

“Urban labour market dynamics in Cameroon, 1993-2005: does growth transmit to the households?”

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Sébastien Merceron, François Roubaud, Constance Torelli¹
DIAL, Paris.

Abstract:

Cameroon has experienced a long and severe period of economic recession from the middle 1980's to the middle 1990's. The failure of a decade of real adjustment and deflation policies (which ended up with the halving of civil servant real wages by the end of 1993) lead the country to the devaluation of French CFA in January 1994. Since then, Cameroon has renewed with positive growth at an average annual rate of 3 to 5%.

The main question we address in this paper is how the macroeconomic growth has been translated to the urban households' living standards, labour conditions and poverty through the labour market. For this purpose we will use a set of first hand and original labour force surveys (LFS) conducted by the Cameroonian National Statistical Office in partnership with DIAL. As three rounds of LFS are available (1993, 1994 and 2005; with a panel component between 1993 and 1994), we are able to track changes over time. We investigate both short term (1994) and long term (2005) devaluation impacts on a large range of labour market outputs: participation, unemployment and underemployment, sectoral allocation - switch from non-tradable to tradable sectors -, earning and inequalities, and more broadly the quality of jobs. One interesting result is that while the informal sector burst out during the phase of sharp recession, the renewed growth trend after the 1994 CFA Franc devaluation has provoked a simultaneous light reduction of employment in the informal sector and a strong growth of informal employment on the whole. What seems to have happened though is a surge of employees without proper contracts nor social protection in more numerous registered production units, that is to say a massive formalisation of the informal sector, or more widely an informalisation of Yaoundé economy.

1. The context.

After years of prosperity from end 70's to mid 80's, Cameroon had to face a severe downturn of its economy: independence in Cameroon meant a fast take off based from 1979 on oil extraction and oil exportation. But because growth was unstable, strongly dependant on oil prices and vulnerable to international exogenous conditions on raw material market, it led to a deep economic crisis in 1986 when oil and raw material international prices went down. In-depth adjustments in public budgets, adaptations of fiscal system and restructuring of labour

¹ merceron@dial.prd.fr corresponding author; roubaud@dial.prd.fr; torelli@dial.prd.fr ;

market have been deficient, so economic recession turned into an economic depression and heavy public debt in the beginning of 90's.

In the first months of year 1994, a policy mix of a devaluation of CFA Franc and of a cut in public expenditures has been chosen, with the idea of raising exports, re-boosting growth, and reduce public debt. Positive impacts of the devaluation on exports and on economic growth have been recorded only from fiscal year 1994-1995, while fiscal year 1993-1994 kept bad exports levels and GDP reduction of 2.5%. Public sector's nominal wage have been reduced from about 30% in a 2-waves cut from November 1993 to February 1994, while consumption goods prices have been raised by about 30% in the same time. In this context, we can ask ourselves what could be the response of households to face these immediate microeconomic side effects of the macroeconomic policy of the devaluation.

Since then, Cameroon has renewed with positive growth at an average annual rate of 3 to 5%², mainly due to a come-back of international investments and exportations incomes.

The main question we address in this paper is how the macroeconomic growth has been translated to the urban households' living standards, labour conditions and poverty through the labour market. For this purpose we use a set of first hand and original labour force surveys (LFS) conducted by the Cameroonian National Statistical Office in partnership with DIAL. This LFS, known as "*I23 survey*" focused on employment, job conditions, salaries, reasons of unemployment, formal registration of employers... As three rounds of LFS are available in Yaoundé (1993, 1994 and 2005; with a panel component between 1993 and 1994), we are able to track changes over time for inhabitants of the capital city of Cameroon (see Annex1 for more information about the data). We investigate both short term (1994) and mid term (2005) devaluation impacts on a large range of labour market outputs: participation, unemployment and underemployment, sectoral allocation - switch from non-tradable to tradable sectors -, earning and inequalities, and more broadly the quality of jobs. Since the methodology and the design of the LFS is constant across time, we are able to focus on immediate (positive or perverse) impacts of the anti-crisis policy by comparing indicators on labour market and poverty between 1993 and 1994, and to measure those indicators after a decade of a recovering economic situation. Of course this study is not able to measure the net impacts of the devaluation policy, because our tool can not really control the evolution of the circumstances, economic, demographic or structural, in the town between the 3 dates. While changes between 1993 and 1994 are more conjunctural, those observed between 1993 and 2005 can be more appreciated as structural.

Nowadays, Cameroon has reached last year a sustainable level of the public debt and have quite good economic perspectives (expected growth is estimated at a level of 4.4% in 2007 and 4.9% in 2008³), due to oil-linked windfall profits (high oil prices) and to several multilateral and bilateral debt alleviation. But Cameroon is suffering of the low level of the dollar and of the Nigerian naira, and has to find a long-term competitive position in international markets and at least maintain its market shares; that why the question of an eventual new devaluation policy is still up-to-date and the long term impacts of 1994's devaluation will still be scrutinized in the next years.

² Annual average growth rate (AAGR) of Cameroon varies a little from a source to another: according to OECD-BAFD, annual growth rates are "closed to 4-5% from 1994 to 2002" in "*Cameroon*" (2002); AAGR is about 3% in the JUMBO Model (AFD) from 1998 to 2005; IMF gives an AAGR of 3% between 2000 and 2005; Banque de France sets a AAGR of about 4.6%.

³ Projections from *JUMBO Model*. See Thomas Bossuroy, « *Rapport de conjoncture et prévisions des pays de la zone Franc* », 2007.

2. Evolution within 12 years of Yaoundé inhabitants' characteristics: numerous city with more educated, smaller households.

Yaoundé is the capital city of Cameroon and second largest city in the country after Douala. It lies in the centre of the nation at about 750 meters above sea level. Yaoundé is the main city for administration, while Douala is the main city for business. Major industries in Yaoundé include cigarettes, dairy products, breweries, glass goods. Yaoundé is a regional distribution center for agricultural raw materials (such as coffee, cacao, copra, sugar cane). Yaoundé is also the site of several universities.

By and large, the rapid demographic growth in Yaoundé is both due to internal and external circumstances: even if fecundity per woman is slowing, global demographic growth in whole Cameroon is about 3% to 5% per years from 1993 to 2005. And migration to main cities such as Yaoundé and Douala, in order to find a job or study, is frequent. Half of the population (above 15 years old) is composed of people who haven't lived all their life in Yaoundé. This explains the average annual growth rate of the population of the town of about 5 to 7% per year⁴. Like in all Sub Saharan African countries, the population of Yaoundé is young (the mean actual age is 20 years in 1993 and 21 years in 2005).

More over, the population in Yaoundé not only grew a lot, but also evolved in its structure: households' typology is in 2005 significantly different from what it was in 1993. The average size of the households has been reduced from 5.3 people to 4.3; and the share represented by unipersonal households has risen from 13% in 1994 to 21% in 2005. This spectacular change is the consequence of an economic necessity (unipersonal households are often young non-native well-educated men who need to accumulate capital before getting married and assuming family responsibilities).

The situation regarding education levels has also changed within the decade: the percentage of uneducated people has fallen from 5.3% in 1993 to 2.8% in 2005, prolonging the trend of decades of improvement in schooling⁵. But since the main policies of global access to education has been lead 30 to 40 years ago in Cameroon, this evolution is mainly due to a structural change in the ages pyramid: old people, frequently uneducated, have died. In the meantime, the share of people who reached superior education levels have risen from 9.6% in 1993 to 11.7% in 2005, and the gap between men and women regarding education achievement has been filled step by step during last decades. While net schooling ratio for 6-11 years old children hasn't changed since 1987 (about 90%), net schooling ratio for 6-9 years old kids has been degraded during the years of economic recession : it passed from 97% in 1983 (while economic situation was still good) to 94% in 1993 and 90% in 1994 (during the crisis); it could be explained by a internal strategy of households to delay school entry for their youngest children when times become hard, for real costs reasons (schooling might create new financial burden for parents) and/or opportunity costs arguments (by sending kids to school, parents can't keep them at home for domestic work or farming). The same phenomenon of tradeoff between education and work is observed for secondary schooling within the period: net schooling ratio in secondary school for 12-18 years old children follow the economic cycle in Yaoundé between 1983 and 2005.

⁴ Limits of the town have also evolved within the decade, and we are considering Yaoundé in 2005 as an urban agglomeration, not strictly at the same perimeter as in 1993.

⁵ The percentages were 9.8% in 1983 (EBC Survey), 8.9% in 1987 (Census).

3. Participation and unemployment

In all further chapters, results are given for inhabitants of Yaoundé above 15 years old.

On the short run, global **participation** on labour market, as defined by ILO, hasn't been affected by the shock of the devaluation: it remained at the level of 59% in 1993 and 1994, which in comparison with main cities of West Africa is a quite low level⁶. But on the long run, the mobilization of the population on labour market is considerable: individual choices regarding insertion on labour market is mainly linked to decisions made at a household level, integrating new economic constraints and fulfill individual needs within the household in a common or shared strategy. In the context of economic recession, while the only income of the household head becomes too weak, the actual strategy is to mobilize secondary members of the household, such as children or grand-parents, in order to maintain their living standard level. On the mid run (between 1993 and 2005), participation index has grown of 6 points; migrants, old people, women are particularly more involved on the labour market than before. The enhanced participation of oldest people could result of two contradictory trends: on the one hand, discouraged people who were banned of the market could find new opportunities for reinsertion in a recovered economic situation; but on the other hand, a felt loss of purchasing power could imply a come-back to work for those people who were living on monetary transfers inside or outside the household. We will see further that the need for secondary members to be inserted on labour market gives rather the idea that mid term side effect of the policy mix is more a new constraint on living standards in households of Yaoundé.

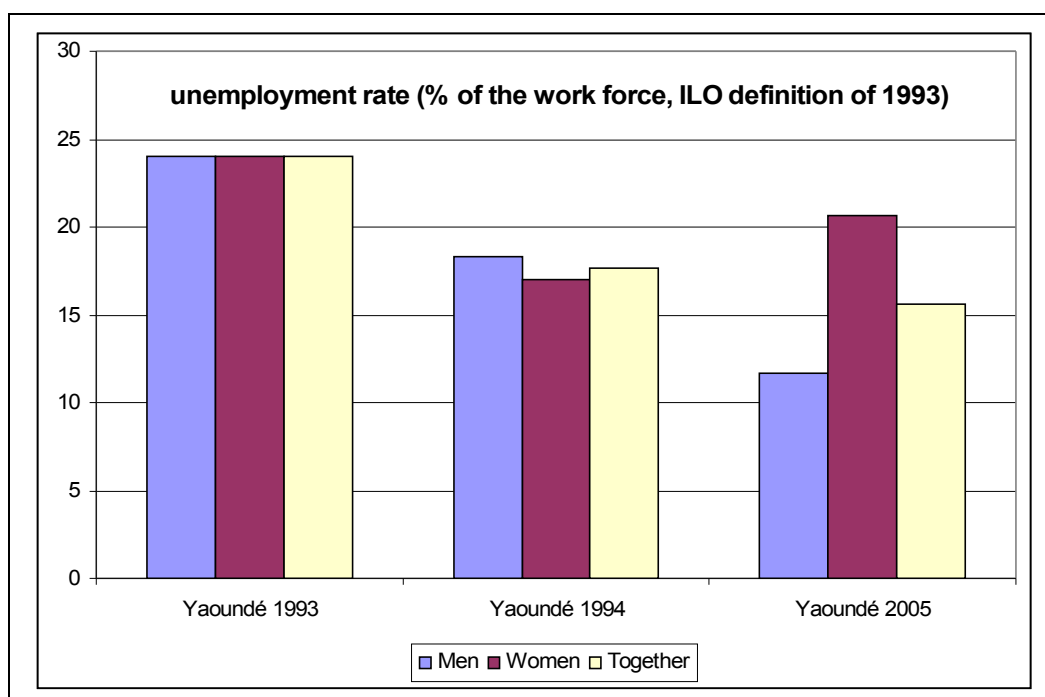
The **reasons for inactivity** have also changed within the period : while individuals were inactive rather for involuntary reasons in 1993 and 1994 (67% in 1993 were inactive because they think that they could not get a job given their lack of qualification or that jobs demand was insufficient on the labour market), the rationale evoked for inactive people in 2005 became more voluntary (71% prefer to go on schooling rather than to try to find a job, having in mind further higher income potentialities because of a higher diploma). In the lapse of 12 years the situation has deeply changed regarding labour market participation.

The definition followed here for **unemployment** is the economic condition marked by the fact that individuals actively seeking jobs remain unhired⁷. The reference period is the 7 days before the survey, and people who have worked at least one hour during this reference period are declared as employed people. Of course, ILO unemployment rates don't give a full picture of the distortions on Africa's labour markets, because distortions like under-employment, over-employment or inadequateness between job and qualification are very frequent in developing countries.

⁶ Mean participation rate for 7 of the 8 main cities of UEMOA is 67.3% in 2001-2003 for people above 15 years old .

⁷ ILO definition of 1993 is followed, and the supplementary criteria of the immediate availability to work isn't included in our definition, because the question was not asked in the 1993 and 1994 surveys, as this criteria was only adopted later by ILO. Actually, the difference between the 2-criteria definition and the 3-criteria definition is very thin in terms of unemployment rates (a 0.8% gap in 2005).

Graph1: Reduction trends in unemployment.



Sources: I-2-3 Surveys 1993, 1994 and 2005; Yaoundé; DIAL, INS Cameroon.

What can be observed on Table1 is a major reduction of unemployment rate between 1993 (24.0%) and 1994 (17.7%), for both genders. As we observed that participation remained stable in the short term, this spectacular step down of the unemployment rate is a result, on the one hand, of a massive access to jobs by the work force (ambitions of unemployed people have revised and a lot of unhired people finally accepted to occupy own-account jobs in the informal sector, setting the end of the “*unemployment of the rich*”⁸, observed before 1994), and on the other hand, of the discouragement of people leaving labour market because of the lack of good perspectives. On the mid run, unemployment rate has been still decreasing to 15.6% in 2005. But females’ rate has been raised to 20.7% while males’ one has shrunk to 11.7% in the same time : wives are widely involved on labour market as a strategy to maintain household living standard, but as they might be still less educated and more capital-deficient than men, they have to face difficulties to get a new job.

Table1: Evolution of unemployment rates by genders and age ranges.

	Yaoundé 1993	Yaoundé 1994	Yaoundé 2005
<i>Gender</i>			
Male	24,0	18,3	11,7
Female	24,0	17,0	20,7
<i>Age range</i>			
15-24 years old	35,4	26,2	27,3
25-29 years old	33,2	28,6	17,9
30-49 years old	15,8	10,8	9,7
50 years old and more	10,2	11,2	5,0
Together	24,0	17,7	15,6

Sources: I-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.

⁸ See Aerts and al. in “l’économie Camerounaise, un espoir évanoui”, 2000.

Table1bis: Relative unemployment rates by genders and age ranges.

%	Yaoundé 1993	Yaoundé 1994	Yaoundé 2005
<i>Gender</i>			
Male	100	103	75
Female	100	96	133
<i>Age range</i>			
15-24 years old	148	148	175
25-29 years old	138	162	115
30-49 years old	66	61	62
50 years old and more	43	63	32
Together	100	100	100

Sources: 1-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.

How to read it: unemployment rate of people above 50 years old in 2005 is equal to 32% of the mean unemployment rate of 2005.

Table1bis shows the differential evolution of unemployment ratio between genders and age ranges, by presenting relative unemployment rates (relative unemployment rate is the ratio of unemployment rate of current category by the mean unemployment rate for each year). We can observe that even if the situation has improved for all age ranges (even for young inexperienced 15-to-24 years old workers, unemployment rate raised from 35,4% in 1993 to 23.7% in 2005, as can be seen on Table2), contrasted relative risk evolutions by age and gender can be shown: the share of unemployment in the youngest work force of 15 to 24 years old is 75% higher than the mean share in the whole work force of Yaoundé in 2005, showing that young workers are even more stigmatized in 2005 relatively to others.

Table2 presents the results of model-based explanation of determinants of the probability to be unemployed in Yaoundé, within the period 1983-2005: by estimating a logistic regression model, we can analyse the net effects on the probability to be unemployed of different socio-demographic characteristics of the individual (such as age range, gender, diploma) and of the household (such as size of the household, position in the household). Figures are given in odd ratios, which give a common measure of the size of an effect, controlled by the others effects within the model, by giving an approximation of the relative risk between a value of an explanatory factor and a reference value⁹. The results emphasize the fact that, other things being equals, male gender has a negative net impact on probability to be unemployed compared with female, as well as age range of 50 years old and higher in comparison with younger work force, and a position of head or wife/husband of the household relatively to secondary members of the household. The negative net impact of the status of wife/husband (often women actually) is clearly reduced in 2005: such women are relatively less likely to be employed while household head (often men) are relatively even more employed than before. The size of the household, which has been decreasing in Yaoundé within the 2 last decades, has also a negative effect on individual unemployment probability : the more numerous the household is, the lower the probability of the people composing the household is to be unemployed. One can argue that the solidarity inside and between the households and the accumulation of social capital and relationships might be higher in the case of big-size households.

⁹ The odds ratio will always overstate the case when interpreted as a relative risk, and the degree of overstatement will increase as both the initial risk increases and the size of any treatment effect increases. However, there is no point at which the degree of overstatement is likely to lead to qualitatively different judgments about the study. See Dirk Taeger and al (1998), Thabani Sibanda (2003).

It appears also that education was not a rampart against unemployment from 1987 to 1994 during the crisis (the factor “no schooling” has a strong negative net effect on propensity to be unemployed, in comparison with highest education level). What can be presented as a paradox could actually been explained by a choice a well-educated people to refuse job supply, by expecting further jobs of higher quality and remuneration, of better adequacy between job and profession. Such kind of “luxury unemployment”¹⁰ has been obviously disappearing.

Table2: Evolution of net effects on probability to be unemployed.

	1	1	1	1	2
CONSTANT	7,89	19,99	21,44	-1,5	-1,6
GENDER					
Male	-46,1*	-24,1	-	-	-27,4
Female	0	0	0	0	0
AGE RANGE					
10-29 years old	-	+77,6	+96,4	+61,3	+180,4
30-49 years old	-65,3*	-	-	-21,3	+47,4
50 years old and higher	0	0	0	0	0
EDUCATION					
-No schooling	-	-25,3	-44,2	-67,7	-6,2
-Primary school	-	-	-	-47,6	-47,3
-Secondary school	-	-	-	-22,1	-0,1
-Superior	0	0	0	0	0
POSITION IN THE HOUSEHOLD					
-Household head	-	-70,5	-64,0	-49,1	-62,1
-Wife/Husband	-70,0*	-66,6	-34,3	-50,1	-1,8
-Children	-	+21,5	-	+19,6	+34,7
-Others	0	0	0	0	0
SIZE OF THE HOUSEHOLD	-	-	-2,4*	-1,9*	-3,4*
SAMPLE SIZE:					
-Occupied work force	955	19221	3771	4033	2091
-Unemployed work force	70	2827	830	676	325
-Unemployment rate (unweighted)	7,3%	14,7%	22,0%	16,8%	15,5%

Figures are given in Odd Ratios. Every parameters and odd ratios are significant at a 5% threshold, except those marked by *, which are significant at a 10% threshold., and those marked by – which are not significant.

Sources: EBC 1983; RGPH 1987 (Census); 1-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.

The typical profile of the unemployed people has also changed significantly (as can be seen on Table3): in 2005, they are mostly (65%) ancient workers who left their occupation, whereas in 1993 they were mainly people seeking a job for the first time. Whereas half of the unhired people in 1993 were seeking a job in adequacy to their qualification, they are only a quarter in 2005 to require this correspondence: jobs demand has evolved into a situation of lower requirements. Requirements (reservation salaries) of jobless people in terms of remuneration have also been revised: -25% between 1993 and 1994 (while effective mean incomes have been reduced of about 40%), and more -14% between 1994 and 2005 (while real mean incomes have been stable). It shows again that luxury unemployment (or unemployment of expectation) has been disappearing since 1993: people take the job they can get, and the reason of this step down of ambition might be found in a kind of deterioration of

¹⁰ Denis Cogneau, 1994.

work conditions on the whole labour market of Yaoundé during the period. The duration of continuous unemployment has been significantly reduced between the 2 dates: indeed, the proportion of people unemployed for more than one year passed from 75% in 1993 to 55% in 2005. As a consequence, we can summarize the evolution of the labour market for 12 years by saying that labour market in Yaoundé welcomed till 2005 a new kind of work force composed firstly by inactive people in 1993 (in particular, wives/husbands of the households' head) and secondly by unemployed well-educated people in 1993. As a matter of fact, active population has risen much faster (about 9% per year in average, which means a multiplication by 3 of the amount of workers, in 12 years) than the global population of the town. The size of the new labour market is bigger, but also marked by increased turn-over. We can also add that people who had migrated to Yaoundé have taken a large part of the new work supply: their unemployment rate fell from 23% to 14% between 1993 and 2005.

Table3: The new profile of unemployed work force in Yaoundé.

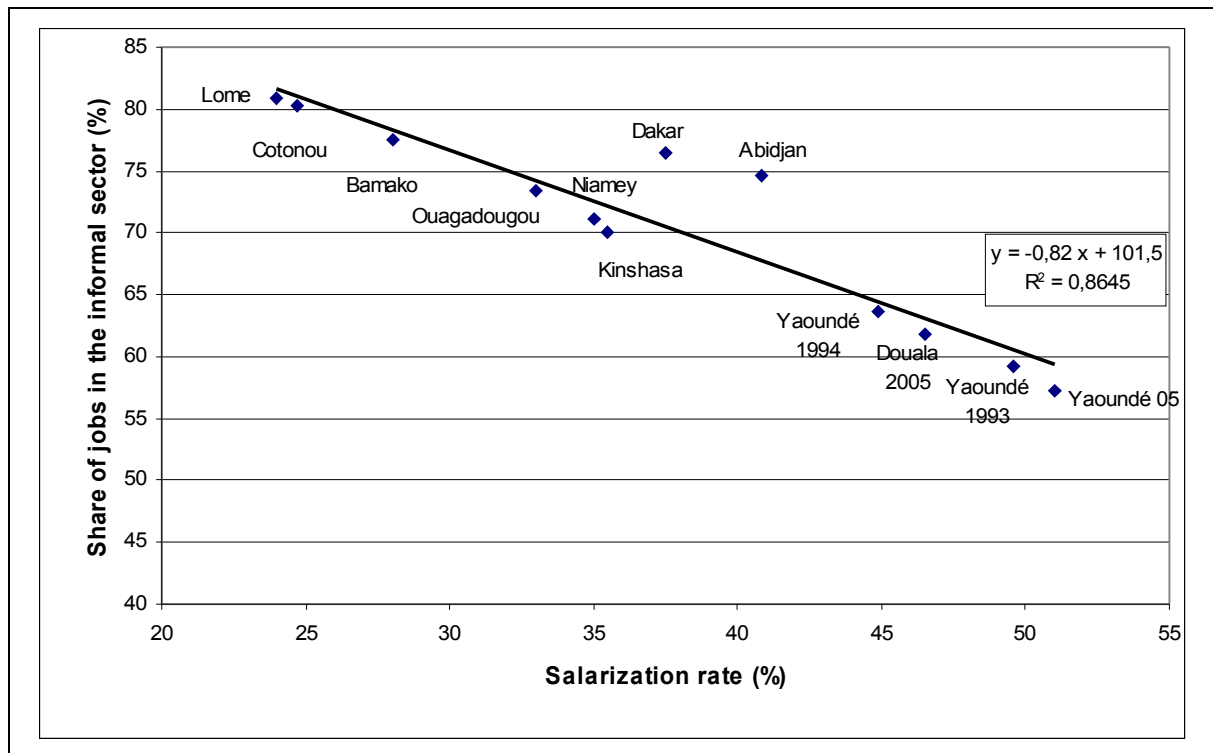
	1993	2005
First applicant	62%	45%
Mean duration of unemployment	4.0 years	2.7 years
<i>Job seeking :</i>		
Independent work	8%	24%
Job corresponding to qualification	49%	30%

Sources: 1-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.

4. Precarious job dynamics: informal sector versus informal jobs, enlarging unclear borders.

About informality: The definition adopted here, as well as in the *Fifteenth International Conference of Labour Statisticians* (ICLS, January 1993) and in all the *1-2-3 Surveys* analyses, focus on the production unit or enterprise as the unit of measurement of informality. An alternative that has been proposed by other researchers and social scientists is to focus on the worker or a job as the unit of analysis. In this view, informality could also characterize not only the management structure of an enterprise, but also the contractual status and conditions of employment. But we consider here as informal sector the group of private production units which are not officially registered by the State, adding also associations and household enterprises. Informality in this case reveals the degree of establishment of the relationship between the State and the production unit. The way to measure the share of jobs in informal sector is to ask individuals who are heads of productive units whether they have both registered their enterprise and monitored a formal accountancy, if no they are considered as part of the informal sectors and head of informal production units. For dependant workers, we only ask whether a formal registration of the enterprise where they work is available. The combination of proxy indicators (i.e. employment size of the enterprise, non-wage employment, registration as an additional criterion) can also be used to determine the magnitude of the informal sector. What we can learn from *1-2-3 Surveys* launched in West Africa between 2001 and 2005 is for example the linear decreasing link between the share of jobs of informal sector and the share of wage employment, as can be seen on following Graph2.

Graph2: the link between informalisation of the economy and salarization rate.



Sources: 123 Surveys: Parstat Project (2001-2003), Yaoundé 1993, 1994, Cameroon 2005 EESI, Kinshasa 2004.

In Yaoundé, the evolution of the salarization rate as a good proxy of the share of informal sector shows that informality has emerged with the beginning of the economic recession: 65,1% of the jobs were wage jobs in 1983¹¹ before the crisis, 63,1% were still salaried jobs in 1987¹² after two years of increasing instability, 49,6% in 1993 and even 45,4% in 1994¹³ during the depression. This process of marginalisation of the wage relationship is an evidence of the fact that the main part of the job creation has been more and more monopolized by the informal sector, whereas formal economy was suffering of the lack of investment and perspectives. Informal sector played a positive role in this sense to satisfy the household demand and to provide incomes to the labour work force which can't enter in a dualistic modern labour market. The analysis of jobs dynamics by sectors reveals also that tertiary sector (in particular non tradable services and trade to consumers), traditionally more informal than others, have increased to the level of 78% in 1993 (and remains quite stable till 2005).

A short term impact of the shock of the policy mix of beginning 1994 seemed to be even more “work refugees” in the informal sector: public sector lost almost 5000 jobs (i.e. about 8%) in one year, with the policy of real adjustment and public balance management. As 80% of job creations were done into informal economy in 1993, about 85% of them were done into informal economy in 1994: the spectacular drop of unemployment between 1993 and 1994 is indeed is essentially the result of the growth of the informal sector. A part of jobless people, who would rather wait till then for better job conditions, finally decided to build their informal own-account enterprise after the market has sent them bad persistent signals (the drop of public salaries, the massive reduction of the number of civil servants, numerous

¹¹ EBC Survey, Cameroun, 1983-1984.

¹² RGPH 1987, Cameroun (last national census).

¹³ 1993 and 1994: 1-2-3 Surveys, National Statistical Institute (INS) of Cameroon, DIAL.

dismissals in the rare remaining big private companies...). The following Table5, the dynamic matrix of the panel, shows that two thirds of the people leaving a situation of unemployment are welcomed in the informal sector. It receive also the majority of inactive people (discouraged capital-less workers and new entrants on labour market) (47% of the increase of the informal sector) and of unemployed people (36% of the increase of the informal sector)¹⁴.

Table4: net flux affecting unemployment and informal sector between 1993 and 1994.

Net flux 1993 to 1994 (%)	into informal sector	outside unemployment
Inactivity	47	17
Unemployment	36	-
Informal sector	-	67
Private formal sector	16	18
Public sector	1	-2
Total	100	100

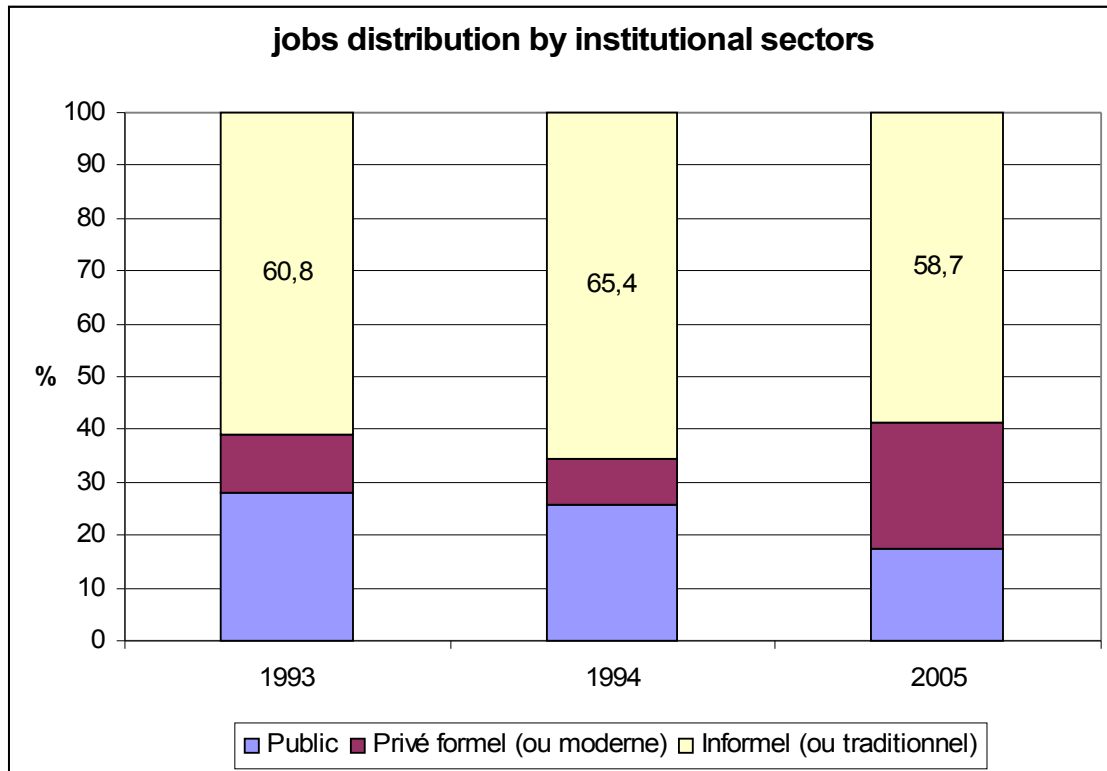
Source: 1-2-3 Survey, DIAL/INS-DSCN 1993-1994, panel.

How to read it: the net flux from people leaving a situation of unemployment to get an informal sector jobs contributes to 36% of the increase of informal sector.

On the long run, we assist at a precarisation of the jobs rather than further informalisation of the economy: The salarization rate rose to 51.6% in 2005, proving that the informalisation of the economy, boosted on the short run by the devaluation and the step down of income levels, is having a break. As Graph3 illustrate the evolution of informal sectors in the distribution of jobs in Yaoundé, from a level of 65.4% in 1994 to a level of 58.7% in 2005 (with the strict definition of informal units). But a new type of worker has appeared at the border of private formal sector during the period: in 1993, workers without pay slip nor written contract represented only 19% of the total numbers of occupied jobs; in 2005, they represent a share of 46%! In the meantime, formal private units have increased their weight in the economy of Yaoundé with almost 24% of the work supply in 2005. Does it mean that new small formal units have been created or does it rather indicates that a lot of informal production units have been finally integrated in the modern sector? One can be pushed to rather choose the second possibility by reading that these units are often very small, quite recent, tertiary, and the provided jobs are occupied by people coming mostly from informal sector (43%) or from a unemployment situation (28%). The modernisation of fiscal system in 1996 led to an easier registration of production units in Cameroon: since then, the registration of units might sometime mean rather a simple recording of the unit by the State than a complete integration in the modern sector. In this way, if we extend the definition of the informal sectors by including workers who doesn't have formal labour relations with their employers (pay slip for example), even if the unit is registered it leads to a share of informality of 71% of the total jobs, but this contradicts the evolution of the salarization rate (see above) and of the own-account jobs, whose share in the total has been decreasing between 1994 and 2005 (from 42% to 33%).

¹⁴ See F. Roubaud, *Revue Tiers Monde* n°140, 1994.

Graph3: evolution of the informal sector during the period.



Sources: 1-2-3 Surveys 1993, 1994 and 2005, Yaoundé, DIAL, INS Cameroun.

The “**Precariousness Score**” is a composite indicator combining the answer to 5 individual questions in order to summarize the main components of the quality and the stability of the jobs. By putting all these criteria together, it gives us an indicator of the risk of getting unemployment. For jobs of dependent workers (e.g. mostly salaried workers), the Precariousness Score of a job illustrates the degree of formalization of the link between employer and employee. It is built as followed:

Precariousness Score = form + contract + place + regularity + remuneration.

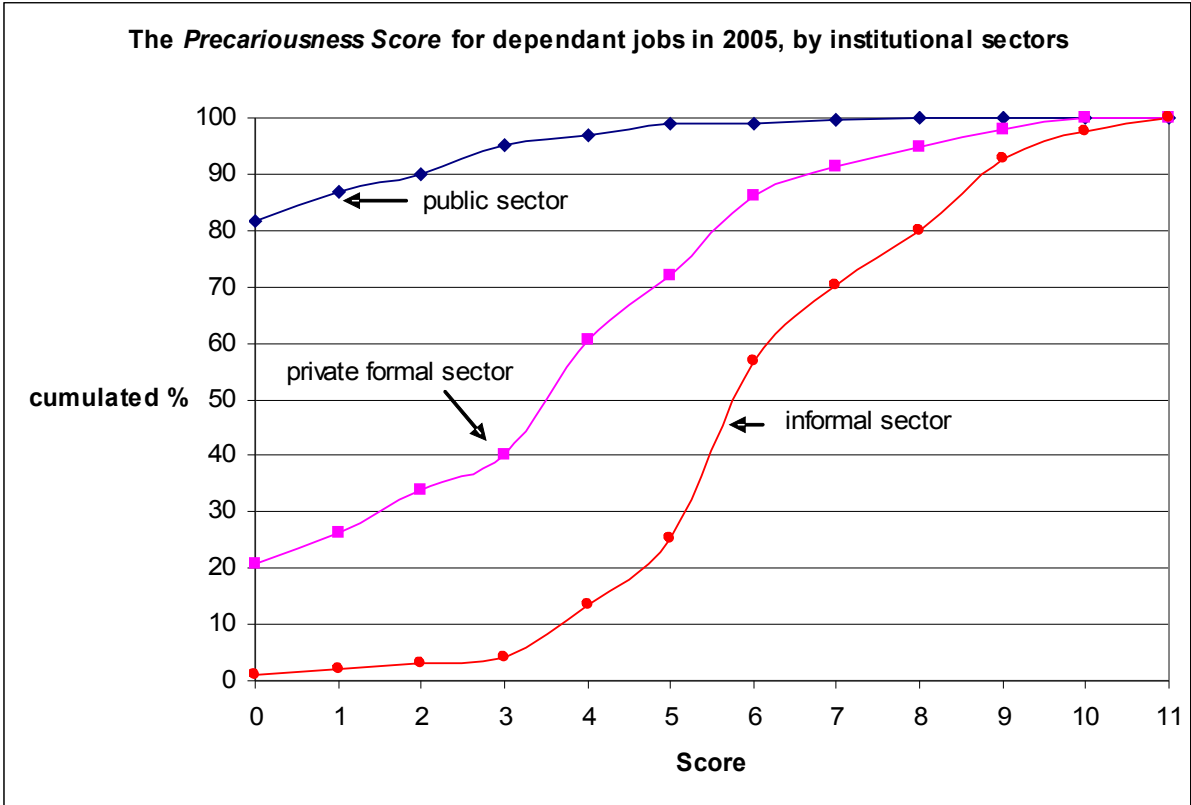
where *form* is the answer to the question “Does your boss deliver a pay slip to you?” (assigned value is 0 or 2), *contract* is the type of work contract (assigned value is 0, 1, 2 or 3), *place* is the type of place assigned for the job (value between 0, 1 or 2), *regularity* explains whether the work is occasional or regular (value is 0 or 2), and *remuneration* means the type of remuneration (daily, weekly, or monthly paid).

Precariousness Score $\in [0;11]$ for dependant jobs, 0 means a stable job and 11 means a very precarious job.

The discrimination between institutional sectors regarding the distribution of the score is very high (see Graph4) and follows obviously the classical hierarchy (public jobs are very stable and protected, jobs in private formal sector can be precarious, and jobs in the informal sector are very unstable, based mostly on casual employment, kinship or personal relations). An econometric analysis of the score can establish also that characteristics like female gender, secondary status in the household, informal recruitment by using social networks, “low” socio-professional categories such as employees or workmen, little education level, and low incomes range have *caeteris paribus* a negative net effect on the Precarious Score, i.e. make the job become more precarious.

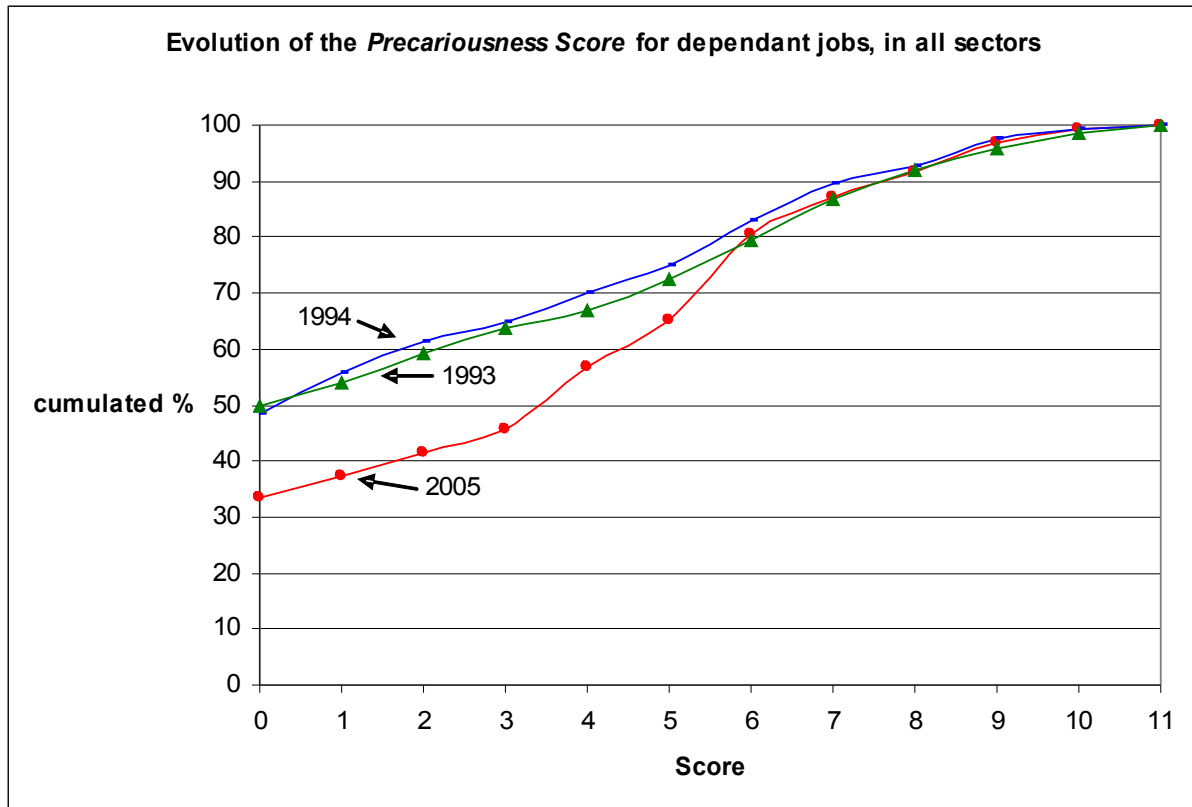
The analysis of the distribution of the Precariousness Score puts the emphasis on the precarisation of work conditions in Yaoundé during the period (see Graph5): half of them had a Score equal to 0 in 1993 and 1994, and they only remaining a third of them with such stable work conditions in 2005. More over, the mean global scores for all jobs passed from 2.6 in 1994 to 3.6 in 2005. In particular, the percentage of workers who were benefiting of contractual arrangements with formal guarantees (Score=0) passed from 50% in 1994 to only 32% in 2005. As work conditions remain bad at the same level in the informal sector during the period, this deterioration concerns in particular the workers of formal units (see also Graph6): the average Precariousness Score of private formal sector dropped from 2.2 in 1994 to 3.8 in 2005 and for public sector from 0.4 to 0.5. As a result, we can say that a counter part of the massive access to participation and employment on the impulse of the devaluation, is a joint process of global precarisation of the jobs and formalisation of the production units.

Graph4: the discrimination regarding precarious jobs between institutional sectors.



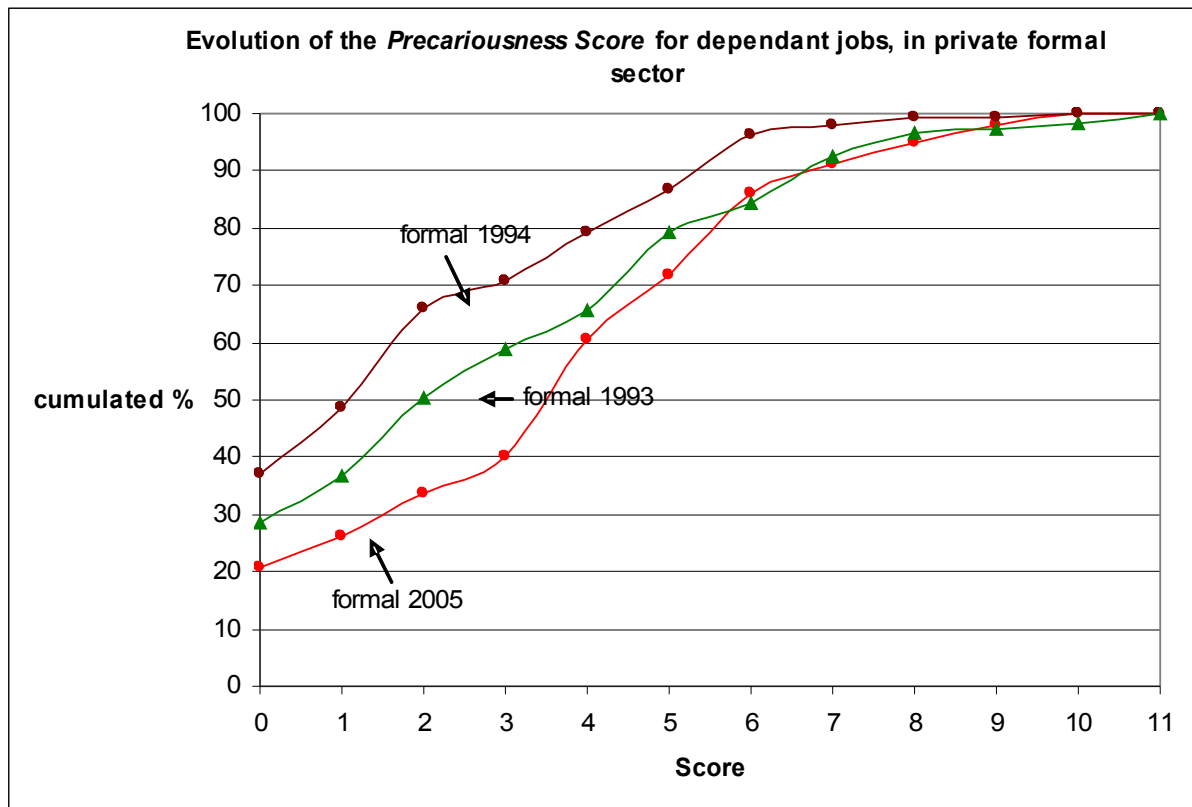
Sources: 1-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.
How to read it: at each discrete value of the Precariousness Score between 0 (stable job) and 11 (very precarious job), the cumulated proportion of the jobs (main activity) having a score beneath the value is reported, in each institutional sector. For example, 25% of the jobs have a Precariousness Score below 4 in the informal sector, in comparison with 72% in the private formal sector and 98% in the public sector.

Graph5: Evolution of the precariousness of all jobs during the period.



*Sources: 1-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.
How to read it: see Graph4.*

Graph6: Evolution of the precariousness of jobs in the private formal sector.



*Sources: 1-2-3 Surveys 1993, 1994, 2005 (EESI); DIAL, INS Cameroon; 15 years old and above, Yaoundé.
How to read it: see Graph4.*

5. Has the shock on real incomes and living standards been filled?

A main measure added to the devaluation policy by the end of 1993-beginning 1994 was a sharp reduction of nominal wages in public sectors (in two successive waves, leading to a 30% cut in mean salaries). This combination had the direct effect of a dramatic drop in real incomes of civil servants, almost divided by 2 in one year! For private formal sectors, the cut was of about 22%, but with an important differentiation between genders (-26% for men and -12% for female workers who were already suffering of a very low level of income). For the informal workers, with already low or no remuneration, the mean drop was about 31%.

On a longer run, a re-growing level of real income can be observed between 1994 and 2005: but this shy increase (+19% in public sector, +1% in informal sector), supported by the global economic growth, driven by exports and high oil prices, isn't sufficient to get back to the level prevailing at the beginning in 1993, before the devaluation: by and large, workers have globally lost 40% of their income during the 12 years. But by analyzing the evolution of the remuneration of a cohort aged of 20-30 years in 1993 (aged of 21-31 years in 1994 and of 32-42 years in 2005), one can observe a rise of mean real income of 24% within 12 years. So, the progression of incomes is following a path of growth. But this growth has been made possible by a degradation of work conditions: firstly, a wide precarization of the existing jobs (see precedent section), and secondly, a dramatic jump of work duration: in private sectors, workers operate more than 50 hours a week to reach a decent living standard (to be compared to 43 hours a week in 1993). That is to say that average worker earns in 2005 twice less money per hour in Yaoundé.

The enlarged participation on the labour market of secondary members of the household, as a strategy of compensation, is not sufficient to fill the loss of purchasing power: whereas the dependence rate (i.e. the mean size of the household divided by the mean number of remunerated individuals per household) has been continuously decreasing from 1993 (4.2) to 2005 (3.2)¹⁵, the level of living standards of the population of Yaoundé has declined of about within the period of 12 years (-24% from 1993 to 1994, +13% from 1994 to 2005). The median living standard level¹⁶ fell from 29.9 kFCFA₂₀₀₅ per capita in 1993 to 25.7 kFCFA₂₀₀₅ in 2005.

But in the meantime, one can also observe a diminution of inequality: the Gini Index, measuring the concentration of income, passed from 0.57 in 1993 to 0.53 in 2005; the level of income still follows in 2005 the life cycle (older workers earning much more than younger), but the variation is thinner: workers above 50 years gained 255% of the mean income of the work force in 1993 and they earn in 2005 only 165% of the average income. More over, the remuneration gap between genders has been reduced after 1994 (women earned an income equal to 56% of the men's level in 1993 and 1994; in 2005, the proportion is upgraded to 62%).

¹⁵ Dependence rates : 4.7 (1983, *EBC*); 4.2 (1993, *I-2-3 Survey*); 3.8 (1994, *I-2-3 Survey*), 3.6 (2001, *ECAM*); 3.2(2005, *I-2-3 Survey*).

¹⁶ Total income of the household, estimation per capita by using the Oxford scale.

Graph7: evolution of incomes distribution, dominance curves.



Sources: 1-2-3 Surveys 1993, 1994 and 2005, DIAL and National Statistical Institute of Cameroon, ECAM 2001.

Conclusion:

The devaluation and the cut in remuneration levels led workers of Yaoundé in 1994 to the loss half of their purchasing power in one year, engaging more widely the population of Yaoundé on the labour market, encouraging luxury unemployed people and inactive women and grandparents to find a own-account job in the informal sector: only the nominal classical short term effects of such devaluation was perceptible on the time of the 1994-survey. The recovering economic situation of the country apparently permitted to reduce inequality, unemployment, and to partly regain the lost living standard; but the price to pay for the workers and for the population has been to accept a wider mobilization on labour market, degraded work conditions, marked by a generalized precariousness and intensified work duration.

ANNEX 1: the data.

The Labour Force Surveys named ‘123 Surveys’ is a benchmark tool, using household samples and international standards (ILO), for household statistics. They are designed as three-phase surveys: employment, measurement of informal activities, household consumption. The main objectives of ‘123 Survey’ are to measure the informal sector in its widest possible sense (including mobile and home workers), to provide measurements of the informal sector that are comparable from one country to another, to study the informal sector as a consistent whole, and to study how the informal sector is integrated into the productive sector. In the context of this study, only the first phase (on employment) of each survey is used.

The *ECAM Survey* (2001) about household consumption in Cameroon gives us an intermediary point of comparison for levels of incomes, dependence rates, socio-demographic characteristics and poverty.

Table5: data and samples design.

<i>Surveys</i>	1993 <i>(1-2-3 Survey)</i>	1994 <i>(1-2-3 Survey)</i>	2001 <i>(ECAM)</i>	2005 <i>(EESI)</i>
<i>Type of statistical units</i>				
Primary units	335	335	809	1 561
Primary units in sample	331	331	100	100
Households in sample (initial)	1 994		1 200	1 200
Households in sample (final)	1 961	2 029 (including 971 in panel)	1 095	1 198
Individuals in sample (including visitors)	11 172	12 235 (including 4 860 in panel)	5 424	5 238
Individuals in sample (15 years old and more)	6 558	7 076	3 441	3 311
Weighted number of households	146 500	152 000	278 400	402 300
Weighted population	784 000	844 800	1 350 000	1 734 000

BIBLIOGRAPHY:

- Aerts J-J., Cogneau D., Herrera J., De Monchy G., Roubaud F. (2000), "L'économie camerounaise : un espoir évanoui", *Karthala*, 275 p.
- AFRISTAT (1999), "Concepts et Indicateurs du marché du travail et du secteur informel". *Série Méthodes* n°2. Décembre.
- Backiny-Yetna P., Kingne A., Roubaud F. (1994), "Dynamique du marché du travail à Yaoundé février 93 à mai 94", 27 p., décembre.
- Berthelie P., Roubaud F. (1993), "Enquêtes 1-2-3 : premiers résultats de l'enquête emploi" DIAL/DSCN, juin.
- Brilleau, A., F. Roubaud and C. Torelli (2005), "L'emploi, le chômage et les conditions d'activité enquêtes 1-2-3 Phase 1", *Statéco*, 99, 43-64.
- Cogneau D. (1992a), "L'industrie camerounaise depuis 1984 : un premier cadrage", *mimeo DIAL*, n°92-24/T.
- Cogneau D. (1993), "L'industrie camerounaise dans la crise 1984-1992", *Etude DIAL*, n°93-08/T.
- Cogneau D., Herrera J., Roubaud F. (1996), "La dévaluation du franc CFA au Cameroun, bilan et perspectives", *Economies et Sociétés*, Série Relations économiques internationales, tome XXX, série P. n°33, 1/1996.
- Cogneau D., Razafindrakoto M., Roubaud F. (1996), "Le secteur informel urbain et l'ajustement au Cameroun", *Revue d'économie du développement*, 3, p. 27-63.
- Cogneau D., Collange G. (1998), "Les effets à moyen terme de la dévaluation des francs CFA : une comparaison Cameroun – Côte d'Ivoire", *Revue d'économie du développement*, 3-4, p. 125-147.
- De Monchy G., Roubaud F., (1991), "Cameroun : Evolution économique rétrospective et perspectives macroéconomiques à l'horizon de 1995", *Etude DIAL*, n°91-02/E, 97 p.
- DIAL, DSCN (1994), "L'enquête 1-2-3 sur l'emploi et le secteur informel à Yaoundé". *Stateco* n°78. Juin.
- DIAL (2001), "L'enquête 1-2-3 : un dispositif original de suivi de la pauvreté".
- INS (002), "Pauvreté et marché du travail au Cameroun en 2001", ECAM II, Cameroun.
- INS (2005), "Enquête sur l'emploi et le secteur informel au Cameroun en 2005. Phase 1 : enquête sur l'emploi, Rapport Principal", Décembre.
- INS (2006), "Enquête sur l'emploi et le secteur informel au Cameroun en 2005. Phase 2 : enquête sur le secteur informel, Rapport Principal", Février.
- INS (2006), "Enquête sur l'emploi et le Secteur Informel au Cameroun en 2005. Bilan méthodologique", Septembre.
- MADIO (2002), "Dynamique du marché du travail dans les sept grandes villes de Madagascar entre 2000 et 2001". INSTAT Madagascar. Juin.
- Roubaud, F. (1994), "Dynamique du marché du travail à Yaoundé 1983-1993 : la décennie perdue" *Revue Tiers-Monde*, Tome XXXV, n°140, 4ème trimestre, 751-778.