasized since the early 1980s (Charmes, 1982). The thirteenth and fourteenth International Conferences of Labour Statisticians have focused on the development of methodologies and definitions for identifying the labour force employed in the informal economy. This term is also revised on the fifteenth International Conference in 1993 (BIT, 1993). The objective set by these attempts was to arrive at an operational statistical for the sector informal and its inclusion in the national accounts according to the United Nations System of National Accounts (SNA).

3.2. Choosing a criterion

The economy as a whole includes all resident units that belong to five institutional sectors: The non-financial corporate sector; the financial corporations sector; the government sector, including public administrations and social security funds; the sector of non-profit institutions serving households; the household sector, including unincorporated enterprises owned by households.

The informal sector belongs to the latter category with respect to unincorporated enterprises, regardless they are owned by a sole proprietorship or more individuals from the same household, as well as associations of persons and unincorporated cooperative societies, founded by individuals from different households, provided that these entities do not have a complete set of accounts. An informal business is a production unit, which is not incorporated as a separate legal entity that provides a means to identify the flows of income and capital between the company and its owners.

Although we can consider all the informal sector enterprises as individual businesses owned by households, all do not belong to the informal economy. This brings in the issue of a partition criterion to differentiate individual companies from the formal and informal sector. So far, experts have focused on three commonly used variables: the size, social security registration and tax registration of these production units (Roubaud, 1994, p. 86).

3.2.1. Size of the enterprise

The size criterion is used in most national statistical definitions of the informal sector (BIT, 1993, p. 39). A characteristic that can be measured easily in a variety of investigations, because it is comparable over time and across countries.

According to the ILO (1993), the number of permanent employees would be the ideal measure of size. However, information on the total number of employees, especially on the number of persons employed may be more easily obtained from respondents than upon the number of permanent employees.

A general problem is the choice of the upper limit for the identification of small business employers. There are considerable differences between countries and industries with regard to the definition of small business. In order to allow users to compare data from the informal sector across various countries and / or various industries as well as with those of the formal sector, it is recommended to classify units according to categories of standardized workforce,

i.e. 1-4, 5-9, 10-19, etc., employed (BIT, 1993, p. 40). It could be determined using a normative approach based on legal requirements for the size of the units.

However, size is not very relevant, because it is not commensurate with the legal form that governs the definition of institutional sectors. A micro enterprise can be a formal individual company (e.g. the professions) or belong to the informal sector.

3.2.2. Social security registration

The registration to social security does not seem good enough a criterion to define the informal sector, because it does not remove the ambiguity between informal employment and informal economic units. The duality of internal labour markets is a characteristic of the recent trend of a more flexible labour market in Algeria (Souag and Hammouda, 2007) and some public companies also use such flexibility. It would not be appropriate to classify these enterprises in the informal sector, on the grounds that some of their employees do not benefit from legal social security coverage.

Currently, informal employment is defined according to the characteristics of employment (social security coverage, work contract, etc.), and the informal sector is defined according tos the characteristics of the economic unit within which the worker is occupied (BIT, 2003).

3.2.2. Tax registration

We believe it is better to adopt a criterion based on administrative registration (for instance, tax registration) or statistical identification. Actually, all economic activity must necessarily be declared to the tax authorities under one scheme or another. In addition, it links the production unit to the legal form within which it operates. Moreover, the tax regime governing each company gives is a key to partition between institutional sectors. Hence, this criterion has a statistical significant advantage; it enables the distribution of production units in an institutional sector or another. With a legal personality, the company belongs to the corporate sector. When it does not have legal personality, either it meets its tax obligations (tax on turnover or lump tax) and will be classified as a formal individual company, or it is unknown in tax records, and it will be identified as an informal individual company.

Since 1992, labour force surveys allow better input tax registration with a series of questions as regards taxation, computability and the registration form of the company. However, they only target the employers and self-employed.

3.3. Estimation of the informal sector in Algeria

3.3.1. A tentative equivalence table for designing institutional sectors

In Algeria, it was only in the mid-1980s that statistical estimation of the informal sector was discussed (Souames, 1984). In 1989 a seminar on the informal sector was organised in Algiers by CENEAP with ILO experts and the participation of countries in the region. For the first time national accounts introduce imports without payment (ISP) for the year 1989. But no definition was adopted officially and no statistical survey on the informal has been conducted.

Since 1992, the ONS has introduced some items in the questionnaire survey for measuring employment in the informal sector and informal employment. We focus on the question about the institutional sector, which had four possible answers: non-financial corporate sector; the financial corporations sector; the government sector and non-profit institutions sector; the household sector. It was a direct projection of the institutional sectors classification. From 2005, this question has been removed from the questionnaire survey and there is only one question on the legal status of the institution with three possible answers: public, private or

mixed. The differences in delimitation of the two series of questions, lead us to design an equivalence table[6].

Merging public and private capital as well as the size and main activity of the company, we design five distinct categories of institutional sectors from the SNA and surveys before and since 2005 (See Table 1).

Table 1. A tentative equivalence table for designing institutional sectors

Institutional sector from the surveys before 2005	Institutional sector from the SNA	Institutional sector from the surveys since 2005	Our proposal
Public administration	Public administration	Size of enterprise	Public administration
Non-financial corporations and quasi-corporations	Non-financial corporations and quasi-corporations	Sector of activity	Public economic sector
Financial institutions	Financial Institution	Legal sector	Large private firms
Individual enterprises	Individual enterprises Unincorporated enterprises	---	Formal SMEs Informal SMEs

Source: Authors

3.3.2. Estimation

We first extract workers in public administration, and those in the public economic sector. Then we distinguish between those working in large private enterprises and those working in small and medium enterprises (SMEs). Finally, we separate between formal and informal SMEs based on two criteria: As for self-employed, all workers who do not have any administrative registration are informal; as for employees, all the enterprises employing less than five employees are informal.

In 2010, from nearly 9.74 million workers occupied (8.60 million excluding agriculture), 3.28 million (2.66 million excluding agriculture) are employed in the informal sector. During the 2001-2010 decade, the share of informal employment in SMEs varied between 33.7 per cent and 37.6 per cent in total employment in 2010; 26.7per cent and 31.5per cent in non-agricultural employment (See Table 2). Public employment has declined steadily since 2001, peaking below 35 per cent of total employment in 2010 and this trend is not accompanied by a dynamics of employment in large private enterprises (not even 2 per cent in 2010). In contrast, there is a dramatic rise in employment of the formal SMEs. Its share rises by almost 10 points between 2001 and 2010, from 20.2 per cent for overall economy (18.6 per cent excluding agriculture) to 30.3 per cent (28.9 per cent excluding agriculture).

Table 2: The employment share by institutional sector, in percentage points.

	2001		2006		2010	
Institutional sector	Overall economy	Excluding agriculture	Overall economy	Excluding agriculture	Overall economy	Excluding agriculture
Public administration	28.5	36.9	22.7	27.8	25.8	29.2
Public sector enterprises	11.9	14.6	8.5	10.1	8.6	9.2
Large private enterprises	2.6	3.2	1.1	1.3	1.6	1.8
Formal SMEs	20.2	18.6	30.0	29.3	30.3	28.9
Informal SMEs	36.8	26.7	37.6	31.5	33.7	30.9
Total	100	100	100	100	100	100

Source: Authors from the ONS data base for 2001, 2006 and 2010.

4. A typology of the labour market in Algeria

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[6] Roubaud (1994, 119) has developed such a table for Mexico. However, it does not separate corporations and quasi-corporations in the financial industry (bank and insurance companies) from non-financial corporations and quasi-corporations.

We use a two-step analysis to identify the informal sector on the labour market. First, we identify the physical characteristics of the production units using a one-dimensional approach. The second steps is devoted to a multidimensional analysis that takes into account all characteristics of the units.

4.1 One-dimensional analysis

Between 2001 and 2010 (See Table A2 in Appendix), agriculture in Algeria is the sector wherein the share of informal sector employment is the highest: over 50 per cent of agricultural employment is in the informal economy. Although this share decreased over the decade from 71 per cent to 54.8 per cent, agriculture remains a key sector where the intensity in informal sector employment exceeds 50 per cent, followed by trade, hotels and restaurants, construction, manufacturing and eventually the transport and communication industries. The informal sector is less present in the public, social and personal services, in the financial and real estate activities and, at last, in the electricity, gas and water industries..

As for size, the informal sector is most common in small businesses up to nine employees (See Table A3 in Appendix): nearly 70 per cent of these units are informal. In 2001, the informal sector consists entirely in small businesses, whereas in 2006 and 2010, it is a major share. In contrast, in companies with at least 10 employees, the share of informal sector is below one per cent throughout the decade.

As for the workplace (See Table A4 in Appendix), almost all the home business is informal and over 57 per cent of businesses that do not operate within premises specifically designed for this purpose are informal. These companies represent over 60 per cent of the informal sector, while the home businesses account for 11.8 - 14.9 per cent of the informal sector.

4.2 Multidimensional analysis

We complete our descriptive analysis by Multidimensional Correspondence Analysis (Lebart et al, 1995), to identify the nature of relationship between the institutional sector and the characteristics of establishments.

The variables used are those analyzed in the previous analysis: the size of the company, activity sector`s, the institutional sector and workplace. The projections are made for the years 2001, 2006 and 2010 and they are illustrated in Figures 1, 2 and 3.

The first factor axis positions the modalities for the institutional sector according to descending ranking of informality. It begins with informal and formal SMEs, large private companies, the public economic sector and public administration. This is the axis of informality. In addition, this axis distinguishes between two production unit categories: SMEs whatever their formal or informal status and other production units. It combines some characteristics such as premises, home-based activity, staff below five employees, 5 to 9 employees, manufacturing, trade, transportation and the construction industries; these formal and informal SMEs are opposite to public administration, the public and large private sector companies that encapsulate other characteristics such as premises, staff over 10 employees, public services, extractive industries, electricity, gas and water, and financial and real estate activity.

The second factor axis disaggregates between formal and informal SMEs. It associates to informal SMEs the following characteristics: less than five employees, home-base activity and the manufacturing industry; the formal SMEs are assigned other characteristics such as staff from five to nine employees, without premises and the construction industry.

Conclusion

Our paper has identified all the data sources that could be used for estimating the informal sector in Algeria. It then uses one source to identify the main features of informal production units during the period 2001-2010.

The basic problem in Algeria is that the informal sector is not included in the national accounts over 2001-2010. Labour force surveys conducted before 2005 allowed its inclusion in the national accounts, whereas later surveys did not allow for such inclusion. Hence, we have designed a table, which enables the transformation from the survey typology into an institutional distribution that is consistent throughout the decade, which can be used to compute the share of the informal economy in national accounts for any year.

Using data collected by the ONS from 2001 to 2010 and on the basis of our descriptive analysis, we conclude that the informal sector in Algeria seems to occupy a large fraction of employment. It mainly consists in small production units operating without premises in the trade, hotels and restaurants, construction, manufacturing, and transport and communication industries.

Thanks to a multidimensional analysis, we shed some light upon the characteristics of informal employment and their evolution over the decade under review.

In our work in progress, we address the reasons to be for informal employment, especially whether it is a voluntary choice or the outcome of labour market segmentation.

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Appendix

Table A1. A comparison of labour force surveys methodologies from 1997 to 2010

Years	1997	2001(A)	2001((B)	2002	2003	2004
Sample (households)	6,457	6,923	6,360	6,596	6,457	14,847
Base of survey	RGPH 87	RGPH 98	RGPH98	RGPH 98	RGPH98	RGPH 98
Reference period	Last week in September	Last week in September	Last week in December	Last week in March	Last week in September	Last week in September
Size of establishment	Self-employment	All occupied	All occupied	All occupied	All occupied	Self-employment
Status of establishment	All occupied	All occupied	All occupied	All occupied	All occupied	All occupied
Workplace	All occupied	All occupied	All occupied	All occupied	All occupied	All occupied
Administrative registration	Self-employment	Missing question	Missing question	Missing question	Missing question	Missing question
Tax registration	Self-employment	Missing question	Missing question	Missing question	Missing question	Self-employment
Accounting	Missing question	Missing question	Missing question	Missing question	Missing question	Self-employment
Social security	All occupied	All occupied	All occupied	All occupied s	All occupied	All occupied
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Sample size (households)	14,939	14,323	14,866	14,000	14,000	14,592
Base of survey	RGPH 98	RGPH 98	RGPH 98	RGPH 2008	RGPH 2008	RGPH2008
Reference period	Last week in September	Last week in September	Last week in September	Last week in September	Last week in September	Last week in September
Size of establishment	Self-employment	All occupied	All occupied	All occupied	All occupied	All occupied
Status of establishment	Missing question	Missing question	Missing question	Missing question	Missing question	Missing question
Workplace	All occupied	All occupied	All occupied	All occupied	All occupied	All occupied
Administrative registration	Self-employment	Self-employment	Self-employment	Self-employment	Self-employment	Self-employment
Tax registration	Self-employment	Self-employment	Self-employment	Self-employment	Self-employment	Self-employment
Accounting	Self-employment	Self-employment	Self-employment	Self-employment	Self-employment	Self-employment
Social security	All occupied	All occupied	All occupied	All occupied	All occupied	All occupied

Source : Authors

Table A2. Employment in the informal and formal sector by industry, in percentage points

	2001			2006			2010		
		Informal	Formal		Informal	Formal		Informal	Formal
Agriculture	71.0	43.7	10.4	64.9	31.6	10.3	54.8	19.0	7.9
Extractive industries	8.4	0.4	2.5	4.0	0.2	2.3	3.4	0.2	2.9
Manufacturing	44.4	12.4	9.0	50.5	15.8	9.3	46.0	14.2	8.5
Electricity, Gas and Water	0.8	0.0	2.3	2.1	0.1	1.7	3.5	0.1	2.0
Construction	39.6	11.8	10.5	40.3	15.3	13.7	47.6	27.4	15.3
Trade, Hotels and Restaurants	58.0	22.7	9.5	53.6	24.3	12.7	50.8	25.4	12.5
Transport and Communication	40.0	4.6	4.0	39.5	7.0	6.5	35.3	5.8	5.4
Finance and Real Estate	3.7	0.1	2.2	5.0	0.1	1.5	1.9	0.1	1.3
Public, social and personal services	4.8	4.3	49.6	7.4	5.6	42.0	8.3	7.9	44.1
Total	36.8	100	100	37.6	100	100	33.7	100	100

Source: Authors from the ONS data base for 2001, 2006 and 2010.

Table A3. Employment in the informal and formal sector by size, in percentage points
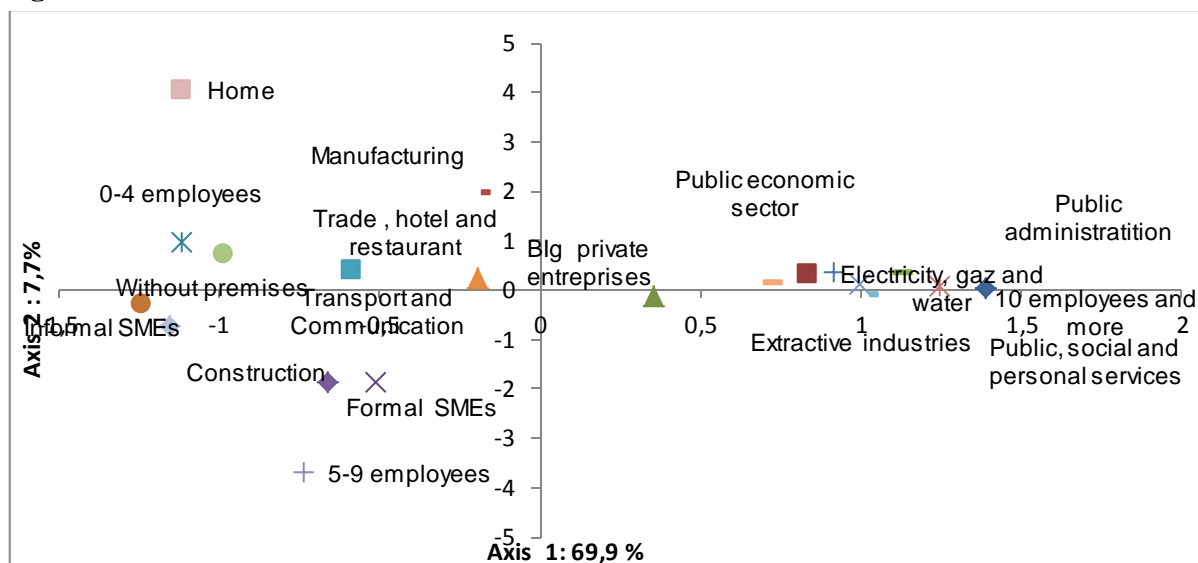
	2001			2006			2010		
Excluding agriculture	%	Informal	Formal	%	Informal	Formal	%	Informal	Formal
0 - 4 employees	73.2	100	13.4	68.5	99.2	21.0	71.4	98.0	17.9
5 - 9 employees	0.0	0.0	7.5	0.0	0.0	12.4	4.4	1.2	12.1
10 employees and +	0.0	0.0	79.1	0.5	0.8	66.7	0.5	0.8	70.0
Total	--	100.0	100.0	--	100.0	100.0		100.0	100.0

Source: Authors from the ONS data base for 2001, 2006 and 2010.

Table A4. Employment in the informal and formal sector by workplace, in percentage points

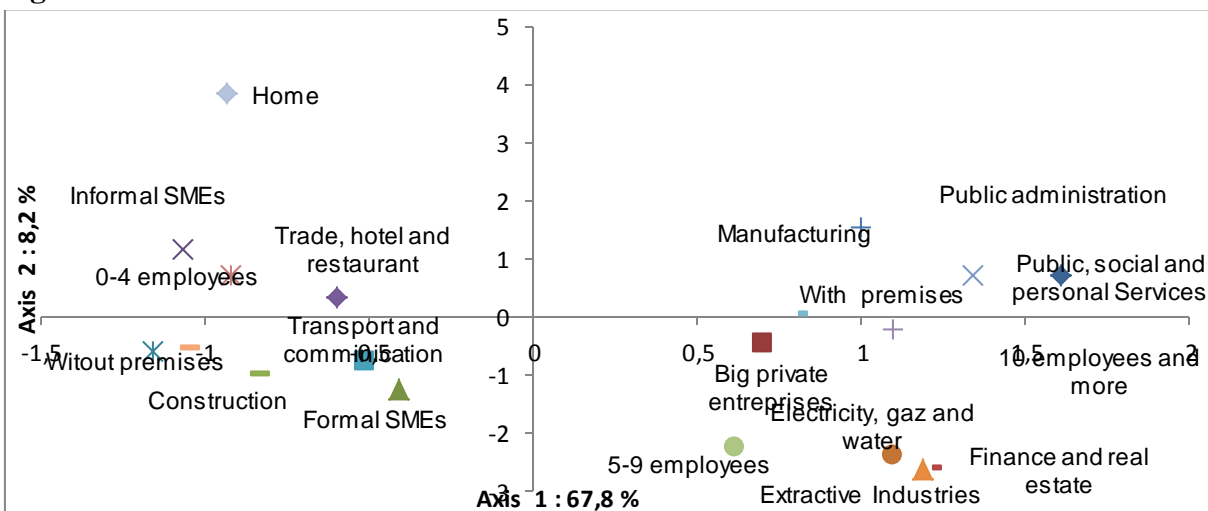|	2001			2006			2010		
Excluding agriculture	%	Informal	Formal	%	Informal	Formal	%	Informal	Formal
With premises	15.0	24.8	81.5	13.4	19.0	73.8	12.4	20.8	75.0
Without premises	66.8	63.5	18.3	60.7	66.1	25.9	57.5	64.9	24.4
At home	98.0	11.8	0.1	96.8	14.9	0.3	92.8	14.2	0.6
Total	--	100.0	100.0	--	100.0	100.0		100.0	100.0

Source: Authors from the ONS data base for 2001, 2006 and 2010.

Figure 1. Main characteristics of the informal sector in 2001.

Source: Authors from the ONS data base for 2001, 2006 and 2010.

Figure 2. Main characteristics of the informal sector in 2006
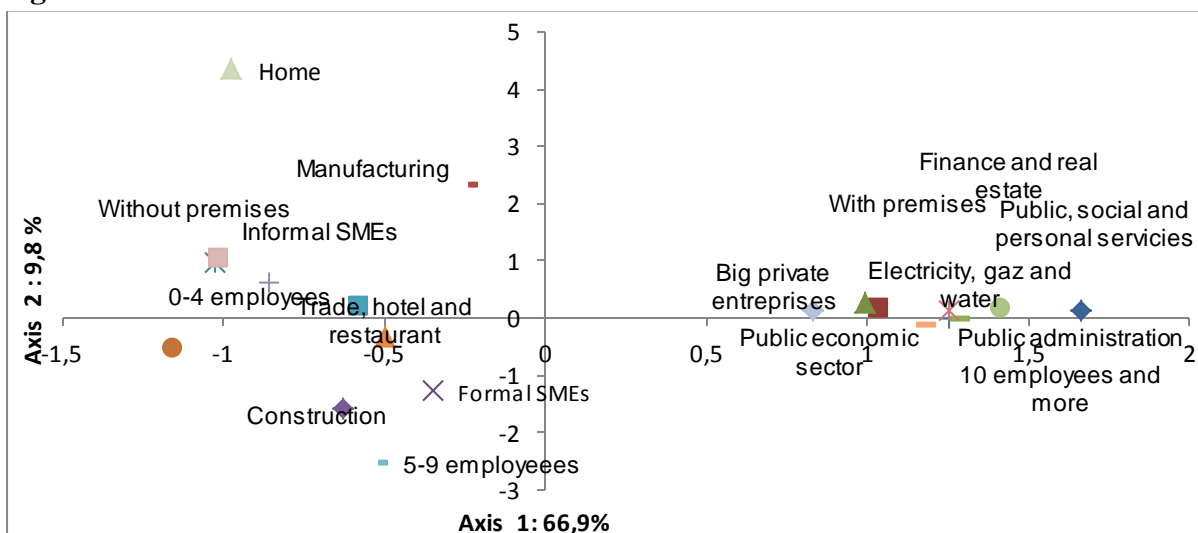
Source: Authors from the ONS data base for 2001, 2006 and 2010.

Figure 3. Main characteristics of the informal sector in 2010

Source: Authors from the ONS data base for 2001, 2006 and 2010.