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Chapter 12. Industrialisation and new forms of employment in Tunisia

(Contribution to the Re-conceptualising work project)

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Tunisia is often acknowledged as a new industrialising country, with a large part of the workforce in wage employment and in manufacturing industries. Free export enterprises have for long mushroomed in the country which is also known for a legal framework and policies addressing the status of women. Among Arab countries which are characterised by low female economic participation rates, Tunisia is also one which made the most continuous efforts to improve the measurement of informal sector activities and especially women's activities.

Surprisingly however, the counter-cyclical behaviour of informal sector employment (i.e. its increase when economic growth slows down or becomes negative and its increase in periods of rapid economic growth) which was observed in the early decades of post-independence did not continue over the past decade and the country experienced a dramatic growth in informal employment in parallel with a rapid industrialising process. As a matter of fact Tunisia provides observers with an interesting case study with regard to informal sector employment and informal employment, two concepts which were defined by the 1993 International Conference of Labour Statisticians (ICLS) for the first one and by the recent International Labour Conference in 2002 for the second one (ILO, 1993a and b and 2002).

The present structures of Tunisia economy and the trends it has experienced are the results of four decades of development which are characterised by a variety of economic policies alternatively sequenced over time, showing evidence of a high degree of adaptation and of a strong orientation towards sustainable growth.

After a brief reminder of the recent economic history in Tunisia (section 1), we will then examine the recent trends of the Tunisian labour market compared to the other Maghreb countries (section 2) and the potentials and weaknesses of the present Tunisian economy with special emphasis on female employment and informal employment (section 3) in order to show that the economic growth of the past decade has been richer in terms of creation of informal/unprotected jobs by the formal sector rather than in terms of sustainable employment in the informal micro-enterprises sector.

1. The 4 decades of development and growth of Tunisia economy.

In the early 1960s, Tunisia embarked in import-substitution industrialisation policies which were meant to lead to more and more state interventions and were about to involve Tunisia into a socialist experience (with the generalisation of a co-operative system). Abruptly interrupted at the end of 1969, this stage of economic development strategies which frightened the private sector, especially but not only in agriculture, was replaced by a new stage where the economic policy is openly and strongly oriented towards the private sector, together with strong state interventions to protect the domestic industries from foreign competition.

During this second period, in the 1970s, Tunisia experienced its highest annual growth rates: 8.5 percent per year from 1971 to 1976: the establishment censuses of 1976 and 1981 showed that more than half of the existing establishments at the date of the census had been created in 1970-1971 and were still operating 6 and 10 years later. The beginning of the 1970s remains as an exceptional landmark which has seen an extraordinary liberalisation of market forces and resulted into a huge basis of small, micro and intermediary enterprises which founded the future of Tunisian economic growth: the average investment rate reached 25 percent of GDP, especially in the manufacturing sector, of which more than 80 percent were covered by national savings. At the end of the decade, the annual growth rate was still as high as 6 percent. But signs were appearing that this type of growth was getting out of breath.

The slow down of economic growth in the mid of the 1970s is due to, and results into, major macro-economic disequilibria: budgetary deficits, increased subsidies for basic food consumption goods and increasing unemployment rates led the government to call for the support of IMF and to accept the usual recommendations of structural adjustment programmes. Promotion of exports, de-subsidised prices, increased productivity, frozen wages, downsized civil service and public enterprises were the new objectives of economic policies implemented since 1983 but it was only in 1986 that the government applied the drastic measures imposed by the international financial institutions and even incorporated them into the national 5-year plan. Furthermore these years were characterised - just like the 1960s – by bad agricultural crops and the decade of the 1980s has been one of the worst for the Tunisian economy. The annual growth rate dropped down to 3 percent and if the investment rate was still at 28 percent of GDP, it was not well allocated and did not benefit to manufacturing industries nor to agriculture. The unemployment rate started to grow and went beyond two-digit.

The new political economy which starts in 1986 consists in the re-establishment of market mechanisms, the liberation of internal and external trade and the encouragement of the private initiative. The option is chosen to take advantage of the globalisation process, to join the World Trade Organisation and, more recently, to sign a free-trade agreement with the European Union (1995). Tunisia which makes more than 80 percent of its exports and more than 75 percent of its imports with the EU, resolutely embarks into a neo-liberal export-led growth policy. The 1990s take up with growth again (4.7 percent in average for the whole decade) allowing a 3 percent average annual growth rate for the GDP per capita, and the beginning of the years 2000 are even better (6.2 percent in average for 2000-2004).

Table 1: Performances of Tunisia economy 1961-2004 (average annual growth rates).

Years	1961-72	1971-76	1973-76	1977-81	1980-90	1982-86	1987-91	1990-00	1992-96	19972001	1999	2000	2000-04
GDP	4.6	8.5	5.6	6.3	3.3	2.9	4.2	4.7	4.6	5.3	6.1	4.7	6.2
GDP per capita					0.8			3.0			4.7	3.4	4.8
Exports of goods and services					5.6			5.1			4.7	6.6	5.7

Sources: World Bank, 2002, Tunisia at a glance (for the period 1980 and after). Ministries of Planning and Economy.
Note: Decades and cycles are distinguished by the colours.

The years 1990s are placed under the sign of the free trade agreement with the EU: all services were to liberalised within 5 years, and all manufactured products within 12 years (in particular textiles will be de-protected with the end of the Multifibres agreement in 2005). The whole economy is put in the situation of ‘upgrading’ to reach the standards of European markets. Enterprises must become competitive in terms of prices, quality, innovation, technology and markets. Special efforts are devoted to the modernisation of enterprises, and also their environment (transport, security, reliability): training, simplification of administrative procedures, support to private enterprises. In 2001 the country became the 4th provider of EU for clothing, thanks to sub-contracting agreements with major multinational corporations. The enlargement of the European Union to Central and Eastern European countries threatens however policy-makers and economic operators who fear the diversion of foreign direct investments towards this new European frontier and the inability of national enterprises to compete with a high-skilled and low-paid labour.

However Foreign Direct Investments (FDI) have remained at a disappointing level in Tunisia, despite continuous efforts from the government to promote them: as a matter of fact, the rapid increase observed in the second half of the 1990s is due to privatisation (frozen for a long time because of reluctance from the State), especially in cement factories. FDI represented only 6 percent of the value added in the manufacturing sector in 2000 (the manufacturing sector representing itself 65 percent of total FDI, FDI 15 percent of total investment in the country and garment-clothing industries 1/3 of FDI in manufacturing).

In such a context of ‘enlargement’, ‘upgrading’ and priority given to exports, the informal sector is now much further from the concerns of political and economic authorities than it was in the 1970s and in the 1980s. However, due to the size of its internal market, Tunisia has always kept a glance at the micro-enterprises and has for long designed support policies for them. And indeed, the micro-enterprise sector represents an important share of total employment in the country.

2. Trends in the Tunisian labour market.

The levels of unemployment have always been high in Tunisia as well as in the two other Maghreb countries (Algeria culminates with nearly 30 percent in 2000, and Morocco has a rate of 13.6 percent this same year). Since the end of the 1980s when it reached the level of 15 percent, the unemployment rate has approximately remained the same. Since then, the National Institute of Statistics calculates the official rate for the economically active population of 18 to 59 years old.

Table 2: Trends in unemployment rates, 1975-2001.

Unemployment rate	1975	1980	1984	1989	1994	1997	1999	2000	2001
18-59 years old			13.1	15.3	15.6	15.7	15.8	15.6	15.0
15 years old and over	15.7	13.6	16.4	16.2	16.3	15.9	16.2	15.9	15.3

Sources : National Statistical Institute, population censuses and labour force surveys, various years.

Several factors can explain such levels in a country where there are no unemployment benefits and where, as a consequence, the unemployment rate is rather an indicator of underemployment.

Firstly, agricultural employment represents less than 1/4 of total employment (see table 8 hereafter) so that the agricultural sector does not play its role of labour surplus absorption any more, contrary to Morocco where it still accounts for nearly 50 percent of total employment while the unemployment rate at national level is lower by 2 to 3 percentage points.

Secondly, the labour force is more and more educated: more than 40 percent of the occupied have completed the secondary level and among them, nearly 10 percent have completed a higher education level (table 3): progress since 1966 and 1975 has been tremendous. As a consequence, the expectations of the workers are relatively high in terms of the quality of the jobs they are seeking for, so that the ‘declared’ unemployment is comprised of a rather important component of underemployment: many young graduates are not satisfied with their current jobs which do no fit with the qualifications they have acquired in the educational system, but due to the new orientations of economic policies, the State is no more in a position of creating new jobs for these young graduates as it did at the end of the 1970s and at the beginning of the 1980s. Table 4 shows the rise of unemployment rate among the young graduates in higher levels. The unemployed young graduates will be soon nearly as many as the unemployed without schooling.

Table 3 : Employment by level of instruction

	1966	**1975**	**1984**	**1989**	**1994**	**1997**	**1999**	**2000**
No school	73.9	56.2	43.0	32.9	24.1	20.3	20.5	18.6
Primary	17.8	29.0	32.5	38.9	39.9	42.5	40.9	39.9
Secondary	7.1	13.2	20.6	23.5	29.1	29.5	29.9	31.8
Higher	1.2	1.6	3.9	4.7	6.9	7.7	8.5	9.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources : National Statistical Institute, population censuses and labour force surveys, various years.

Table 4: Unemployment rates by age group and by degree of graduation.

	1989			1994			1997			2000
	15-24 years	25-34 years	15 years and +	15-24 years	25-34 years	15 years and +	15-24 years	25-34 years	15 years and +	15 years and +
No degree	22.2	15.2	11.2	28.2	21.5	16.8	24.5	16.2	10.2	8.0
Middle level	32.7	14.9	19.3	28.0	15.1	17.2	32.4	17.6	18.2	16.3
Higher level	19.1	6.8	5.3	12.3	6.0	3.8	30.5	12.3	8.1	11.0
Total	31.0	14.4	16.2	27.9	15.2	16.3	31.9	16.9	15.9	15.6

Sources : National Statistical Institute, population censuses and labour force surveys, various years.

Simultaneously, the informal sector of micro-enterprises is now employing relatively more secondary school leavers than the rest of the economy. Although data for assessing the current trends are not available, it is clear that the informal sector has started to play a role of labour absorption for this category of the labour force, as well as for the higher educated. It is a long time in the past when the small entrepreneurs of the informal sector declared that they were preferably seeking for young illiterate apprentices, rather than literate or young having acquired technical skills, a much less malleable workforce with too high a level of expectations (Charmes, 1982).

Table 5: Proportion of young aged 15 to 25 years in total employment and in micro-enterprises by level of instruction, Tunisia 1997.

	No school	Primary	Secondary	Higher	Total
Total employment	7.8	64.9	25.8	1.5	100.0
Micro-enterprises	1.3	64.6	33.2	0.9	100.0

Sources : National Statistical Institute, labour force survey 1997 and National Survey of Economic Activities ENAE 1997.

Table 6 clearly illustrates that the bulk of the unemployed is progressively shifting from primary level to secondary level (40 percent of the unemployed in 2000), a proportion much more important than in Algeria and in Morocco where the unemployed in primary level or with no schooling remain the major issues for policies addressing unemployment.

Table 6 : Distribution of the unemployed by level of instruction in Maghreb countries.

	Algeria			Morocco		Tunisia				
	1982	**1989**	**1998**	**1985**	**1993**	**1975**	**1984**	**1994**	**1997**	**2000**
No school	24.2	19.2	19.6	58.6	37.5	36.7	34.7	24.4	11.8	9.6
Primary	71.6	58.9	55.2	15.0	19.5	47.8	45.4	47.8	50.4	43.2
Secondary	4.2	18.5	20.0	20.8	25.2	15.5	19.2	26.2	33.7	40.0
Higher	-	3.4	5.3	5.6	17.8*	-	0.7	1.7	4.1	7.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources : National Statistical Institute (Tunisia), National Statistical Office (Algeria) and Direction of Statistics (Morocco): population censuses and labour force surveys, various years.
Note : * Including secondary level graduates.

The third factor explaining high unemployment rates is the rather low female economic participation rate, a usual characteristic of Arab labour markets, as already mentioned. Despite continuous efforts in measurement towards capturing women's activities, the share of women could never go beyond 1/4 of the total labour force and female participation rates are not more than 1/3 of those for men (table 7). At the same time, female unemployment rates are higher than males', so that the overall unemployment rate is artificially overestimated because it includes this part of the female labour force which has high expectations in terms of jobs (at the numerator) and excludes (from the denominator) the other part of the female labour force which works in productive activities but whose work has not been declared or recorded as 'productive'.

Table 7 : Trends in activity rates by sex and in women's share in total labour force, 1966-2001.

	1966	**1975**	**1984**	**1989**	**1994**	**1997**	**2000**
Women	5.6	18.9	21.8	20.3	22.9	23.7	23.8
Men	85.5	81.1	78.6	75.4	73.8	73.4	72.2
Both sexes	45.6	50.2	50.5	48.1	48.4	48.6	48.0
% Women in labour force	6.0	18.7	21.3	20.9	23.6	24.3	24.8

Sources : National Statistical Institute, population censuses and labour force surveys, various years.

Table 8 summarises the main structures of Tunisian employment: the decreasing share of agriculture (now at 22 percent of total employment) in parallel with the increasing share of industries which however never go beyond 1/3 of total employment, the other half being represented by trade and services. Manufacturing industries represent in total approximately 1/5 of total employment.

On table 8, the counter-cyclical behaviour of informal employment clearly shows up: after the burst out of the years 1970-71, informal employment declines from 38.4 percent of non-agricultural employment in 1975 to 36.8 percent in 1980. Since its emergence in 1970, the informal sector has continuously grown up in absolute terms over the decade of the 1970s, characterised by a rapid growth of the whole economy, but in relative terms, it has actually declined.

Table 8: Structures of employment and of informal employment in Tunisia 1975-1997.

	1975	1980	1989	1997
Agriculture in % of total employment	37.2	35.0	25.8	22.0
Industries			33.6	33.7
Of which : manufacturing			19.3	20.2
Informal employment in % of non-agricultural employment	38.4	36.8	39.3	47.1
Wage employment in informal employment	54.7	36.4	42.5	48.4
Women in % of informal employment		33.2	21.8	18.5

Sources : Charmes J. (2001), Bernard Ch. et Charmes J.(1999), and CAWTAR (2002).

On the contrary, during the decade of the 1980s, characterised by a slowdown of the economic growth and the application of drastic measures under structural adjustment programmes, the relative share of informal employment increased again, up to 39.3 percent of non-agricultural employment. These 3 figures for 1975, 1980 and 1989 are in perfect conformity with the theory of the dynamics of the informal sector. But it is absolutely not the case of the figure for 1997 which rises up to 47.1 percent in a period when the economy has known a rapid growth as shown in table 1 above. It is in the explanation of this apparent contradiction that the new distinction between employment in the informal sector (defined as employment in economic units held by households and not registered or under a certain size) and informal employment (defined as unprotected jobs in the informal sector as well as in the formal sector) reveals its usefulness.

3. Informal sector, micro-enterprises and informal employment in Tunisia economy.

As soon as the mid of the 1970s, Tunisia was one of the first countries to attempt an overall measurement of the informal sector at national level. There were several good reasons for that. Firstly, the ‘informal sector’ had just been ‘discovered’ three years before, but developing countries were generally reluctant to admit that this sector could be the right path for growth at a time when most economists were still confident in models which had not yet proved their inaccuracy. Secondly, the boom of very small firms, coming after a period which threatened private initiative, was visible and statistics were willing to reflect these trends. Also, there was a belief, among policy makers, that such a tremendous and rapid growth should be accompanied and supported with appropriate and benevolent measures, in order to ensure the sustainability of the process, to avoid unfair competition and an excessive resort to cheap – if even paid – labour: one of the major features of the 1970s growth in micro-enterprises was actually the extensive use of apprentices as a workforce employed under the legal minimum age without any remuneration and quickly trained to be as productive as semi-skilled workers, to the detriment of the quality of apprenticeship supposed to be a training to all dimensions of the trade (Charmes, 1982): the huge growth of this cheap labour appears in the very high share of paid employment in total informal employment in 1975.

3.1. Data collection.

In the early years of informal sector investigations, Tunisia opted for the technique of establishment census, carried out close behind a population census (1975) or a large sample labour force survey (1980). The census is then used for selecting a representative sample of establishments. The establishment survey uses various sample fractions in order to have enough observations on all types of enterprises, stratified by industry, by size and geographical area. Preliminary qualitative surveys helped to adapt the questionnaires by designing indirect questions for measuring production, value added and income with more reliability.

The 1975 establishment census carried out at national level revealed for the first time the enormous share of micro-enterprises in total employment and it justified the launching of sectoral surveys in order to measure the contribution of these micro-enterprises to the value added and the GDP. After that a first investigation on carpenters and furniture makers had shown that the value added of this industry was underestimated by nearly 50 percent in the national accounts, it was decided to launch a complete and exhaustive survey on micro-enterprises at national level and for all industrial sectors. The establishment census was repeated in 1981 and the first National Survey on Economic Activities (ENAE) was carried out on a representative sample of more than 6,000 micro-enterprises, drawn from the establishment census and fulfilling the criteria for defining the informal sector. One of the striking results of the survey was that the actual average output was twice as high as the direct declaration of the entrepreneurs just as if, when asked about their income, the small entrepreneurs were under-declaring their results by dividing the actual figures by 2 (which is the easiest division if we except the division by 10 which would be unreliable).

These results were used for the measurement of the value added by the informal sector in the GDP and a systematic method for the measurement of the informal sector in the household institutional sector in national accounts was then designed and established for the base year of National Accounts in the early 1980s.

In the early 1990s, a national register of all businesses was set up by the National Institute of Statistics with the support of fiscal authorities and the social security funds, among other official registries. It was used as a basis for selecting the sample of the second National Survey of Economic Activities in 1997, an operation of data collection which is now going to be repeated every five years (the provisional results of the 2002 survey are already available).

The methodology developed by the National Institute of Statistics was designed long before that the 1993 ICLS recommend the 'mixed' surveys for a complete capture of the informal sector. And it effectively does not cover the whole variety of informal sector activities. In particular it leaves aside the home-based workers as well as the street vendors. This is why as early as the mid of the 1970s, the so-called 'residual method' was designed in order to identify and measure those components of the informal sector – and more generally of what was to be called the 'informal employment': the method consists in the systematic comparison of data on employment obtained from the sources on households and from the sources on enterprises. The procedure is conducted at a detailed level of industries disaggregated by status in employment and by sex: however, in the 1970s, gender concerns were not yet as acute as at present and data are consequently lacking. A complete description of the method is provided in Charmes (2001) and is presented in the chapter 'Measurement of work' of this book.

3.2. Informal employment.

Data on size and composition and characteristics of informal employment are thus exceptionally available over a period of nearly three decades. Table 9 below shows the most recent figures on informal employment and table 10 hereafter summarises the main features and the trends in informal employment over the last three decades.

Table 9: Main components of non-agricultural employment in 1997.

Non-agricultural sectors	Number of employed persons	%
Informal employment (including informal sector)	**922,000**	**47.1**
- of which micro-entreprises (informal sector)	423,000	(45.9)
- of which homeworkers or undeclared workers	499,000	(54.1)
Formal sector	**1,035,000**	**52.9**
- of which private (with complete set of accounts)	383,000 156,000	(37.0) (15.1)
- of which public enterprises		
- of which private off shore	126,000	(12.2)
- of which administration	370,000	(35.7)
Total non-agricultural employment	**1,957,000**	**100.0**

Source: INS (2002).

Informal employment accounted for more than 47 percent of non-agricultural employment: among these workers, only 45.9 percent were employed in the micro-enterprises of the informal sector (a generic term designing the small economic units, be they run by own-account or by employers) against 54.1 percent who were employed by non registered enterprises or by registered enterprises which did not declare to hire them.

Some striking features come out from table 10 although some data are missing: in 22 years, from 1975 to 1997, informal employment has been growing at a very fast rate and was multiplied by 2.8 while non-agricultural employment increased by 5.8 percent per year and total employment by 3.6 percent. But the period of the 1990s is outstanding for its acceleration in informal employment creation: while the annual growth rate of informal employment had been of 5.4 percent for the period of the end of the 1970s and the 1980s, it rose up to 7.5 percent for the 1990s (from 1989 to 1997), a period characterised by a high rate of economic growth.

During the first period (which includes two sub-periods of rapid growth from 1975 to 1980 and of slowdown from 1980 to 1989 for the whole economy), the share of industries and services in informal employment declines while the share of trade is increasing. At the same time, the share of paid employment dramatically decreases during the first half of the period, then starts again to increase during the second half. The counter-cyclical characteristic of informal employment results in a decrease of the share of informal employment at global level in a time when the formal sector experiences a rapid growth: the micro-enterprises employing paid employees tend to become formal and self-employment increases its share in total informal employment. During the second half of the period on the contrary, the economy slows down, informal employment increases its share and due to structural adjustment, many micro-enterprises and their paid employees prefer to come back to informal statuses and larger firms also prefer to hire their employees on the basis of more precarious arrangements: the share of paid employment in informal employment starts to grow again. When economic growth is back in the 1990s, the share of paid employment in total informal employment continues to grow, due to hard competition on labour costs with the opening of the Tunisian economy to globalisation and the European market. Informal employment is increasingly comprised of wage employees (in micro-enterprises and through casual or subcontracted employment in larger enterprises) representing more than 55 percent of the category in 1994-95. Informal employment is also shifting from industries and trade to services and may indicate that service industries have undergone restructuring by casualising their labour force and that industrial sectors have outsourced certain of their activities.

Table 10: Trends in informal employment and its components. 1975-1996.

	1975	1980	1989	1994-95	1997
Total employment	1,366,500	1,576,900	1,978,800	2,320,610	2,441,500
Annual growth rate		3.1	2.8	2.9	2.6
Non-agricultural employment	857,600	1,025,200	1,469,100	1,819,621	1,957,000
Annual growth rate		3.9	4.8	4.0	3.8
Informal employment	329,100	377,200	577,000	887,041	922,000
Annual growth rate per period		2.9	5.9	8.9	3.9
Annual growth rate 1970-80s and 1990s		5.4		7.5	
Informal sector	154,500	178,400		443,600	423,000
% of paid employment in informal sector					25.3
Homeworkers and undeclared				443,400	499,000
% informal employment in non-agricultural employment	38.4	36.8	39.3	48.7	47.1
% of paid employment in homework and undeclared					73.8
% informal sector in informal employment	46.9	47.3		50.0	45.9
% homeworkers and undeclared in informal employment	53.1	52.7		50.0	54.1
% paid employment in informal employment	54.7	36.4	42.5	55.4	54.2
% self-employment in informal employment	45.3	63.6	57.5	44.6	45.8
% industries in informal employment	57.8	51.3	48.6	47.4	
% trade in informal employment	20.4	27.1	35.3	23.5	
% services in informal employment	21.8	19.4	15.9	29.1	
% women in informal employment		33.2	21.8	18.1	18.5
% of women in informal paid employment		16.2	13.7	18.8	

Sources: Charmes J., 1990, 1994,1998.

For this period of rapid growth in the 1990s, it is interesting to distinguish the two components of informal employment: the micro-enterprises of the informal sector on the one hand, the undeclared paid employees and the unrecorded homeworkers with linkages with the formal sector on the other hand. While the micro-enterprises of informal employers and of the self-employed represented the bulk of total informal employment in the earlier decades, the new decade of the 1990s (characterised by economic policies addressing globalisation and the opening of the market) sees the share of the undeclared and unrecorded reaching 50 percent of total informal employment in 1994-95 and 54.1 percent in 1997 (figures resulting from the residual method). Thus there are more and more undeclared and unrecorded workers, and at the same time, among them less and less are employed in industries (and more and more in services) or as paid employees under casualised contracts with larger firms. The development of manpower enterprises and of intermediaries providing cheap labour to other enterprises (outsourcing), and the expanding resort to homeworkers in industries can explain these contradictory trends.

Another striking feature of the recent trends in informal employment (table 11) is the decreasing share of women in informal employment: indeed, their overall number has increased over the years, but in relative terms, they dropped from 33.2 percent in 1980 to 18.5 percent in 1997. But their share in informal wage employment increased from 17.8 percent to 49.4 percent and their share in industries decreased from 80.7 percent to 64.6 percent, during the same period. From the 1997 data, showing that women are relatively fewer in informal sector and more numerous in undeclared-unrecorded informal employment, it seems clear that this structure results from a trend which is involving women more and more in sub-contracted homework.

Table 11: Structures and trends of female informal employment in Tunisia.

	1980	**1989**	**1997**
% informal employment in non-agricultural employment	36.6	39.3	47.1
% of women in informal employment	33.2	21.8	18.5
% of women in informal sector			14.6
% of women in undeclared-unrecorded employment			22.3
% of women in informal employment who are self-employed	82.2	73.2	50.6
% of women in informal employment who are paid employees	17.8	26.8	49.4
% of women in informal employment who are in industries	80.7	77.1	64.6

Source: Cawtar, 2001.

Such trends explain the new pro-cyclical behaviour of informal employment observed during the last decade of economic growth: its growth is due to the increasing number of informal jobs formal sector while the micro-entreprises sector is consequently undergoing a harsh competition from the formal sector.

3.3. The informal sector of micro-enterprises.

The informal sector in the strict sense of the 1993 international definition hardly represents 45.9 percent of total informal employment with paid employment accounting for 25.3 percent of it and the workforce of apprentices for 5.4 percent, far from the peak of the 1970s when this type of cheap labour was sought for by the new small entrepreneurs. Unpaid family workers are, by contrast, surprisingly numerous with 10.2 percent of informal sector employment. Males are predominant in all statuses, but the share of women is the highest in paid employment and in unpaid family labour. In female informal sector employment, paid employment is also predominant (37.1 percent, against 23.3 percent for men), followed by own-account work (26.3 percent against 35.8 percent for men).

The informal sector of micro-enterprises is traditionally the segment which draws attention of political authorities in this sense that it is the sector which can be supported through appropriate policies. And even it is not the component of informal employment which has experienced the more rapid growth in terms of number of jobs created, it is certainly the component with the highest potentials in terms of capital accumulation and income generation.

Table 12: Distribution of employment by status and sex in the informal sector of micro-enterprises, Tunisia, 1997.

Status	Women	Men	Total	Distribution by status		Distribution by gender	
				Women	Men	Women	Men
Own-account	16,577	129,343	145,920	26.8%	35.8%	11.4%	88.6%
Employers	8,562	85,213	93,775	13.9%	23.6%	9.1%	90.9%
Associates	682	8,302	8,984	1.1%	2.3%	7.6%	92.4%
Paid employees	22,884	84,267	107,151	37.1%	23.3%	21.4%	78.6%
Unpaid family workers	11,264	31,931	43,195	18.2%	8.8%	26.1%	73.9%
Apprentices	1,656	21,309	22,965	2.7%	5.9%	7.2%	92.8%
Other	120	969	1,089	0.2%	0.3%	11.0%	89.0%
Total	61,746	361,334	423,080	100.0%	100.0%	14.6%	85.4%

Source: INS, 2002.

In the following tables, income and wages are compared with the legal minimum salary which was at 180 DT per month in 1997 and the gender gap is calculated by dividing female income (wage) by male income (wage).

Over a period of 14 years, the micro-enterprise sector has demonstrated that it was able to provide its small entrepreneurs with income as high as 5.4 times the legal minimum salary in 1997 (and 5.1 times in 1981) in manufacturing industries, 4.8 times in construction, 4.9 times in services and 2.9 times in trade. Compared to the average wage in the formal sector, these figures are respectively of 2.9 times for manufacturing, 2.6 in construction, 2.7 in services and 1.6 in trade. As a whole, for all activities, the micro-entrepreneur’s income is 4 times as high as the legal minimum salary, and 2.2 times the average salary in the formal sector (table 13).

At 14 years of distance, the situation has not changed much: the performances of the informal sector are quite remarkable and the informal sector has never been assimilated to poverty in Tunisia. Also the gender gap is of 81.3 percent as a whole, which means that a female micro-entrepreneur earns an average income which is 83.9 percent of the equivalent male’s income. However the gap is huge in manufacturing (39.9 percent) and especially the textile industry.

In terms of wages, the performances of the informal sector are also quite remarkable since the micro-enterprises distribute wages which are in average higher than the legal minimum salary: 1.1 time according to table 14 hereafter. The highest wages are observed in transport (1.7 time), food processing industries (1.3) and construction (1.2) and the lowest in personal services (0.7), clothing (0.8) and retail trade (0.9).

Tableau 13 : Micro-entrepreneurs' income by industry and sex, and in multiple of the Legal Minimum Salary (SMIG) and of the average wage in the formal sector in 1997 (and 1981) .

Industrial sectors	In multiple of SMIG				In multiple of the average wage in the formal sector			Gender gap (women in % of men)
	Men	Women	Both sexes		Men	Women	Both sexes	
			1997	1981				
Industries of which	**5.7**	**2.3**	**5.4**	**5.1**	**3.1**	**1.2**	**2.9**	**39.9%**
Food processing Industries	7.3	4.3	7.1	4.7	4.0	2.3	3.9	58.8%
Textile, clothing, leather	3.8	1.8	3.2	3.5	2.1	1.0	1.8	46.8%
Wood industries	4.0	*3.3*	4.0	7.2	2.2	*1.8*	2.2	*83.4%*
Metal industries	3.7		3.7	5.0	2.0	0.0	2.0	
Construction	**4.8**	***5.5***	**4.8**		**2.6**	***3.0***	**2.6**	*114.4%*
Commerce, repairs	**3.0**	**2.2**	**2.9**	**4.4**	**1.6**	**1.2**	**1.6**	**74.2%**
Services of which	**4.8**	**5.3**	**4.9**	**8.9**	**2.6**	**2.9**	**2.7**	*109.9%*
Hotels and restaurants	6.1	3.8	5.9	16.5	3.3	2.1	3.2	61.8%
Transports and communications	3.6	*2.3*	3.6		2.0	*1.3*	1.9	65.0%
Personal Services	2.7	2.8	2.7		1.5	1.5	1.5	101.8%
TOTAL	**4.0**	**3.3**	**4.0**		**2.2**	**1.8**	**2.2**	**81.3%**

Source: INS, 2002
Note : Figures in italics are not significant, due to the small number of female entrepreneurs in these industries.

A major finding of the Tunisian survey is the estimate of the gender gap at 75.5 percent, i.e. equivalent to the coefficient proposed by the UNDP Human Development report for these countries where no data is available, or also equivalent to the average of countries where data are available. It means that in the micro-enterprise sector and in average, a female paid employee earns only 75.5 percent of what earns a man. The maximum gaps are observed in textiles (65.5 percent) and in food processing industries (69.8 percent).

As for income, changes between 1981 and 1997 are not noticeable. It means that over the past two decades, the legal minimum salary has played a role of reference or of a floor for the micro-entrepreneurs of the informal sector who have tried to align the wages they distributed to their workforce on the legal minimum.

Does it mean that the legal minimum salary represents the equilibrium level at which supply equalises demand on the labour market ? Probably not.

As already mentioned, the sample survey on micro-enterprises is drawn from the business register which includes those enterprises registered at social security funds, but all enterprises in the register are not recorded by social security registers and for those which record their employees at the social security, it is highly probable that the official salary for which they declare their employees and for which they have to pay for social contribution is at the legal minimum. Therefore the informal sector should not be anymore defined as the sector which pays its workforce under the legal minimum salary, but rather as the sector which officially pays it at the legal minimum and in fact at the equilibrium level on the labour market which is higher. In order to hire the workers that they need, the micro-entrepreneurs may well pay them at a higher level than the minimum, but the oral contract between the employer and the employee will be that social contribution (for the employer as well as for the employee) be paid on the basis of the minimum salary (see Charmes and Unni, 2002).

Table 14: Average monthly wages in the micro-enterprise sector in Tunisia (1997 and comparison with 1981).

Industries	Women		Men		Both sexes			Gender gap (women's wage in % of men's)
	In DT	In multiple of the legal minimum salary	In DT	In multiple of the legal minimum salary	In DT	In multiple of the legal minimum salary		
						1997	1981	
Food processing industries	155	0,9	222	1,2	215	1.3	1.6	69,8%
Textiles	127	0,7	194	1,1	165	1.0	1.0	65,5%
Clothing	138	0,8	160	0,9	139	0.8	0.6	86,3%
Leather			159	0,9	160	1.0	1.0	
Wood			171	1,0	170	1.0	0.6	
Metal			152	0,8	146	1.0	0.7	
Furniture			175	1,0	175	1.0	0.8	
Construction			205	1,1	196	1.2	1.3	
Trade and car repair			154	0,9	151	0.9		
Wholesale trade	205	1,1	242	1,3	244	1.4		84,7%
Retail trade	125	0,7	176	1,0	160	0.9		71,0%
Restaurants	137	0,8	188	1,0	183	1.1		72,9%
Transport			289	1,6	287	1.7		
Services to enterprises	164	0,9	218	1,2	190	1.1		75,2%
Education	158	0,9	194	1,1				81,4%
Health	161	0,9	168	0,9				95,8%
Personal services	115	0,6	139	0,8	126	0.7		82,7%
Total	**148**	**0,8**	**196**	**1,1**	**190**	**1.1**		**75,5%**

Source: INS, 2002. **Note:** Only major industries have been included in the table, but the total includes all industries. When the number of salaried women in the industry is negligible, the cell has not been filled although data are available, because the figures are not significant.

3.3. The undeclared-unrecorded informal workers.

The residual workforce which is defined as informal employment but which is not in the informal sector is called here the 'homeworkers-undeclared workers'. It represented more than 54.1 percent of total informal employment and it has been increasing over the past decade.

Who are these workers?

As shown on table 10 above, nearly 3/4 of these home-based and/or undeclared workers are paid employees and women are more numerous in this category than in the informal sector itself. An assumption is that many of these workers are home-based because they are not recorded in establishments. However, they are not in the statistics of the establishments (labour demand) because they are not declared by the employers. In order to understand such trends and characteristics, it is necessary to look at the partial figures shown by recent censuses and surveys (labour supply). Table 15 below presents the numbers and characteristics of home-based workers .

These figures are not comparable for the various years: in the 1984 population census, only the own-account workers had been asked about their place of work, and just like for the 1997 labour force survey, the figure includes the workers in construction, transport and domestic services. The three years provide however an indication that the category of home-based workers has slightly increased across the 13-year period. However, this category of workers is usually widely underestimated in the surveys. The most comprehensive and detailed results are consequently those presented for the 1994 population census. They show that women account for nearly 3/4 of the home-based workers, that most of them are employed in manufacturing (and especially in textiles). It also can be assumed that the family workers are partly, if not mostly, to be added to the paid employees, helping sub-contracted women to complete the orders passed by the firms in due time. Also, many own-account can work as sub-contracted paid employees during other periods of the year or as a secondary activity and are therefore not well captured in usual labour force surveys.

Table 15: Proportion and characteristics of home-based workers in Tunisia (various years).

	Number of home-based workers	% of non-agricul-tural labour force	% females	% own-account	% emplo-yees	% family workers	% manu-facturing (textiles)	% trade	% services
1984	123,060	9.4	75.6	100.0					
1994	86,267	4.8	71.3	63.8	9.2	27.0	90.2 (86.4)	1.3	2.1
1997	211,336	10.7	37.9						

Source: Charmes, 2002 et ILO, 2002a.

At this point, it is necessary to look at how sub-contracted work functions in the manufacturing industry, and especially in the textile-clothing and leather-shoes industries.

Homework has mushroomed around the export and offshore industries and also around the industries working for the local market. A good example is provided by the case of a firm employing 174 employees in the leather-footwear industry. The enterprise is 'offshore', all its production is exported and exclusively allocated to European firms which have passed the orders. Because the enterprise is offshore, raw materials are not allowed to be sent and worked out of the enterprise, except with the authorisation of the customs (in Tunisia, an enterprise can be 'offshore' by legal status without being located in a specific area).

The enterprise operates with permanent employees within its own premises, but it also provides homeworkers with sub-contracted work through middlemen (or 'middlewomen') who need to be recorded with a 'trading licence' at the fiscal authorities: the enterprise's keeper is one of these middlemen who sub-contracts more than 60 women homeworkers, and among these 60 women, many ask for help by family workers especially their daughters and even their husbands when these are unemployed or underemployed). More than 160 homeworkers are thus sub-contracted to supplement the work of the regular paid employees, half of them are authorised by the customs (which means that the other half is unauthorised). Many of these homeworkers work at home, but an important number of them also work in the premises of the middlemen which could explain why the proportion of home-based workers in the labour force is not as high as one could have expected.

By these means, the enterprise nearly doubles its workforce and minimises its wage bill: the permanent core employees are paid at the legal minimum salary and social contributions are also minimised. As to the sub-contracted workers, they are piece-rate paid for an average of 60 dinars per month (with a minimum of 40 and a maximum of

140, to be compared with a legal minimum wage of approximately 200 dinars) and the middleman perceives 26 percent of the total wage bill distributed.

There are various types of middlemen: some can be the heads of small sub-contracted firms, specialised in the industry, and hiring homeworkers, but others - such as the enterprise keeper in the example just described above – play the role of middlemen for the provision of manpower: they are in fact manpower enterprises without being registered and controlled by the labour law: their ‘trading licence’ is only an authorisation for carrying on a given industry. The labour code was revised in 1994 and 1996 regarding the labour contract with limited duration, but interim work and private employment agencies are not authorised although many are actually operating as agencies for selecting workers for the enterprises.

For the enterprise, this external wage bill is recorded as sub-contracted technical work in the intermediate consumption of the production account and the core employees work with the materials prepared by homeworkers. In labour force statistics, many if not most of the homeworkers are not counted, because they are temporary workers or because homework is their secondary activity (which explains the level of wage compared to the minimum salary : 1/2 to 1/4 or 1/5), or also because they are family workers for the paid homeworkers who have received the contracts (a category which is not part of the international classification of status in employment, provided that only own-account workers can work with contributing family workers).

Such a double invisibility needs to be seriously addressed and it is already actually on the methodological side: all the efforts made to measure the ‘place of work’ in labour force surveys (ILO, 2002a) and the recent development of time-use surveys as a reliable alternative or at least a necessary complement to the labour force surveys in developing countries. Still the exclusion of homeworkers from the value added and from the GDP remains the most important challenge to cope with: accounted for intermediate consumption of the non-financial incorporated firms, the homeworkers either do not declare themselves at all in the labour force or do not declare themselves as paid employees so that there is no chance that their contribution to the value added be accounted for.

Conclusion.

Most homeworkers remain invisible because they are temporary or secondary workers. But at least, the ‘residual method’ allows to highlight the importance of these undeclared-unrecorded workers, a large part of whom are homeworkers. Their huge number and share in total employment is rather paradoxical in a country where there is a strong belief that the social security system is covering the great majority of the labour force: does not the country have been ranked 30th on 172 (Diaxon, 2000)? Since the early 1980s the own-account workers have their own system of social security, and according to official figures, the system would be covering nearly 90 percent of paid employment. However the statistics of social security systems are hardly comparable with statistics on employment because their updating is not implemented and actually does not have to be implemented: why an employee whose employer has not paid the social contributions should be deleted from the register and should be forbidden access to the public health services?

The Tunisian case illustrates the dramatic growth of precarious jobs and homeworkers in a period of rapid industrialisation. In informal employment, it is the component of undeclared-unrecorded workers which grows the more rapidly along a pro-cyclical pattern and carries informal employment as a whole along the same trend.

Bibliography

Bernard Ch. et Charmes J. (2000), Le marché du travail dans les économies du Maghreb à la veille de l'ouverture euro-méditerranéenne (quelques comparaisons avec les PECO) (Labour markets in Maghreb economies at the eve of the Euro-Mediterranean opening some comparisons with Central and Eastern European countries), in Boudhiaf M. et Rahji T. eds (2000), **Les enjeux de l'intégration économique régionale,** Tunis, 759p. (pp. 401-432).

CAWTAR (2001), **Globalisation and Gender : Economic Participation of Arab Women**, CAWTAR Arab Women's Development Report 2001, Tunis, Centre of Arab Women for Training and Research, UNDP, CAWTAR, AGFUND, 245p.

Charmes J. (1982), L'apprentissage sur le tas dans le secteur non structuré en Tunisie, (On-the-job apprenticeship in Tunisia informal sector) in **La politique de l'emploi-formation au Maghreb. 1970-1980**, CRESM-CNRS, Collection "Etudes de l'Annuaire de l'Afrique du Nord", Annuaire de l'Afrique du Nord, année 1980, 472p. (pp.357-396). Egalement publié in **Cahiers ORSTOM. Série Sciences Humaines,** vol. XXI, n° 2-3, "Jeunesse, développement et changements sociaux", 1985, pp. 305-328.

Charmes J. (1998b), **Contribution of Women Working in the Informal Sector in Africa: a Case Study.** Paper prepared for the United Nations Statistics Division. "Umbrella Gender Statistics Programme" and presented at the Delhi Group Meeting on Informal Sector Statistics. Ankara. 28-30th April 1998.

Charmes J. (1999a), **Informal sector, Poverty and Gender. A Review of Empirical Evidence,** Background paper for the World Development Report 2001, Washington, The World Bank, 44p.

Charmes J. (1999b), Gender and Informal Sector**, contribution to** The World's Women 2000, Trends and Statistics**, United Nations, New York, 2000.**

Charmes J. (2001), **Procedures for Compiling Data on Informal Sector Employment and Informal Employment from Various Sources in Developing Countries**, ILO/WIEGO Latin American workshop on informal sector statistics, Santiago do Chile, 16-18 October, 10p.

Charmes J. (2002), **Self-employment, informal employment, informal sector employment: trends and characteristics. A tentative assessment of their statistical knowledge,** ILO-WIEGO background paper for the ILC 2002, Geneva, 68p.

Charmes J. and Unni J. (2002), **Measurement of work,** ILO/WIEGO project on "Reconceptualising work", Geneva.

Diaxon J. (2000), Classement mondial des régimes publics de sécurité sociale, **Revue Internationale de Sécurité Sociale**, n°1, 2000.

Hussmanns R. (2001), **Informal Sector and Informal Employment: Elements for a Conceptual Framework**, paper presented at the 5th meeting of the Expert Group on Informal Sector Statistics (Delhi Group), New Delhi, 19-21 September 2001, 9p.

ILO (1993a), **Statistics of employment in the informal sector**, Report for the XVth International Conference of Labour Statisticians - Geneva 19-28 January 1993, 91 p.

ILO (1993 b), **Report of the Conference,** Report of the XVth International Conference of Labour Statisticians - Geneva 19-28 January 1993, 113 p.

ILO (1996), **Convention on homeworkers,** Geneva.

ILO (1999), **Decent Work,** Report of the Director General, International Labour Conference, 87th session, Geneva, 81p.

ILO (2002a), **On measuring place of work,** Geneva, 134p.

ILO (2002b), **Decent Work and the Informal Economy,** report VI, 90th session of the International Labour Conference, Geneva, 129p.

ILO (2002c), **Women and men in the informal economy. A statistical picture,** Employment sector, Geneva, 64p.

INS (1999), **Enquête Nationale sur l'Emploi en 1997,** Tunis, 190p.

INS (2002), **Enquête Nationale sur l'Emploi en 1999,** (in arabic), Tunis, 362p.

INS (2002), **Le secteur des micro-entreprises en Tunisie. Analyse des résultats de la seconde Enquête Nationale sur les Activités Economiques. ENAE 1997,** Tunis.

Jomni S. (2002), **Le travail informel des femmes en Tunisie,** thèse en démographie économique de l'IEP de Paris, Observatoire de l'emploi et de la formation (2002), **Les statistiques de l'emploi et de la formation,** Tunis.

Saada R. (2000), Le droit du travail face à la prolifération des formes a-typiques d'emploi, in **Revue Travail et Développement,** n° 18-19, Tunis.

UGTT (2001), **L'accord de libre-échange Tunisie-Union Européenne: conséquences économiques et conséquences sociales,** Tunis, Union Générale des travailleurs Tunisiens, Fondation Friedriech Ebert.

UTICA (1995), **L'accord de libre-échange Tunisie-Union Européenne: impact sur l'entreprise tunisienne,** Tunis, Union Tunisienne de l'Industrie, du Commerce et de l'Artisanat.