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Editorial

The DIAL/CIPRE research unit's quadrennial programme launched at the beginning of 2001 will be completed at the end of 2004. The programme set out to examine the relationships between the demo-economic development process, the distribution of resources and State interventions, in terms of macro-economic, sector-based and social policies and redistribution. The work carried out over the past four years was important, whether it be in terms of research, developing partnerships, training, or dissemination and debate. Progress made in the latter area is undeniably our greatest success, as shown by the increasing numbers of publications, including articles, books, special editions of reviews, etc. In the same vein, six international conferences were organized, two in Paris and four abroad (Antananarivo in February 2001; Dakar in December 2002, in partnership with AIDELF and the Senegalese Ministry of Family and National Solidarity; Lima in October 2003; Bamako in June 2004). Five series of international conferences were also organized (ABCDE in Oslo in 2002; UEPA in Tunis in 2003; CSAE in Oxford, EIP/IRD in Paris and AISO in Amman in 2004), together with the joint organization of the development economics seminar at ENS Jourdan in Paris.

DIAL's programme for the coming four years (2005-2008) will carry on from the previous programme, with a few reorientations: the launching of a research programme on development aid; an emphasis on policy monitoring and evaluation issues and on the comparative dimension of research; opening up to Asia, by sending two researchers to Vietnam (Mireille Razafindrakoto and François Roubaud). Javier Herrera will head the DIAL research unit (the research unit's new name), taking over from François Roubaud. Jean-Pierre Cling will continue as director of the Economic Interest Grouping of the same name, created in 2003 by the IRD and the AFD with backing from the French Ministry of Foreign Affairs and INSEE.

This issue looks at the problems involved in measuring living standards and inequalities on the basis of findings from household surveys. The authors analyse the results of two budget-consumption surveys carried out in Côte d'Ivoire (1998) and Madagascar (1993). They highlight the large number of biases contained in these surveys. In particular, they confirm the usual observation that surveys find it difficult to correctly assess tail areas of distributions. Certain types of errors or different methodological choices have a considerable impact on income level measurements. For example, if corrections are made for under-declarations of income in Côte d'Ivoire at the same time as adding the population of foreign origin, the population's average income is adjusted by over 50%, and there is a strong increase in inequalities. It is clear that if adjustments of this sort were brought into general practice this would significantly improve living standards measurements in developing countries, and probably lead to a significant rise in assessments of inequality levels.



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MEASURING LIVING STANDARDS AND INEQUALITIES: DO THE SURVEYS GIVE THE REAL PICTURE?

In recent years, there has been a large increase in primary data from household surveys. Now in the public domain, the data is used as a basis for the statistics on inequality compiled by international databases¹, and has sparked off much research on trends in world poverty and inequalities.

There is a striking lack of consensus in the resulting literature. Apart from ideological disagreements, the divergencies come from the different methods used to measure living standards and the choices of statistical sources, reviving an old debate between national accountants and household survey statisticians. As a result of this methodological controversy, the researchers decided to re-examine the aims of the surveys carried out in the past 20 years in developing countries and the diagnoses drawn from them².

The discussions are mainly about trends in average living standards, between countries and within countries, but with little mention of the difficulties relating to measuring inequalities within countries, although this is a vital issue for several reasons. As it has been demonstrated that high inequality levels reduce the growth-elasticity of poverty (Bourguignon, 2002, Cling et al., 2004), a re-evaluation of inequality levels can call into question the expected effects of growth on poverty reduction. In addition, it is essential to examine the scale of inequalities and their origins before introducing redistributive measures.

Through a scrupulous analysis of two surveys, the EPM93 survey in Madagascar and the ENV98 survey in Côte d'Ivoire, we decided to review the different biases likely to have an impact on measurements of average living standards and inequalities (see Guénard and Mesplé-Somps, 2004, for a complete presentation of the results of this study).

There are numerous sources of potential biases: (1) collection methodology, data entry errors, and choice of how the well-being aggregates are calculated; (2) incorrect sample

design, selective observations; (3) missing values or underestimates of certain items in the questionnaire. Once we have identified the scale of these biases, we propose several ways of correcting them in a view to establishing a table of inequalities, corrected for the biases present in the surveys (cf. Table 2).

We then examine whether a comparison of the survey data and the National Accounts data helps to give a better assessment of the quality of the household survey data (4). In conclusion, we propose a summary of the results (5).

(1) Impact of the quality of surveys and of methodological choices on the assessment of inequalities.

Contrary to National Accounts, for household surveys there is no international protocol defining the methods for data collection and the calculation of living standards aggregates. But methodological choices can have a real impact. They must be stated explicitly, otherwise it is difficult to know whether differences in living standards observed, for example between two countries, are the result of "real" gaps or of different methodologies. For example, calculating a fictitious rent for households living in housing which they own, has a real impact. In the Madagascar case studied here, if we do not take this into account the average level of consumption is reduced by 8% and the Gini index is increased by over 6 percentage points, as poor people own their housing. Apart from these issues of definition, other problems are raised.

For instance, we noted that too small a number of product categories or of income sources and too long reference periods tend to lead to an underestimation of spending and income due to lapses of memory. The results of work done by Visaria (2000) on India, quoted by Deaton (2001), are striking in this respect: traditionally, the period of reference for all expenditure is a month for Indian surveys; by reducing this period to 7 days for expenditures on food, as is most often the case in other countries, poverty rates fall from 43% to 24% in rural areas and from 33% to 20% in urban

¹ For example Deininger and Squire (1996), WIDER (2000).

² Bhalla, 2002; Chen and Ravallion, 2004; Deaton, 1997, 2001; 2004; Ravallion, 2000, 2001.

areas, reducing the numbers of poor by 175 million!

The way the data is annualised can also have an impact on the calculation of annual expenditure levels. A study of Chinese data shows that the annualisation of monthly declarations of expenditure by multiplying by twelve, increases the poverty rate by 16 percentage points and the Gini index by 13 points compared with the levels calculated with statements of expenditure for the twelve months (Gibson, Huang and Rozelle, 2003).

Seasonal variations in prices and quantities of products consumed are difficult to control and can lead to biases in comparisons of time-space living standards, insofar as it is suspected that seasonality varies within the territory and that intra-annual consumption smoothing behaviour by households is either low, or different from one region to another (Jones and Ye, 1997).

In addition, price differentials within countries are often badly known and can have a significant impact on calculations of levels of poverty and inequalities and the way they are evolving (Appleton, 2003).

Our study of the two surveys mentioned above shows that, out of all the possible methodological choices, given the structure of the surveys and the data available and besides the question of defining aggregates, it is the question of whether or not the regional price differentials are taken into account that has the greatest impact on the living standards calculations. Taking into account these relative prices significantly increases the average consumption level by more than 10% in both cases and reduces poverty rates by 7 percentage points. The effects on the global inequality levels amount to 2 points in the case of Côte d'Ivoire (and can explain the difference in inequality indicators from our own calculations and those available in the *World Development Indicators*) and to 0.8 in the case of Madagascar. However, these differences are not significant.

It was clear, nonetheless, that before starting to process the data at all, it was vital to audit the data files. There were very frequent data entry or collection errors, particularly in the sections

on income. Failure to correct them leads to an overestimation of average income by 11% and 78%, and 5 and 9 Gini index points for the Ivorian and Madagascan cases respectively!

These errors are usually identified by examining the extremes of the distributions only. They are then corrected by the so-called "Winsorisation" method. This consists in attributing average spending and/or income levels to households with levels that are considered too extreme (i.e. levels superior or inferior to the average, plus or minus three standard deviations). In our view, this method is completely arbitrary and tends to reduce the level of inequalities in a totally artificial manner. In the case of the survey in Côte d'Ivoire, this method reduces the average consumption level by 2% and the Gini index by one point.

Apart from the impact of the above-mentioned errors in data entry, choices of survey methodology and calculations of aggregates, other sources of errors and bias are also possible, such as:

- problems with the sample design and selective observation (non compliance)
- the lack of information on certain items or the under-declaration of specific items of the questionnaire.

(2) Attempt to rectify bias from sample designs and selective observations

Inequalities can be underestimated due to bias in sample designs. First, sample design based on housing automatically eliminates homeless people, who are amongst the most deprived groups. In addition, certain households selected at the sampling stage do not actually take part in the survey³. High-income households are likely not to take part as their time has a high opportunity cost or in order to protect their private lives. Interviewers are therefore obliged to replace them with households that are more conciliating, but which may also have more modest living standards.

³ These cases of non-reponse can represent up to 30% of the initial sample in British and American surveys (see studies quoted by Mistiaen and Ravallion, 2003).

We attempted to assess the scale of these problems in the Ivorian and Madagascan surveys. We found that certain sampling biases can be important, such as the under-representation of foreigners of African origin in the Ivorian case (17% of the total population in the survey, compared with 26% in the population census), the underestimation of residents living in villas or simple houses (22% in the survey, compared with 39% in the census), and the underestimation of households living in makeshift housing – shacks or huts, particularly in urban areas – (6% compared with 11%).

However, none of the adjustments to the sample design carried out by the *a posteriori* stratification method had a significant impact on the income or consumption inequalities. This no doubt stems from the method itself, as it amounts to replacing the missing values in the sample with average values. There is therefore the implicit assumption that the non-respondents in a category cannot be distinguished on average from the respondents. This artificially introduces a concentration around the average values, meaning that the variance calculations on the adjusted sample underestimate the real differences.

If part of the population is not accounted for in the sample design, we must use a different process. This is the case for all the people of foreign origin in Madagascar and of foreigners of non-African origin in Côte d'Ivoire, i.e. in both cases, 0.2% of the total population. We therefore added households representing these populations to the survey, by simulating several hypotheses of living standards. For households of non-African origin living in Côte d'Ivoire or in Madagascar, an initial, so-called "high" hypothesis was applied. This is based on the supposition that this population, comprised of households with an average of four members, has an income of 4,500 euros (30,000 FF) per month and per household, and consumes on average 2,290 euros (15,000 FF) per month. A second, so-called "low" hypothesis consisted in allocating the average income of French households (approximately 2,100 euros)⁴. In Madagascar, the living standards of the foreign population of African

or Asian origin were taken to be equal to the average living standards for Madagascan households.

The results in terms of inequalities depend on the hypotheses retained, but show the extent to which inequalities can be underestimated if the western populations are not included: whereas the average income levels increase by 30% with the high hypothesis (by 11% with the low hypothesis) in Côte d'Ivoire and by 15% in Madagascar, the Gini indexes increase by 9 and 8 points respectively. With the low hypothesis, all of these effects are halved.

(3) Accounting for non-responses and under-declarations of income and consumption

The low impact of corrections to the sample design on living standards levels suggests that the real biases are more likely to be in underestimates of certain types of income by the households surveyed. Lillard, Smith and Welch (1986) showed that the rate of non-response concerning income levels increased from 2.5% to 26.6% of the American sample between 1940 and 1982, and that it was far higher for high-income professions (lawyers, doctors, etc.). In this way, estimating growing probabilities of non-response as income rises, Mistiaen and Ravallion (2003) adjust the Gini index for the United States from 45 to 50.7!

A way of identifying these problems of non-response and under-declaration consists in examining residual savings (balance of income and consumption). The average rate of residual savings is – 86% in the Ivorian case and – 4% in the Madagascan case (cf. Table 1). The fact that the surveys frequently give negative savings rates has been noted in the past (Deaton, 1997). However, there is a high percentage of households with income levels that are more than twice less than the declared consumption levels, with over 20% in Côte d'Ivoire and 5% in Madagascar, and this grows with the standard of living. This suggests significant problems of under-declaration of income, which must be rectified to make them compatible with declarations of consumption, even though these, too, are subject to errors. We used two different methods.

⁴ Households which declare positive or nil income to the tax authorities, in which the reference person is neither a student nor a conscript called up for national service (source INSEE).

The first, in line with Loisy (1999) in the case of France, consisted in using savings declarations. In the cases where the sum of declared consumption and savings ($C + S_{\text{declared}}$) is higher than the declared income (Y_{declared}), and that the household has not obtained a consumption loan, the income was replaced by $(C + S_{\text{declared}})$; in the other cases, i.e. where the income is higher than $(C + S_{\text{declared}})$ and when the households have a lower income but have obtained a loan for the purchase of consumer goods, no replacements were made. This adjustment, which was only possible for the case of Madagascar, concerned 23% of households. It increased the average income by 14%, the average residual savings rate by 30 percentage points and the Gini index by 2 points. The total savings rate for Madagascar households was then shown to be 27%, a relatively high rate, as the National Accounts give a rate of 2.3%.

The second method estimates new income for households which either declared none, or under-declared it (for example, households with very large negative rates of savings). We used the multiple imputation method for missing data developed by Rubin (2004). Based on the Bayesian inference, this method takes into account the uncertainties about the real value of the missing data by proposing different replacement values using several selections of the parameters of an income equation. We tried to control the biases of under-declarations due to living standards by introducing the levels of consumption in the income estimation model, as the other variables correlated with the income are not sufficient to control this bias. This method increases the average income by roughly 6% in Côte d'Ivoire and 13% in Madagascar. The Gini index is not affected in the case of Côte d'Ivoire, but is increased by 2 points for Madagascar.

Generally speaking, studies of bias due to under-declaration, lack of declaration or sample design are not tackled by examining the internal coherence of the surveys or by checking the sample design as we have just done, but by comparing the living standards found in the surveys with those calculated in the National Accounts. In this case, the consumption in the surveys is adjusted using an average coefficient taken from the National

Accounts, following the example of Bourguignon and Morrisson (2002) and Sala-i-Martin (2002). We find this method highly debatable. It implies, on the one hand, that we consider the National Accounts to be more reliable than the surveys when it comes to measuring household income and spending and, on the other, that the gap between the two sources is neutral in distributive terms, i.e. that the underestimation of consumption in the surveys is a constant proportion, at all levels of wealth.

(4) Imperfect matching of household surveys and National Accounts

It is accepted that there is a very low level of concordance between the assessment of the final consumption levels of households made by the National Accounts and those calculated by the aggregation of consumption by a representative sample of households. For example, following work by Ravallion (2001), Deaton (2004) shows that in 277 surveys carried out throughout the world, the per capita consumption is underestimated compared with the National Accounts, the ratio between the two data sources averaging 86% (with a standard deviation of 31%). This average ratio amounts to 78% (standard deviation 10%) for OECD countries, although they are renowned for having better statistical resources than other countries.

There are many methodological and conceptual reasons explaining these differences. The notions of final consumption versus actual spending, of spending versus investment for housing and related spending are different for each of the two sources. In many developing countries, the household consumption given in the National Accounts is simply a balance obtained after subtracting other forms of domestic absorption, that of companies and the government. Household consumption in the National Accounts cumulates the errors made upstream for the other institutional sectors.

The two data sources do not agree either about the population taken into account: consumption in the National Accounts includes the spending of "non-ordinary" households and not-for-profit institutions (workers' hostels, boarding schools, prison population, religious

groups, etc.), whereas the surveys only take into account the purchases and self-consumption of "ordinary" households. In addition, the national accountants are well aware of the problems involved in assessing the scale of illegal or informal income, and of subsistence income. Finally, the two sources do not necessarily use the same price deflators and may differ from year to year.

Given the differences of methods and cover, it is clear that there is no real reason why the two sources of information should lead to a similar assessment of households' consumption and/or income levels and in fact is hardly surprising that this is not the case. On the other hand, it is worrying that there should be such a wide gap between the two sources and also that this gap is widening all the time, whether it be in rich countries (the United States or Great Britain) or in developing countries. Deaton (2004) shows that in a sample of non-OECD countries from 1990 to 2000, the growth rate of consumption found in the surveys is, on average, half of that found in the National Accounts. This confirms the diagnosis that household surveys have difficulty in capturing the top end of income distribution⁵.

In the surveys we examined, the differences between the National Accounts and the surveys exceed 50% in Madagascar and are around 10% in the case of Côte d'Ivoire. The top end of the distribution is not covered by the surveys for the reasons given above, i.e. problems with the sample design, with under-declarations or the deliberate omission of formal income distributed to the population of non-African origin. This is particularly highlighted by the absence of people with relatively high income from non-salary earnings. In Côte d'Ivoire, the maximum incomes measured by the survey correspond to an average formal salary for a non-African, whereas in Madagascar, they are at the level of an average salary for a Madagascan senior executive working in a formal, industrial company⁶.

⁵ This can be particularly true in developing countries in phases of strong economic growth, such as India, as the emergence of new wealthy social classes is totally ignored by the surveys (Banerjee and Piketty, 2003).

⁶ Székely and Hilgert (1999) observed the same phenomenon with a sample of Latin American countries.

If we add the income and consumption of households of non-African origin (on the basis of the same hypotheses as previously), this halves the gap between the two data sources in the Ivorian case. In Madagascar, the income drawn by entrepreneurs in quasi-corporate enterprises, which are taken into account in the National Accounts but not in the surveys, explains the entire 50% gap between the two data sources. However, this income seems extremely high in the absolute and suggests that the National Accounts also include a large number of errors and inconsistencies. We carried out several simulations. The first equalised the incomes from the survey and those from the National Accounts: 90% of the income registered in the latter was attributed to formal entrepreneurs and households receiving dividends. Inequalities increased by over 23 points. The second simulation attributed only 40%: inequalities then increased by over 12 points.

(5) Summary of results and conclusions

In the end, what have we learned when we review our different attempts to correct the survey data?

In the two cases studied, although lapses of memory and seasonality of consumption and income do indeed have an impact, and even though the means of annualising living standards aggregates poses a question, all these phenomena have relatively little impact on the assessment of living standards and their distribution. On the other hand, data entry errors, calculating fictitious rents for households which own the housing they live in, and regional price variations have a large impact. The latter two factors increase average living standards and reduce inequalities in a significant manner.

There are clearly problems with the overall quality of data both in the household surveys and the National Accounts, making it difficult to compare the two.

Although it is relatively easy to spot problems of internal coherency between declarations of income, savings and consumption, correction can be somewhat delicate. There are a large number of possible hypotheses and potential corrections to choose from in order to "make

the aggregates match better". In this study, we replaced abnormal observations using the multiple imputation method, which we believe gives the most satisfactory results compared with other relevant methods currently in use. However, this method does not sufficiently correct certain declaration biases relating to living standards. In addition, it was impossible to assess or rectify certain biases, such as those relating to the absence of homeless people in the surveys.

Whatever the case may be, the multiple imputation method shows that, at the very least, the average income in Madagascar must be adjusted by 14%, whereas matching with the National Accounts would result in an adjustment of around 50%! In Côte d'Ivoire, adjusting under-declarations of income for the households surveyed increases the average income level by 17% and adding the population of foreign origin, by 34%. It seems necessary to add these corrections.

What is the impact of these different adjustments on inequalities in the two countries? Inequalities are apparently much higher in both cases. In Madagascar, the multiple imputation method for correcting income results in a 2 point increase in the Gini

index (43 compared with 41)⁷, whereas the addition of the population of foreign origin leads to increases, depending on the hypothesis retained, of 4 to 7 points in the Gini index. In Côte d'Ivoire, the first adjustment has no impact on the levels of inequality, whereas the second leads to an increase of the Gini index on incomes from 52 to 56, or even 62, depending on the scenario retained. Finally, if we give more credibility to the data from the Madagascar National Accounts than to the household survey and to the origin of the differences between the two data sources, the impact on inequalities can be very significant, up to 23 Gini points.

These different corrections bring the inequality levels in the two countries closer to those in the most inegalitarian countries, such as Brazil. Are inequalities underestimated to the same extent in the other countries? This question can only be answered by wide-scale research, which statisticians and others who use these databases would be wise to undertake. This work could, at the same time, help in drafting a frame of reference to assess the quality of data available on living standards distribution.

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Sandrine Mesplé-Soms**

Table 1 : Residual mean saving rates by deciles of consumption – Côte d'Ivoire and Madagascar

Deciles of consumption	Côte d'Ivoire		Madagascar	
	Mean saving rate (in %)	% of household with saving rate <= -100%	Mean saving rate (in %)	% of household with saving rate <= -100%
1	-7.7	7	32.5	0
2	-50.6	11	25.6	2
3	-43.7	11	-32.5	2
4	-39.5	17	27.4	2
5	-60.5	15	20.5	2
6	-62.8	21	11.1	4
7	-55.9	22	14.3	4
8	-77.3	26	4.9	4
9	-125.6	37	-19.9	9
10	-337.2	52	-125.9	18
Total	-85.9	22	-4.2	5

Source: EPM93, our own calculations, extract from Guénard and Mesplé-Soms (2004).

⁷ The adjustment on the basis of declared savings has the same impact.

**Table 2 : Average consumption and income levels, Gini index,
Côte d'Ivoire ENV98, Madagascar, EPM93.**

	Consumption aggregate		Income aggregate	
	Average per capita	Gini index	Average per capita	Gini index
Côte d'Ivoire (current F CFA)				
World Bank data ^a	319 136	45.15		
(1) Our calculations ^b	348 989	43.6	380 713	52.2
<i>Impact of data entry errors and methodological choices</i>				
(2)= (1) without corr. entry errors	349 070	43.6	422 468	57.0
(3)= (1) without regional price gaps	315 023	45.4		
<i>Adjustment for sample design bias and under-declarations</i>				
(4)= (1) plus foreign pop. of non-African origin (high hyp.) ^c	403 169	50.0	490 671	61.8
(5)= (1) plus foreign pop. of non-African origin (low hyp.) ^c	373 199	46.2	425 519	56.2
(6)= (1) adjusted for under-declarations of income by multiple imputation method ^d			402 695	52.1
Madagascar (current F MG)				
World Bank data ^a	237 099	43.4		
(1) Our own calculations ^b	296 630	45.6	358 569	40.9
<i>Impact of data entry errors and methodological choices</i>				
(2)= (1) without corr. entry errors	301 372	46.4	640 712	69.1
(3)= (1) without regional price gaps	264 760	46.8		
<i>Adjustment for sample design bias and under-declarations</i>				
(4)= (1) plus foreign population (high hypothesis) ^e	332 163	51.3	411 925	48.5
(5)= (1) plus foreign population (low hypothesis) ^e	314 294	48.5	385 122	44.9
(6)= (1) adjusted for under-declarations of income by multiple imputation method ^d			400 718	42.8
(7) (1) adjusted for under-declarations of income by declared savings ^e			407 863	42.9
<i>Adjustment on basis of National Accounts data</i>				
(8)= (1) plus 90% of income drawn by entrepreneurs in quasi-corporate undertakings in NAs ^f			643 329	64.0
(9)= (1) plus 40% of income drawn by entrepreneurs in quasi-corporate undertakings in NAs ^f			485 129	53.3

Source: EPM93, our own calculations, extract from Guénard and Mesplé-Soms (2004).

a) Sources :

➤ Average consumption levels: <http://www.worldbank.org/research/povmonitor/>

➤ Gini indexes: *World Development Indicators*, World Bank, 1998 and 2004.

b) The consumption and income aggregates are calculated after eliminating data entry errors from the survey files and are deflated for regional price gaps.

Definition of consumption aggregate: current expenditure, including fictitious rent, transfers and consumer durables;

Definition of income aggregate: current income from productive salaried or non-salaried activities carried out during the year, from principle and secondary activities of all the members, from income generated by the households' assets (dividends, rent received and fictitious rent for owners), and private and public net transfers.

c) Addition of the foreign population of non-African origin in Côte d'Ivoire and the foreign population in Madagascar, on a high hypothesis (5) and a low hypothesis (6) of the living standards of non-African origin populations. High hypothesis: available income per 4-member household, per month of 4,500 euros, average consumption per household, per month of 2,290 euros. Low hypothesis: available income per 4-member household, per month of 2,100 euros (average French income, INSEE), average consumption per household, per month of 1,100 euros.

d) Using the multiple imputation method for missing data (Rubin, 2004).

e) Adjustment of income by comparing levels of consumption and declared savings (*vs* residual savings).

f) Addition of 90% of income drawn by entrepreneurs in quasi-corporate undertakings given in the National Accounts to households which declare themselves to be "formal" entrepreneurs or to receive dividends. This re-estimation was made equiproportionally to the resources received in the form of income from non-salary, non-farming activities and income from dividends.

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COMMUNICATIONS 2nd SEMESTER 2004

AFRISTAT and DIAL. Workshop on processing and analysing phase 3 of the 1-2-3 survey. Communication by Alain Brilleau, François Roubaud and Constance Torelli « *La consommation et le rôle du secteur informel dans la satisfaction des besoins des ménages* ». (Bamako, Mali, 8-15 November).

AFRISTAT, DIAL and METAGORA. Workshop on processing and analysis of survey modules on poverty, governance and democracy. Communications by Mireille Razafindrakoto and François Roubaud « *L'évolution de l'analyse de la pauvreté et de ses multiples dimensions* » et « *Gouvernance, démocratie et lutte contre la pauvreté à Madagascar : le point de vue de la capitale. Enquêtes 1-2-3, premiers résultats* ». (Bamako, Mali, 16-19 November).

Applied Econometrics Association (AEA). Conference on « *Econometrics of Labour Demand* ». Communication by Christophe Muller and Christophe Nordman « *Which Human Capital Matters for Rich and Poor' Wages? Evidence from Matched Worker-Firm Data from Tunisia* ». (Mons, Belgium, 7-8 October).

Association Française de Sciences Economiques (AFSE). 53rd Congress.. Communication by Lisa Chauvet « *L'aide extérieure permet-elle d'amortir les chocs politiques régionaux* ». (Paris, 16-17 September).

Association Internationale des Statistiques Officielles (AISO), IAOS-IASS Joint conference 2004 on « *Poverty, Social Exclusion and Development: A Statistical Perspective* ». Communications by Mireille Razafindrakoto and François Roubaud « *Les pauvres, la démocratie et le rôle de l'Etat. Le point de vue de la population en Afrique de l'Ouest et à Madagascar* » and « *Le suivi de la pauvreté par les enquêtes, auprès des ménages en Afrique: diagnostic et propositions* ». Communication by Isabelle Parizot and Jean-Michel Wachsberger, « *Aider et être aidé: système et structure du soutien social à Antananarivo et à Paris* ». (Amman, Jordan, 29 November-1st December).

World Bank. Workshop on tools for analysing the social impact of macroeconomic shocks. Communication by Denis Cogneau and Anne-Sophie Robilliard « *Poverty Alleviation*

Policies in Madagascar: a Micro-Macro Model ». (Washington, DC, 18 November).

Banque mondiale-InWent. International policy workshop on the "WDR 2006 - Development and Equity". Communication by Denis Cogneau : « *Equality of opportunity and other equity principles in the context of developing countries* ». (Berlin, 6-8 September).

Centre for Labour Market and Social Research. Conference in honour of Dale T. Mortensen on « *Labour Market Models and Matched Employer-Employee Data* ». Communication by Christophe Muller and Christophe Nordman « *Which Human Capital Matters for Rich and Poor' Wages? Evidence from Matched Worker-Firm Data from Tunisia* ». (Sandbjerg, Denmark, 14-18 June).

Centre for the Studies of African Economies (CSAE), Workshop on Networks, Behavior and Poverty, Communication by Marcel Fafchamps and Flore Gubert « *The Formation of Risk Sharing Networks* » (Oxford, Great Britain, 4-5 December).

CEPAL, World Bank and INEI. 13th regional workshop on poverty line construction in Latin America. Methodology and practical implementation. Communication by Javier Herrera and Nancy Hidalgo « *La estimación de líneas de pobreza en el Perú 1997-2002* » (Lima, Peru, 7-9 July).

Centre d'Etude de Populations, de Pauvreté et de Politiques Socio-Economiques (CEPS/Instead). Workshop on the reinforcement of statistical capacities for development in Africa. Communication by Jean-Pierre Cling and François Roubaud « *Etat des projets de recherche en cours à DIAL sur les pays de l'UEMOA* ». (Differdange, Luxembourg, 2-3 November).

Commissariat Général au Plan, Meeting of MIDI group, Communication by Flore Gubert « *Les comportements des migrants en matière de transferts financiers* » (Paris, 7 December)

Commission of the West African Economic and Monetary Union (WAEMU). Seminar to validate the results of the survey on employment and the informal sector. Communications by Alain Brilleau, François Roubaud and Constance Torelli « *L'emploi, le chômage et les conditions d'activité dans la principale agglomération de sept Etats*

membres de l'UEMOA : principaux résultats de l'enquête 1-2-3 de 2001-2002», « Premier bilan méthodologique des enquêtes 1-2-3 dans les Etats membres de l'UEMOA », « Propositions pour la mise en place d'un dispositif de suivi de l'emploi et du secteur informel dans les Etats membres de l'UEMOA » et présentation d'un outil statistique informatique sur le suivi de la pauvreté : « KIT 1-2-3 » . (Ouagadougou, Burkina Faso, 8-10 September).

Andean Community – French co-operation. 4th meeting of government experts in statistics on citizens participation. Communication by François Roubaud and Javier Herrera « *Premiers résultats du module Gouvernance, corruption, démocratie et participation citoyenne en Equateur* ». (Quito, Ecuador, 27-29 October).

Department for International Development (DFID). Workshop “How do LICUS achieve “turnaround?”. Communication by Paul Collier and Lisa Chauvet « *Development Effectiveness in Fragile States: Spillovers, Turnarounds and Service Provision* ». (London, 8-9 November).

European Society for Population Economics. 18th Annual Conference. Communication by Denis Cogneau and Michael Grimm « *The Measurement of Poverty Dynamics when Demographics are correlated with Income - Theory, Concept and empirical Implementation* ». (Bergen, Norway, 11 June).

European Union Development (EUDN)- Agence Française de Développement (AFD). 2nd academic conference. Communications by Denis Cogneau and Jean-David Naudet « *Who deserves aid? Equality of opportunity, international aid and poverty reduction* », by Jean-Paul Azam and Flore Gubert « *Those in kayes. The impact of Remittances on their Recipients in Africa* » and by Mohamed A. Marouani « *The Impact of the Multi-fibre Agreement Phaseout on Unemployment in Tunisia: a Prospective Dynamic Analysis* ». (Paris, 26-27 November).

Fondation BBVA. Meeting on the theme of microsimulation as a tool for assessing public policies. Communication by Denis Cogneau, Michael Grimm and Anne-Sophie Robilliard « *L'évaluation des politiques de lutte contre la pauvreté: l'apport des techniques de micro-simulation* ». (Madrid, Spain, 15-16 November).

GRADE, Universidad Pontificia and CEDEP. 1st Conference on Labour Economics, Communication by Javier Herrera « *Sobre y subeducación en el Perú urbano, 1995-2002* ». (Lima, Peru, 22-23 November).

International Association for Research in Income and Wealth (IARIW). 28th General Meeting. Communication by Denis Cogneau and Michael Grimm « *The Measurement of Poverty Dynamics when Demographics are correlated with Income - Theory, Concept and empirical Implementation* » (Cork, Ireland, 22-28 August).

4th International Water Association (IWA) World Water Congress. Workshop on Water Services and Economy. Communication by Anne Olivier « *Measuring Households Preferences for water using Analysis of Discrete Choices. An Application to Manaus, Brazil* ». (Marrakech, Morocco, 19-24 September).

Landbouw-Economisch Instituut (LEI). Conference on the impact of a WTO agreement on poverty. Communication by Anne-Sophie Robilliard and Sherman Robinson « *Social Impact of a WTO Agreement in Indonesia* ». (The Hague, Netherlands, 2-4 December).

Latin American Studies Association (LASA)/Peru Section and Instituto de Estudios Políticos. Communication by Javier Herrera « *¿Por qué no lo aplauden? Realidad y percepción de las condiciones de vida de los hogares peruanos* », (Lima, Peru, 9 July).

Ministère des Affaires Etrangères, Seminar on Human Development. Communication by Denis Cogneau , « *L'éducation et la santé dans la croissance et les inégalités* » (Paris, 30-31 August).

Organisation for Economic Cooperation and Development (OECD). Development assistance committee. Communication by Paul Collier and Lisa Chauvet « *Development Effectiveness in Fragile States: Spillovers, Turnarounds and Service Provision* ». (Paris, 5 November).

Université Paris XII – Créteil. 14th GRATICE study day (Groupe de Recherche et d'Analyse des Théories, Institutions et Conventions Economiques) on development aid. Communication by Lisa Chauvet, « *L'aide extérieure permet-elle d'amortir les chocs politiques régionaux* ». (Créteil, 9 December).

Working papers published in 2004

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