

**WORKSHOP ON
MIGRATION IN THE ARAB REGION: DETERMINANTS AND CONSEQUENCES
APRIL 16-17, 2011
ISTANBUL MARRIOTT HOTEL ASIA TURKEY**

**Impact of remittances on poverty and
inégalities : preliminary results of a survey
in the province of Zagora in Morocco**

E.M. Mouhoud (Univ. Paris Dauphine)

Abdelkabir Bahani (IURS)

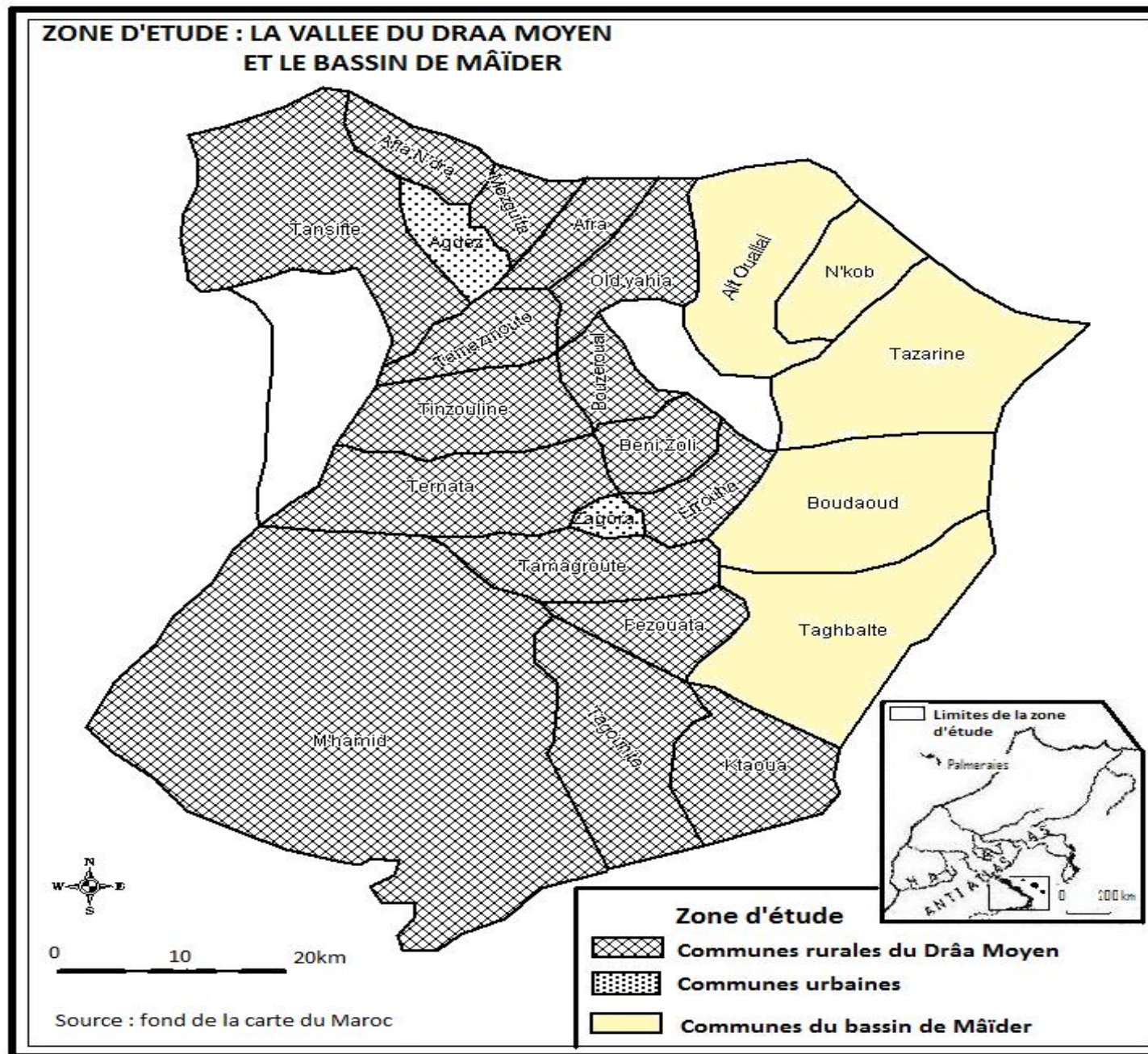
Hicham Hanchane (IURS)

motivation

- Determinants and uses of remittances from France to Maghrebian countries based on a new survey (2M0) conducted in France :
- Result old waves of migration (non skilled, being in France for a long time, attached to the country of origin) remit more (both in extensive and intensive margin) than the new waves => risk of decline of remittances in Algeria (Kabylie) and Morocco ?
- FEMISE study : impact of remittances on poverty, inequalities and education in those two countries
- Very preliminary results based on the survey conducted in Morocco (Zagora Province)

Presentation Outline

- Choice of Zagora province: justification
- Impact of transfers: some empirical results.
- Sampling method
- Preliminary Results
- agenda



Why Zagora?

1- Importance of transfers in the region

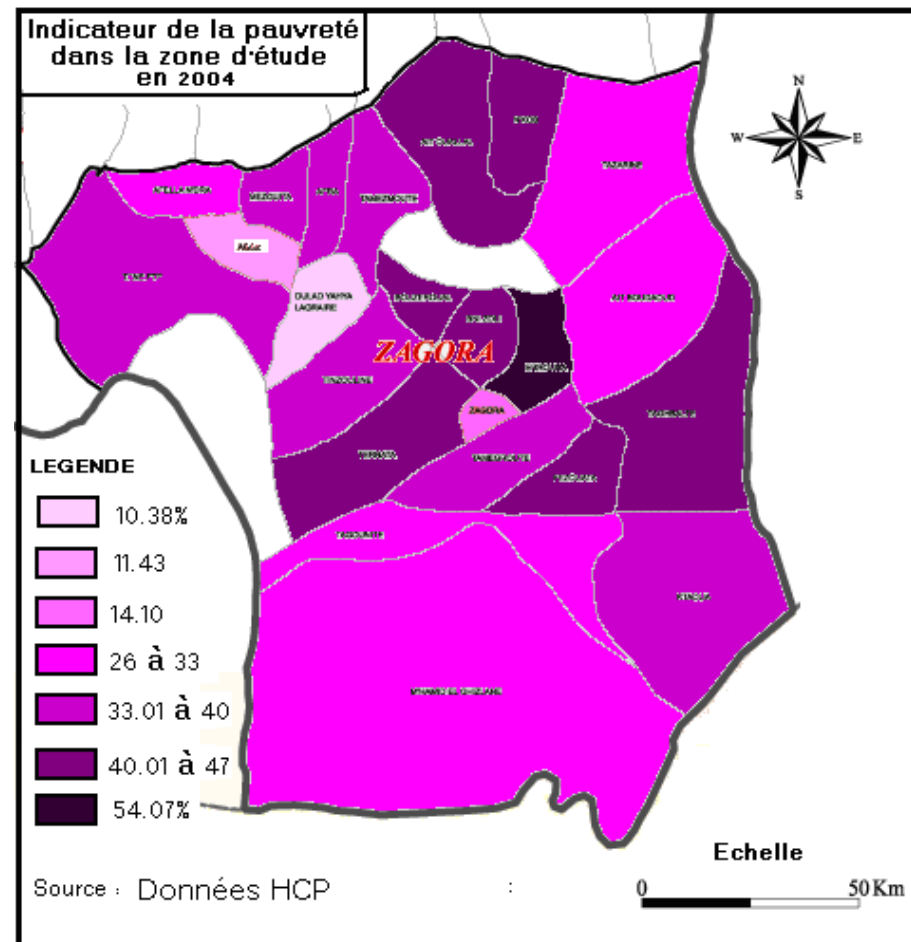
- The average *Drâa* has registered payment transfers totalling 150,8 millions dirhams in 2002**
- Only 18.9 millions dirhams of the above total were transfers from internal payments**
- The remaining funds were from international transfers**

2- The migratory phenomenon is an one.

Poverty is a huge problem

3- Lack of data in the region.

Poverty Rates in the Zagora province



Impact of remittances: some empirical results (1)

Using household surveys studies have mainly focused on the impact of transfers on:

- Children's schooling**
- Inequality and poverty**

Impact of remittances: some empirical results (2): education

There are numerous studies which all conclude that remittances:

- Improve children's access to schooling,**
- Improve school performances, and particularly,**
- Reduce the risk of child labor**

This vein of research includes the work of

- Edwards et Ureta (2004) in El Salvador**
- Mansuri (2008) in Pakistan**

Impact of remittances: Some empirical results (3): inequality

- **The debate is not settled however**
- **Two interesting studies**
 - 1- Lachaud (1999) for Burkina-Fasso :**
uses a model which solely captures direct effects.
 - **Remittances have a negative impact on inequalities**

Impact of remittances: Some empirical results (4)

2- Adams (1991) : in the case of Egypte

- Determines the variance of the total income as a function of the interaction of the different sources of income.**
- Remittances are the least egalitarian source of income**

Impact of remittances: the case of Morocco

- **Studies are generally qualitative and rare.**
- **The impact of remittances on girls' education has been neglected**

Impact of remittances on inequality: the case of Morocco

- **Little research.**
- **By simple deduction, some studies suggest that remittances increase inequality**

Questionnaires designed for this study

- A questionnaire intended to the presidents of the municipalities
- A questionnaire '*qasr*' intended to the *Chioukhs* and to the *Mouqadimines* of the *qsours*
- Lastly a questionnaire intended to the head of households
 - Households receiving remittances
 - Households not receiving remittances
 - Households without migrants

Meetings and data collection at the provincial and local levels

- **Comprehensive survey**
- **The main objective of the questionnaire (qsar and municipalities) was to catch the geographic distribution of the migrants in the region**
- **Visit of all *Caïdats* of the province in to fill the '*qsar*' and *douar* questionnaires**

Preliminary results of the comprehensive survey

- **The comprehensive survey has identified 598 households in the province and 4284 migrants living abroad.**
- **Single migrants are the majority and constitute 56% of the total.**
- **In the two basins:**
 - **More than 66% of migrants in Tazarine/Taghbalte are single**
 - **In the Middle Drâa only 36% of migrants are single.**

Preliminary results of the comprehensive survey

- **4284 migrants live abroad:**
 - **15.90% of unknown destination.**
 - **98.5% of the 3603 migrants have moved to European countries.**
 - **Spain (35.05%), France (29.53%), Italy (16.54%).**
- **More than 50% of the Middle Drâa migrants are in France,**
- **More than 50% of migrants from the Tazarine/ Taghbalte bassin have moved to Spain.**

Preliminary Results of the comprehensive survey

- **This situation can be explained by the period during which migration took place.**
 - **It is in the Middle Drâa that we have the majority of the first generation of migrants**
 - **In Tazarine/Taghbalte, most migrants left after the 1990s**

Household survey: sampling design

- **Total number of households with transfer by douars as a function of migration weight.**
- **Selection of households without remittances who have the same demographic characteristics than families with migration**
- **598 households**
 - **298 with migration and remittances**
 - **140 with migration without remittances**
 - **180 without migration**

Household survey: sampling design

Population young in the 2 basins (1/3 less than 15 years)

Size : 8 members per household (8.67 in household with remittances, 7.6 in Household without migrants)

1/3 are at school (more important in HH with remittances)

Head of households are female (13 % for households with remittances

only)

Distribution of the sample by municipality

Municipality	Number of households	% of households sueveyed
Mezguita	9	1.51
Afra	54	9.03
Tamezmoute	33	5.52
Oulad Yahia Lagraïre	20	3.34
Bouzeroual	4	0.67
Tinzouline	63	10.54
Tamegroute	57	9.53
Fezouata	10	1.67
Ktaoua	31	5.18
Tagounite	19	3.18
Zagora (municipalité de)	34	5.69
Agdz (municipalité de)	9	1.51
Aït Ouallal	52	8.70
N'Kob	45	7.53
Tazarine	48	8.03
Aït Bodoud	50	8.36
Taghbalte	60	10.03
Total	598	100.00

Results

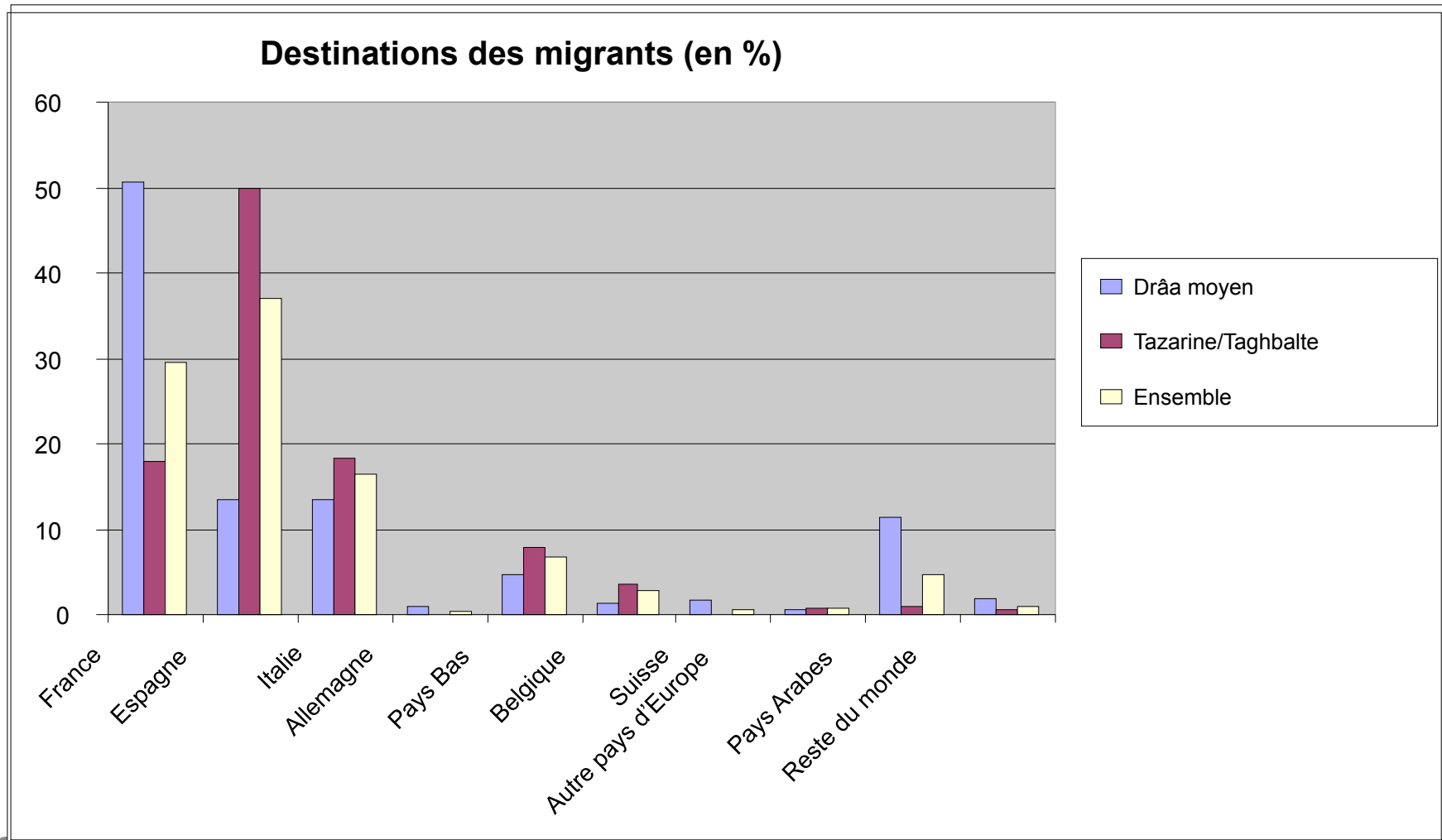
- **Migration wave, destination and remittances**
- **Inequality of income**
- **Poverty**
- **Children's schooling**

Migration wave, destinations and remittances (1)

Migration wave in the two bassins

Period	Drâa	Tazarine/ Taghbalte	total
	%	%	%
Before 1980	32.17	6.13	17.95
80 to 89	13.95	4.84	8.97
90 to 99	14.73	21.29	18.30
2000 to 2009	39.15	67.74	54.75
Total	100.00	100.00	100.00

Migration wave, destinations and remittances (2)



Migration wave, destinations and remittances (3)

Migrants and remittances from abroad (in %)

Types of households	Middle Drâa	Tazarine/ Taghbalte	total
Migrants remitting	58,91	73,55	66,90
Migrants not remitting	41,09	26,45	33,10
Total	100	100	100

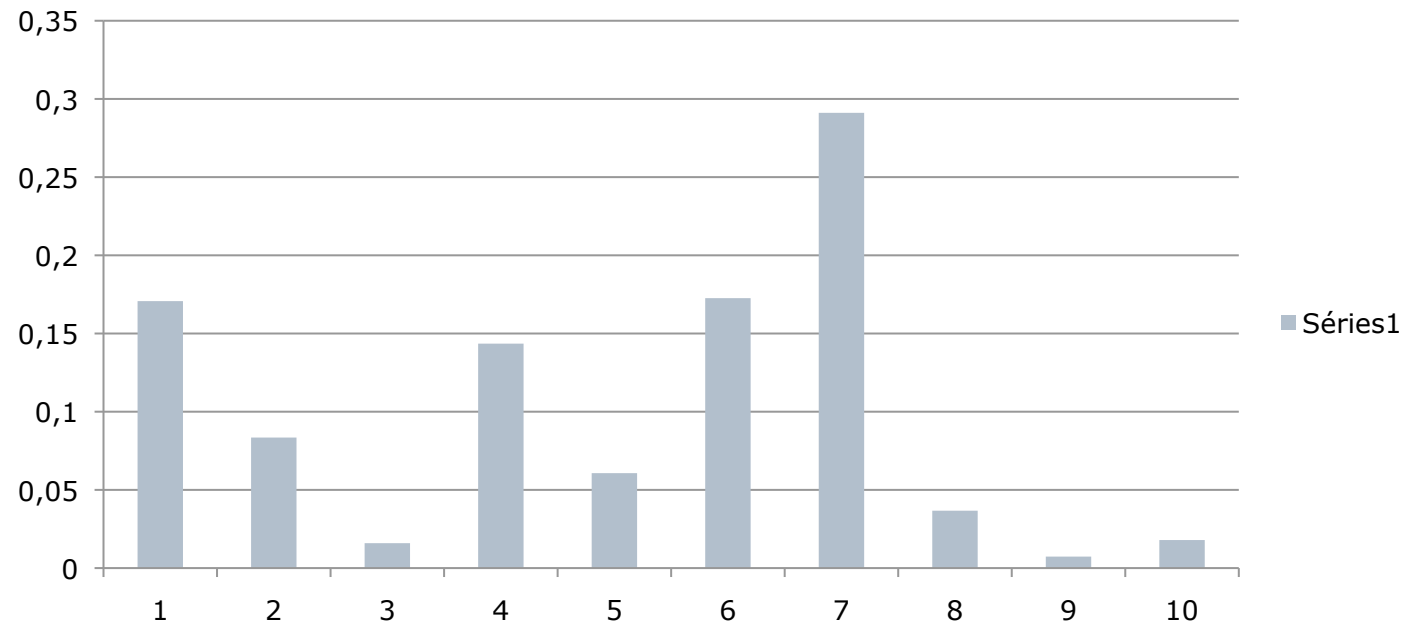
Source: field survey

Inequality of income (1)

- **Source of household income as per survey :**
 - **Agricultural products sales,**
 - **animal sales,**
 - **craft activities,**
 - **public sector salary ,**
 - **private sector salary,**
 - **internal remittances**
 - **international remittances**
 - **retirement pension from abroad ,**
 - **Income from rent**

Inquality of income (2)

The dependance of the area on remittances from abroad



Inequalities of Income (3)

The average income of households (in dh) in the last 12 months		
	Average income	Average Income without Remittances
Household receiving remittances	29899.46	14674.64
Household with migration without remittances	25701.43	
Households without migration	24749.26	

Extent of inequality:Decomposition of the Gini index

**The Gini coefficient is a measure of the degree
of inequality of income distribution**

**The Stark,Taylor and Yitzhaki (1986) The
Economic Journal, 96, 383, decomposition
method used in the Mexico case is adopted here.**

**The decomposition of the Gini Index by income
source enable us to determine which source
contributes most to inequality**

Decomposition of the Gini index

- R_k : corrélation of Gini Index between the component k of the income and the total income
- G_k is Gini index associated to the source k of the income
- S_k is the part of the factor k in the average income
- When the product of those 3 components is high $\Rightarrow$ the contribution of the source k to the income inequality is important

Decomposition of the Gini Index by income source excluding remittances

Sources of income	Gini coefficient (G_k)	Contribution to inequality %
Agricultural products sales	0.7694	24.35
Sales of animals	0.7971	11.47
Craft activities	0.9794	2.08
Public sector salary	0.9476	27.88
Private sector salary	0.9544	8.35
Remittances from internal migration	0.7396	16.86
Retirement pension from abroad	0.9664	5.93
Income from rent	0.9859	1.04
Other	0.9613	2.04
Total	0.5715	100

Decomposition of the Gini Index by source of income

Income source	Gini Coefficient (G_k)	Relative contribution to total inequality of income ($S_k G_k R_k / G$)	Contribution to inequality %
agricultural products sales	0.7694	0.1876	0.0169
animals sales	0.07971	0.0807	-0.0028
Craft activities	0.9794	0.0101	-0.0058
Public sector salary	0.9476	0.2271	0.0836
Private sector salary	0.9544	0.0619	0.0012
Internal migration transfer	0.7396	0.1011	-0.0715
Remittances from abroad	0.7359	0.2633	-0.0278
Retirement pension from overseas	0.9664	0.0455	0.0088
Income from rent	0.9859	0.0078	0.0005
Other	0.9613	0.0149	-0.003
Total	0.4507		

Remittances and poverty: method of the nutritional energy consumptions (1)

- **The method consists of determining the necessary cost to reach the recommended level of nutritional energy consumption .**
- **The level recommended by the World Health Organization and the Food and Agricultural Organization is of 2400 kal/person/day.**
- **Units of analyses vary depending on their size and their composition (number of persons, but also proportion of adults and children in the household or family)**
- **To calculate the cost, the equivalence scale must be taken into account**

Remittances and poverty: method of dietary energy consumption (1)

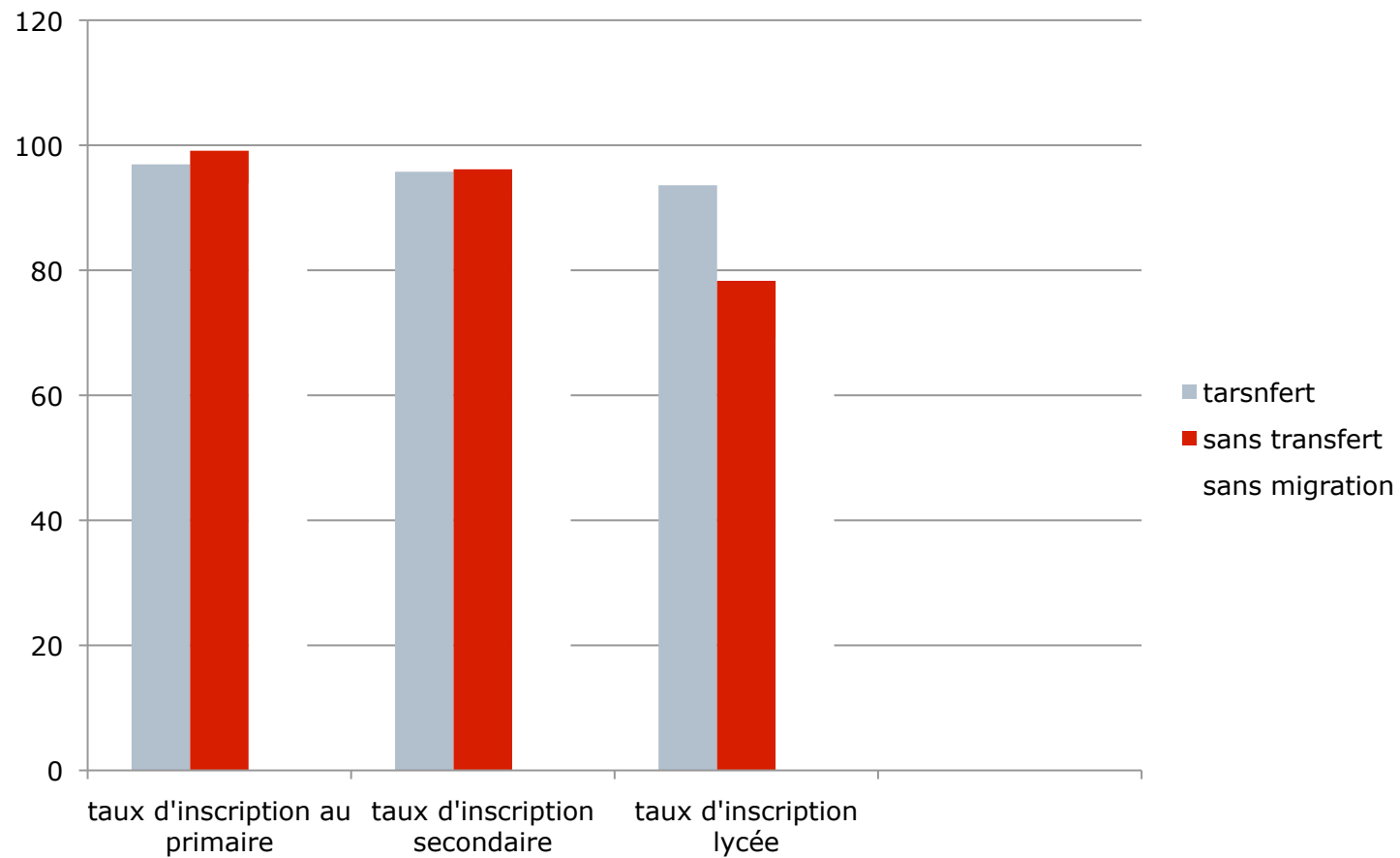
Calculation of poverty indices by Foster, Greer et Thorbecke. These indices enable the calculation of :

- 1- Poverty rate
- 2- Poverty depth: measure of the standard deviation of the poor relative to the poverty threshold
- 3- Poverty inequality: measures the intensity of poverty between the poor.

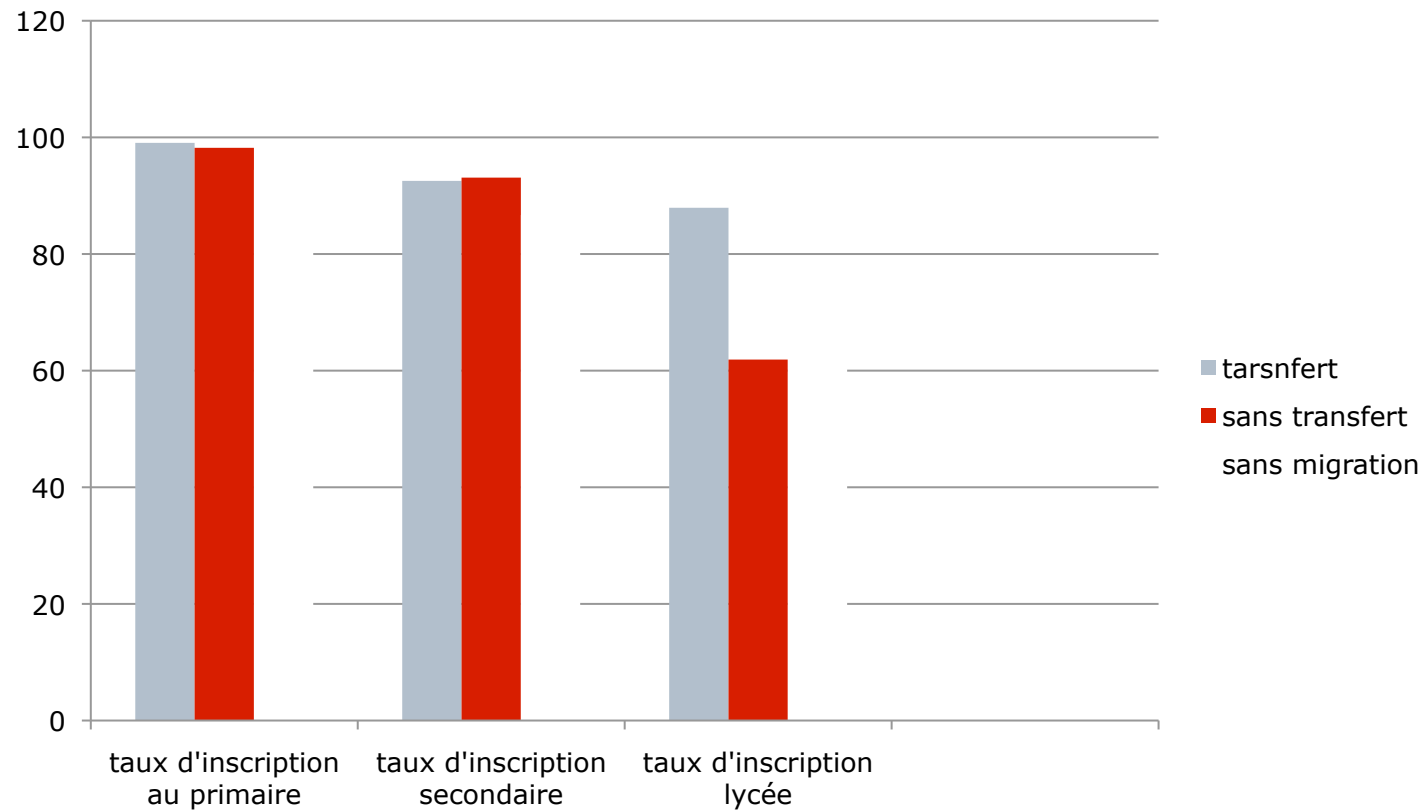
Remittances and poverty: method of dietary energy consumption (6)

Household type	incidence	Depth	Inequality	Weight
	P0	P1	P2	N
Households with remittances	22.43%	0.28%	0.068%	2411
Households without remittances	19.55%	0.43%	0.17%	1038
Household without migration	33.89%	0.66%	0.18%	1419
total	25.16%	0.42%	0.12%	4868

Schooling of members of the household



Girls' schooling



Avenues for further research

- Determine the net impact of the transfers on the standard of living or poverty level of households taking into account migrants' earnings if they had stayed in their home community.
- Despite its usefulness, the Gini index decomposition approach has a number of limitations:
 - The method captures the contribution and the direct effects of different income sources on inequality assuming no interaction between the various components of income.

<i>Variables</i>	Paramètres estimés	T de student	Effets marginaux
<i>constante</i>	0.739949	1.75	
<i>Household size</i>	-0.134576	-7.06*	- 0.0334610
<i>Remittances or not</i>	0.427907	3.21*	0.1063955
<i>Head of household sex</i>	0.414714	1.64**	0.1031149
<i>Married or not</i>	0.165631	0.66	0.0411827
<i>Internal migration remittances or not</i>	-0.146728	-1.16	- 0.0364827
<i>Head of household active</i>	0.541998	1.52	0.1347630
<i>Chef du ménage autres</i>	0.865440	2.23*	0.2151841
<i>Chef du ménage avec un niveau scolaire</i>	0.196182	1.24	0.0487790

- * Significatif au moins à 5%
- ** significatif entre 5% et 10%

<i>Variables</i>	Paramètres estimés	T de student	Effets marginaux
<i>constante</i>	0.137142	0.30	
<i>Tailles des ménages</i>	-0.134341	-7.00*	-0.0324422
<i>Migration avec transfert</i>	0.610686	4.09*	0.1474757
<i>Migration sans Transfert</i>	0.376522	2.22**	0.0909271
<i>Sexe chef du ménage</i>	0.452608	1.81**	-0.0301526
<i>Marié ou pas</i>	0.146047	0.58	0.1093011
<i>Envoi migration nationale ou pas</i>	-0.124860	-0.98	0.0352692
<i>Chef du ménage actif</i>	0.677656	1.85**	0.1636484
<i>Chef du ménage autres</i>	0.958380	2.40*	0.2314408
<i>Moyenne d'années de scolarité de l'ensemble des membres des ménages</i>	0.111676	3.12*	0.0269688

- *significatif à au moins 5%
- ** significatif entre 5% et 10%