# THE REDISTRIBUTIVE EFFECTS OF FISCAL POLICY IN MALI

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Poverty & Equity

# Outline

1- Context

2- Methodology

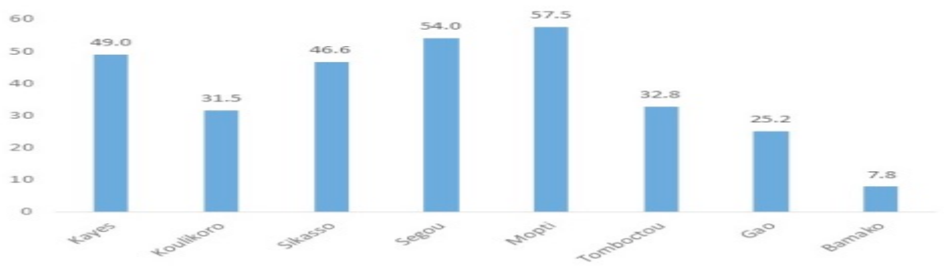
3- Results

4- Conclusion

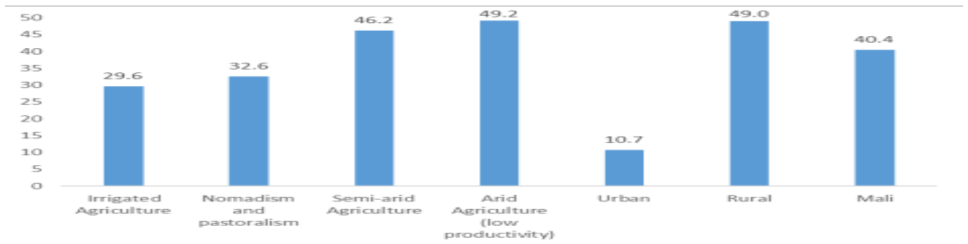
# Context : High Poverty Rate in Mali

*The poverty rate is high in rural areas and in the regions of Ségou and Mopti*

**Poverty rate by region (%)**

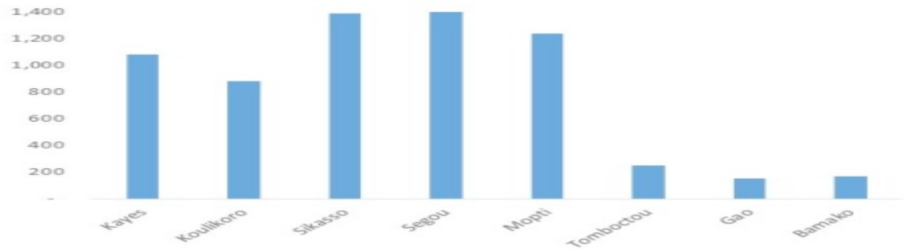



**Poverty rate by zone (%)**

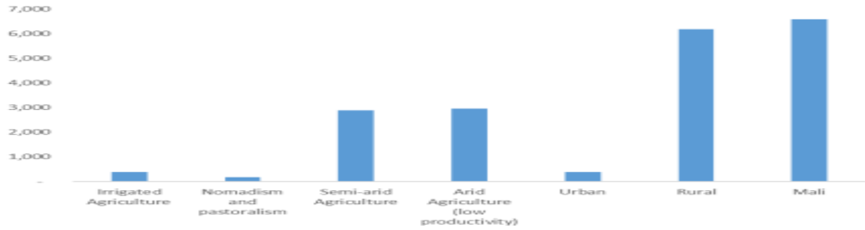



*The poor are concentrated in the southern regions and 88 percent of them live in semi-arid and arid areas*

**Number of poor people (thousands, 2014)**




**Number of poor people (thousands, 2014)**



# Context: Why a Fiscal incidence Analysis for Mali ?

- Taxes and public spending are now seen as instruments to be used to reduce poverty and redistribute revenues

- Like many of its African counterparts, Mali has limited financial resources : decisions must be made about which sectors are to benefit from greater public expenditure.

- It is important to identify sectors for which greater public spending lead to important poverty reduction and redistribution.

# Context: Why a Fiscal incidence Analysis for Mali ?

- For households, paying taxes to the State reduces income and purchasing power. It must therefore be ensured that tax collection by the State does not exacerbate inequalities or result into a great deterioration in the living conditions of vulnerable households.

- The main focus of this paper is how taxes and budget expenditures in Mali redistribute resources among the various welfare quantiles.

# Methodology: CEQ

- In this paper, we use the CEQ methodology developed by the Commitment to Equity Institute. The general objective of the CEQ methodology is to assess the impact of a State's fiscal policy and its public spending on household welfare.

- The CEQ seeks to answer the following questions:
  - What is the impact of the fiscal system on poverty and inequality?
  - Are taxes and transfers progressive? Are they poverty and inequality reducing?
  - Who benefit from public spending and who bears the burden of taxes ?

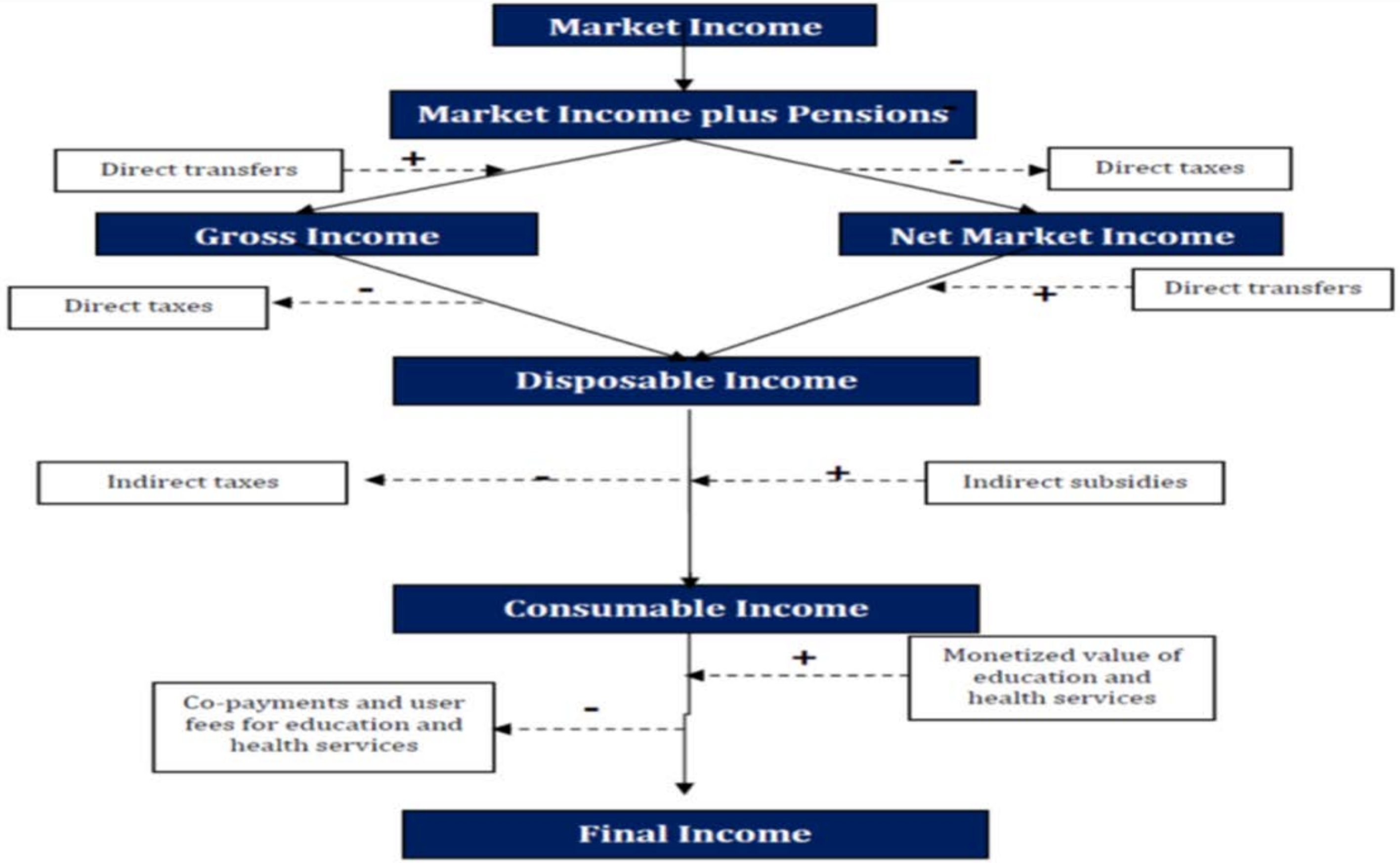
- The data used come from the latest Integrated Survey on Agriculture (Enquête Agricole de Conjoncture Intégrée, EACI), from 2014/15, and the national budget for 2014.

# Methodology: CEQ

- Eligible households are allocated the amount of social spending they have received and the taxes they have paid, using institutional criteria as well as household survey data.

- The analysis uses various income concepts to measure the implications of each fiscal intervention for poverty and inequality.

# Methodology: CEQ



# Methodology: CEQ

- A public expenditure (or tax) is progressive, in relative terms, if the proportion of expenditure (or tax) in relation to income decreases (increases) with household income. A public expenditure (or tax) is pro-poor if it is progressive in absolute terms—in other words, if the absolute amount

- In order to assess the progressivity of different taxes and expenditures, we used the Kakwani index, which is equal to the difference between the concentration coefficient of a tax and the Gini index of pre-fiscal income. The tax is progressive if the Kakwani index is positive; if not, the tax is regressive.

# The WST is progressive everywhere and pro-poor…

*The WST is progressive everywhere and pro-poor*

Figure 4a. WST (incidence by market income deciles and concentration by decile)


Figure 4b. WST (CFAF, amount per capita)

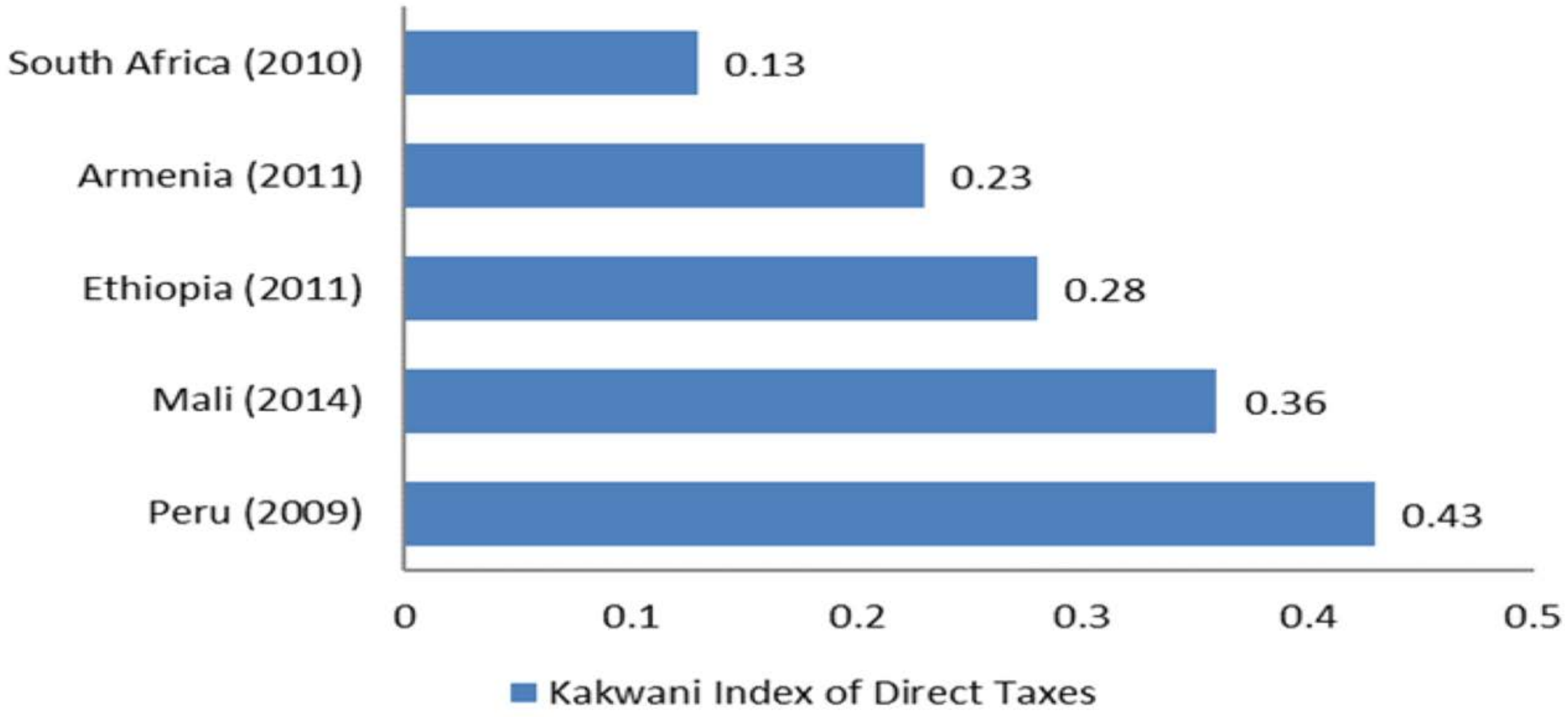

*WST is negligible in rural areas*

Figure 4c. WST (incidence by market income deciles) by place of residence


Figure 4d. WST (CFAF, average amount per capita)

by place of residence

# … and Mali performs better than many countries



# Indirect taxes are progressive

*Indirect taxes are progressive*

Figure 6a. Indirect taxes (incidence by market income deciles and concentration by decile)


Figure 6b. Indirect taxes (CFAF, amount per capita)


*Urban residents pay more indirect taxes than rural residents*

Figure 6c. Indirect taxes (incidence by market income deciles) by place of residence


Figure 6d. Indirect taxes (CFAF, average amount per capita) by place of residence

# Indirect taxes are progressive

*VAT is the largest indirect tax*

Figure 7a. Indirect taxes by category (incidence by market income deciles)

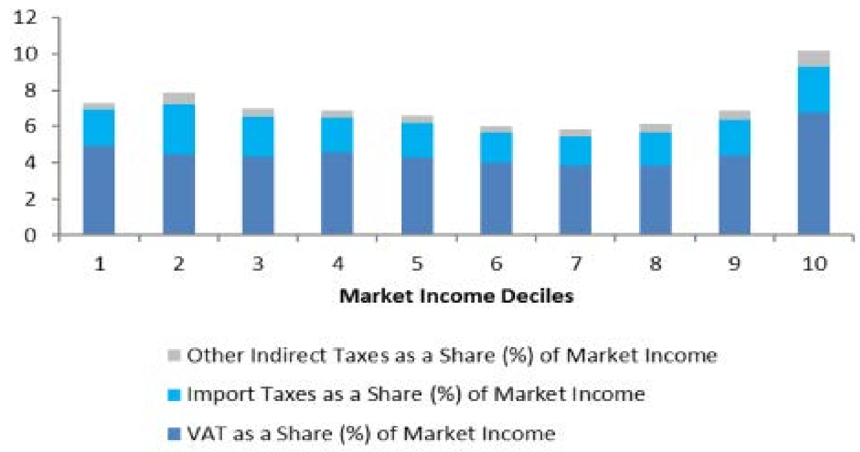
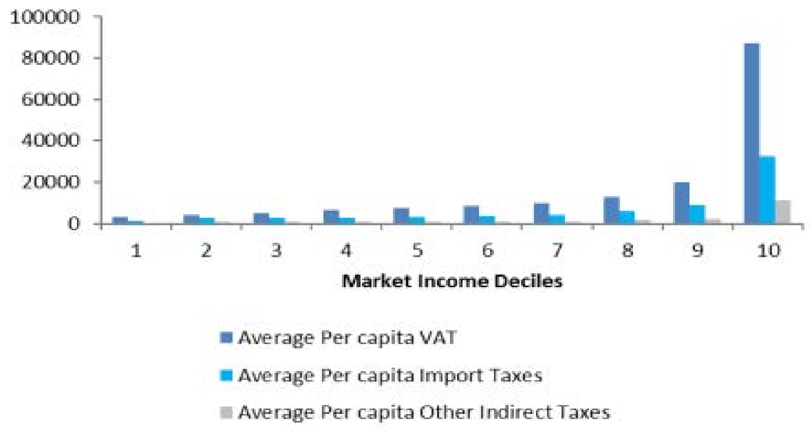
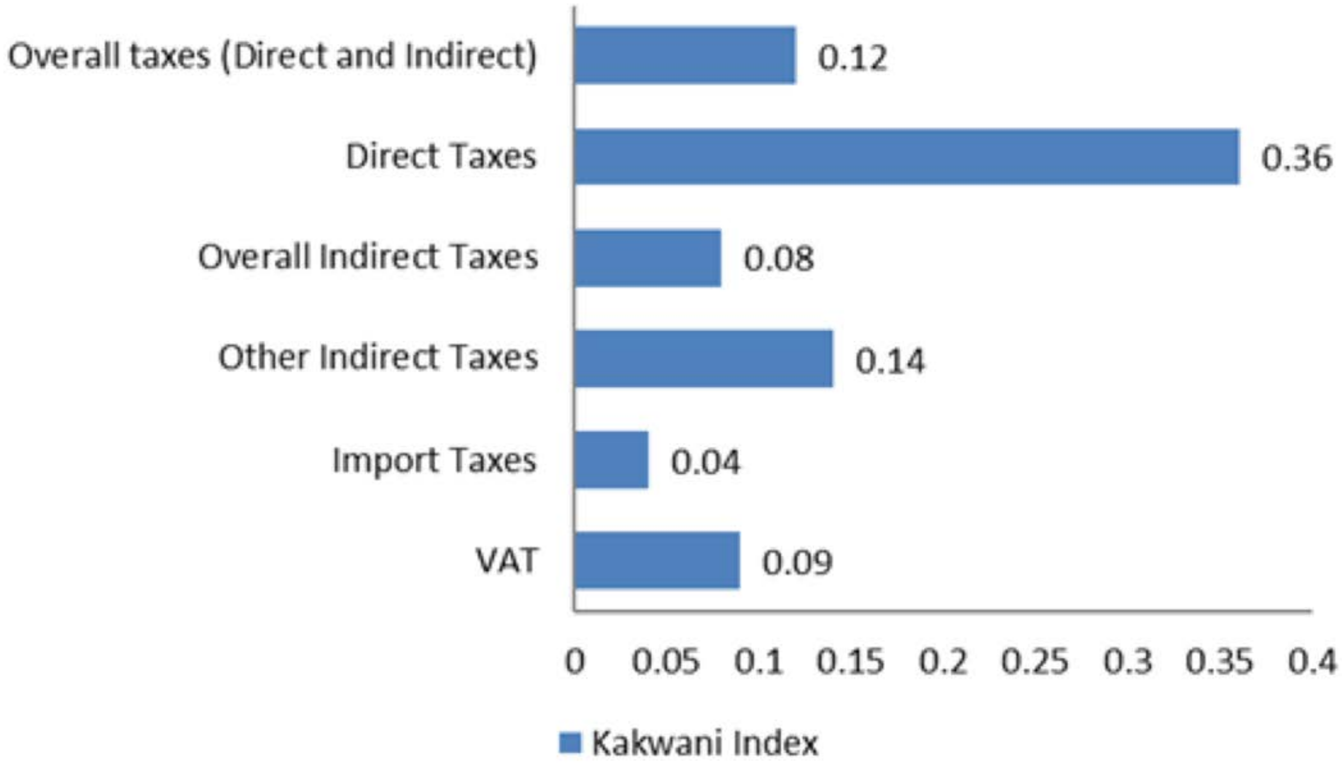



Figure 7b. Indirect taxes by category (CFAF, amount per capita)



# Taxes are progressive



# Education spending is progressive

*Spending on basic education is progressive and spending on higher education is regressive*

Figure 9a. Spending on education by category (incidence by market income deciles)

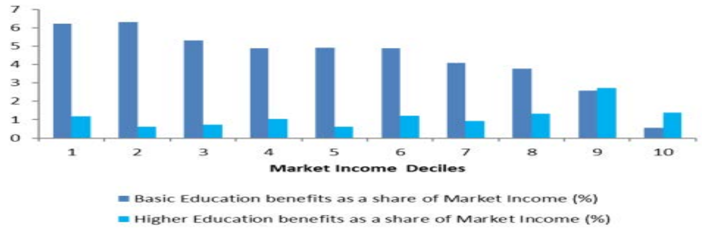
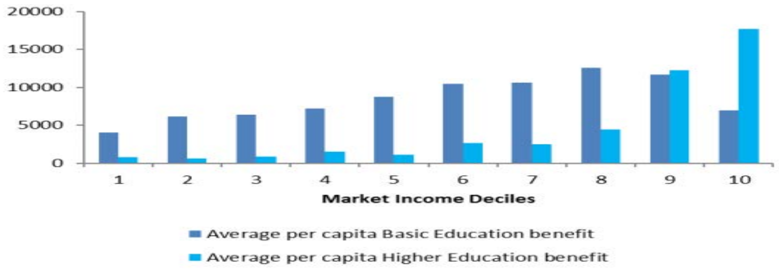



Figure 9b. Spending on education by category (CFAF, average amount per capita)




*Urban residents benefit more from education spending than rural residents*

Figure 9c. Spending on education by category in urban areas (CFAF, average amount per capita)

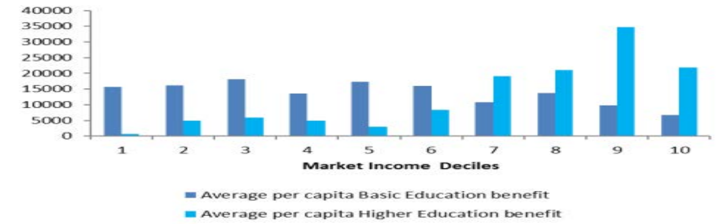



Figure 9d. Spending on education by category in rural areas (CFAF, average amount per capita)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# Health spending is progressive

*Health spending is progressive*

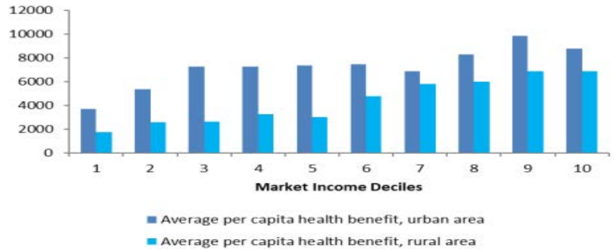
Figure 10a. Spending on health (incidence by market income deciles and concentration by decile)


Figure 10b. Spending on health (CFAF, average amount per capita)


*Urban residents benefit more from health spending than rural residents*

Figure 10c. Spending on health (incidence by market income deciles) by place of residence


Figure 10d. Spending on health (CFAF, average amount per capita) by place of residence



# Agricultural subsidies are pro-poor

*Agricultural subsidies are pro-poor*

gure 13a. Agricultural subsidies (incidence by market income ciles and concentration by decile)

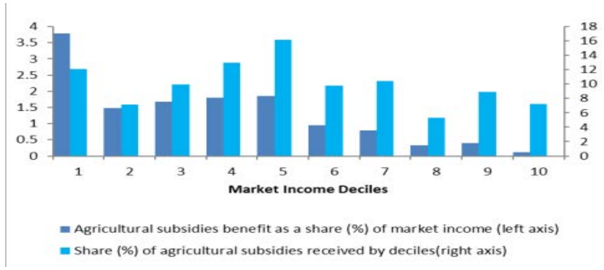
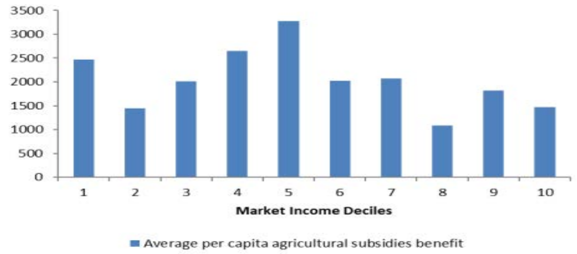



Figure 13b. Agricultural subsidies (CFAF, average amount per capita)




*Rural residents benefit more from agricultural subsidies than urban residents*

gure 13c. Agricultural subsidies (incidence by market income deciles) by place of residence

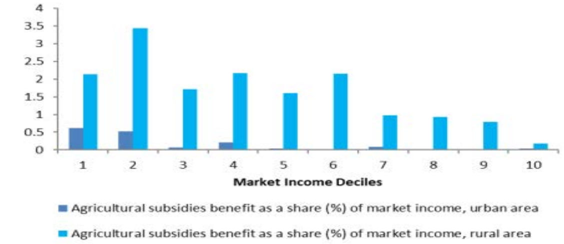
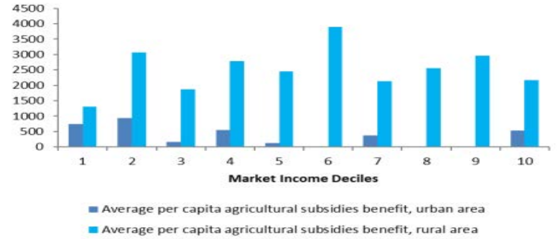



Figure 13d. Agricultural subsidies (CFAF, average amount per capita) by place of residence



# Energy subsidies are regressive

*Gas and electricity subsidies are regressive*

Figure 12a. Energy subsidies by category (incidence by market income deciles)

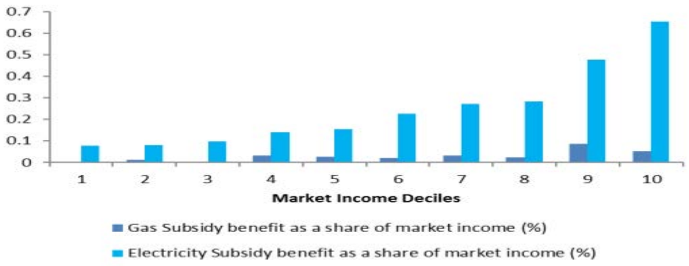
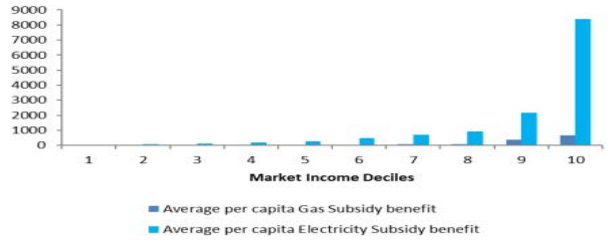



Figure 12b. Energy subsidies by category (CFAF, average amount per capita)




*Urban residents benefit more from energy subsidies than rural residents*

Figure 12c. Gas subsidies (CFAF, average amount per capita) by place of residence

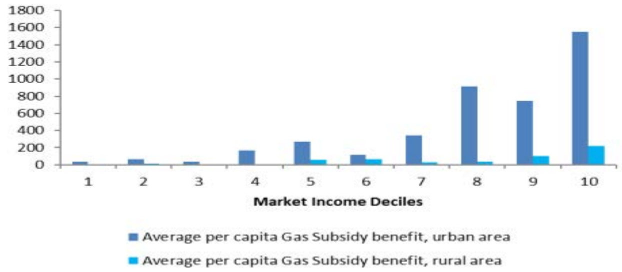
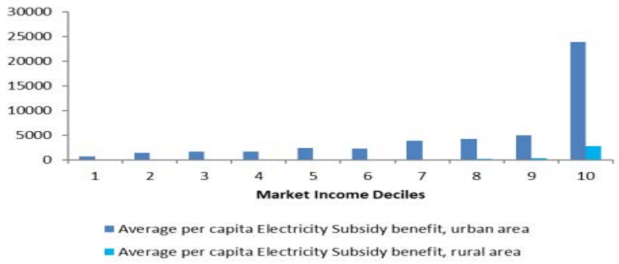



Figure 12d. Electricity subsidies (CFAF, average amount per capita) by place of residence

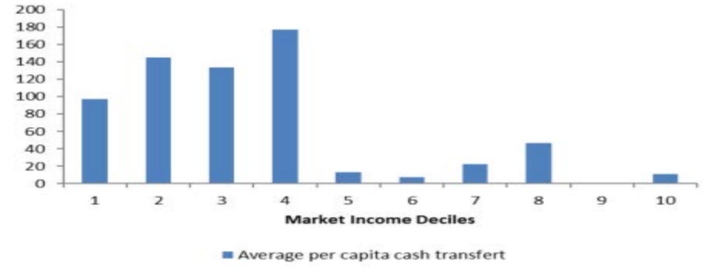


# Cash transfers are pro-poor

*Cash transfers are pro-poor*

ure 14a. Cash transfers (incidence by market income deciles
d concentration by decile)


Figure 14b. Cash transfers (CFAF, average amount per capita)




*Rural residents benefit more from cash transfers than urban residents*

Figure 14c. Cash transfers (incidence by market income deciles) by place of residence

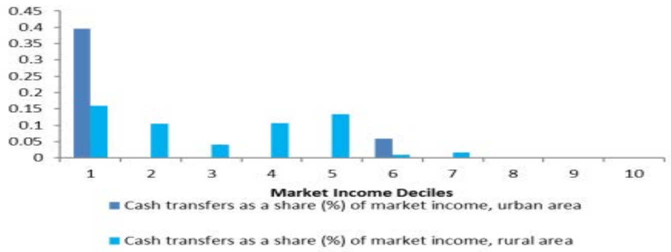
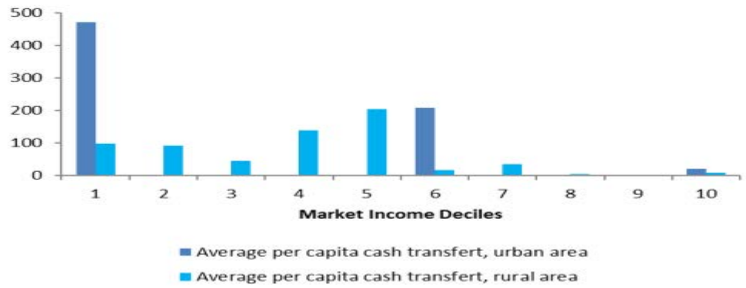



Figure 14d. Cash transfers (CFAF, average amount per capita) by place of residence

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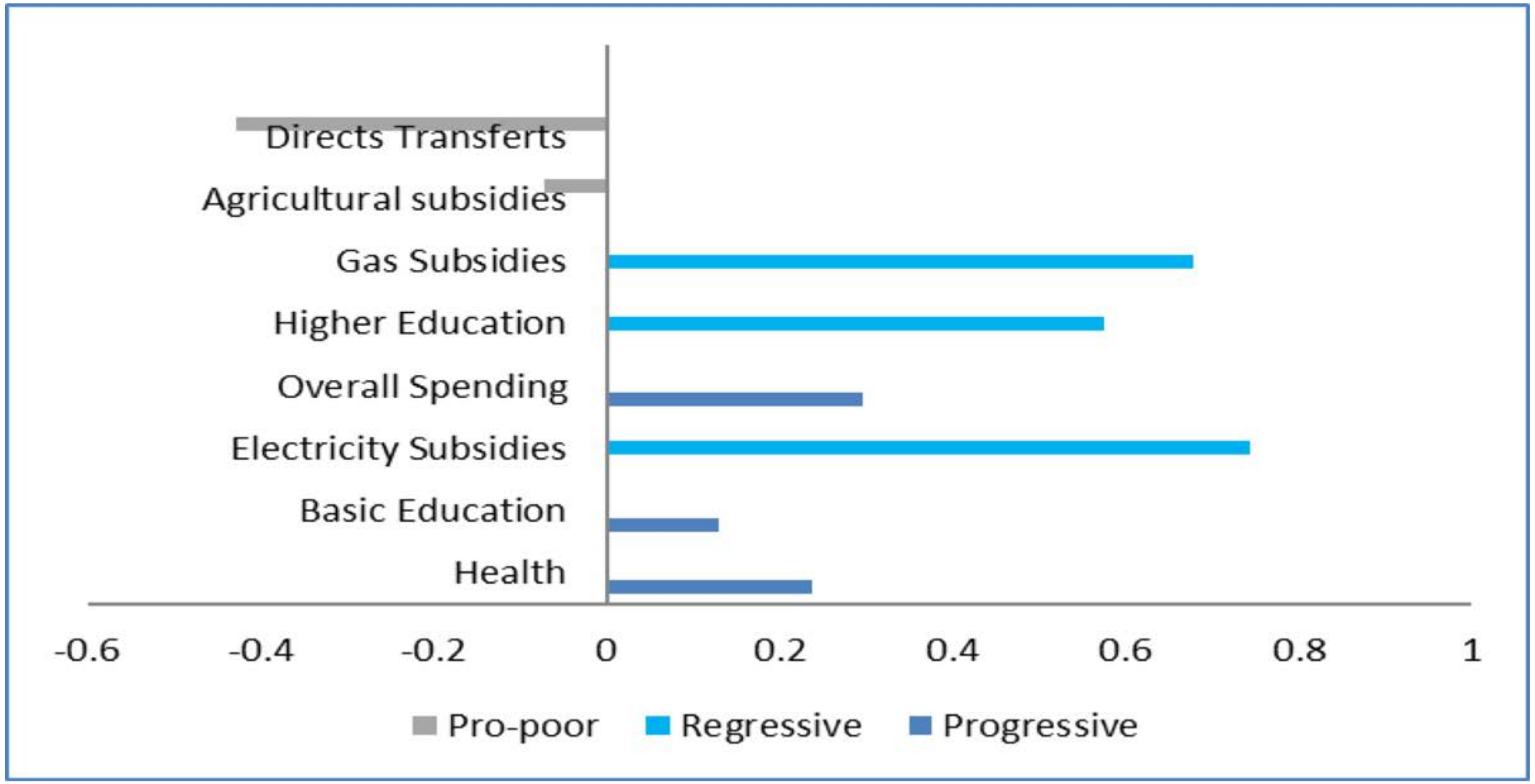
# Public spending is progressive



# Effect of Taxes and Public Spending on Poverty and Inequality

| Type of income | Gini index | Headcount index (%) National Poverty Line | Headcount index (%) US $ 1.25 PPP | Headcount index (%) US $ 2.5 PPP |
|---|---|---|---|---|
| Market income (pre-fiscal income) | 0.491 | 40.59 | 42.01 | 75.48 |
| Market income plus pensions | 0.491 | 40.43 | 41.81 | 75.4 |
| Net market income | 0.486 | 40.44 | 41.82 | 75.61 |
| Gross Income | 0.491 | 40.41 | 41.81 | 75.4 |
| Disposable income | 0.486 | 40.42 | 41.82 | 75.61 |
| Consumable income (post-fiscal income) | 0.482 | 42.99 | 44.04 | 77.84 |
| Final income | 0.469 | | | |

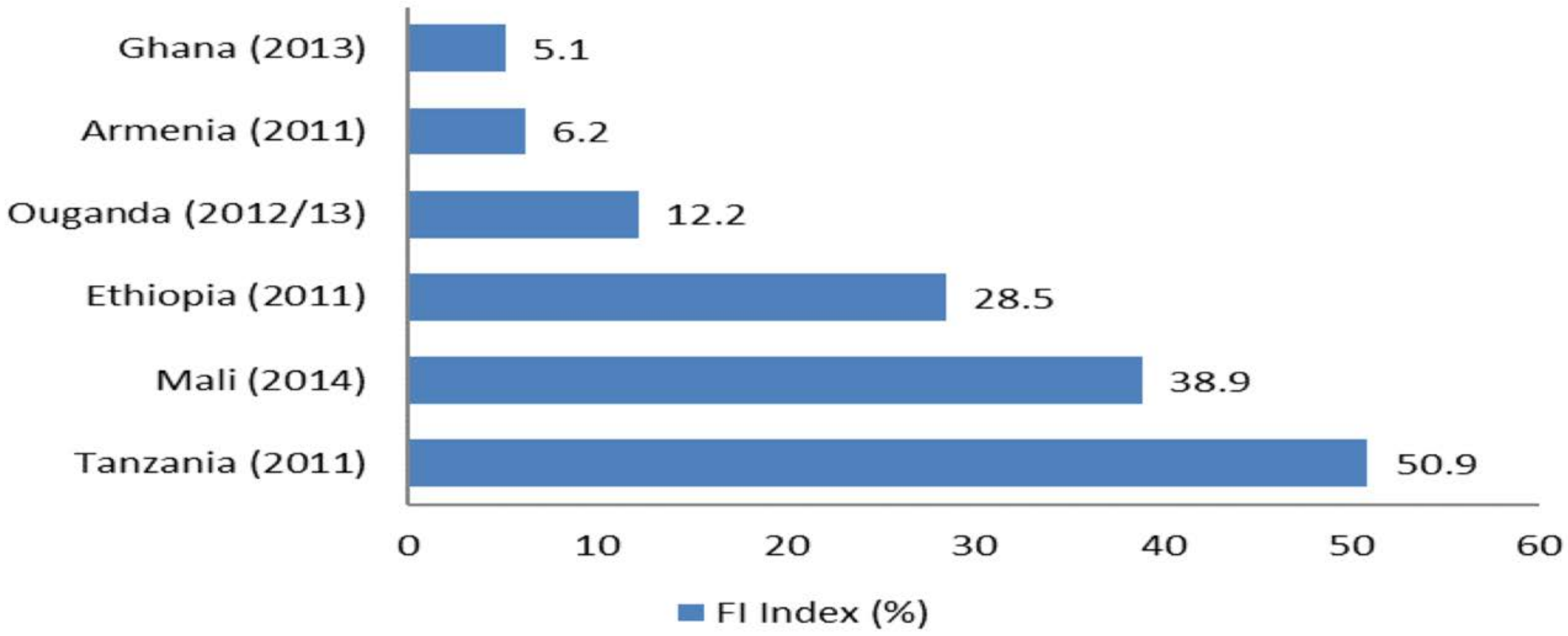
# Effect of Taxes and Public Spending on Poverty and Inequality

- While the payment of taxes impoverishes households, the benefits from public spending enrich them
- The net effect may therefore be positive (enrichment) or negative (impoverishment).
- We use the indicators proposed by Lustig and Higgins (2016) to assess fiscal impoverishment (FI) or fiscal gains to the poor (FGP).
- Individuals are considered to be impoverished by fiscal policy if they were not poor before the policy was applied and became poor after its application or if they were already poor and dropped further below the poverty line after the policy's application

# Fiscal impoverishment

| | From market income to disposable income | From market income to consumable income | From market income to final income |
|---|---|---|---|
| Fiscal impoverishment (FI) index (as % of population) National Poverty line | 0.25% | 37.89% | 21.46% |
| Fiscal impoverishment (FI) index (as % of population) US$1.25 per day,PPP 2005 | 0.25% | 38.9% | 21.99% |
| Non-poor individuals who became poor (as % of population) National Poverty Line | 0.01% | 2.81% | 1.8% |
| Non-poor individuals who became poor (as % of Market income Non-poor) National Poverty Line | 0.02% | 4.73% | 3.04% |

# Fiscal impoverishment



# Fiscal Gains to poor

- The FGP rate measures the proportion of the poor (based on pre-fiscal income) who experienced a positive net fiscal gain

| | From market income to disposable income | From market income to consumable income | From market income to final income |
|---|---|---|---|
| **Proportion of the poor who received a positive net fiscal gain (FGP) National Poverty Line** | 1.7% | 5.51% | 20.93% |
| **Proportion of the poor who received a positive net fiscal gain (FGP) US $ 1.25 PPP** | 1.76% | 5.62% | 21.69% |

# Marginal contributions to inequality reduction

- The marginal contribution for each fiscal intervention is computed as the difference in the Gini of the respective end income concept without the intervention minus the Gini of the respective end income concept.

- If the marginal contribution of a fiscal intervention to inequality is positive, the intervention is inequality reducing.

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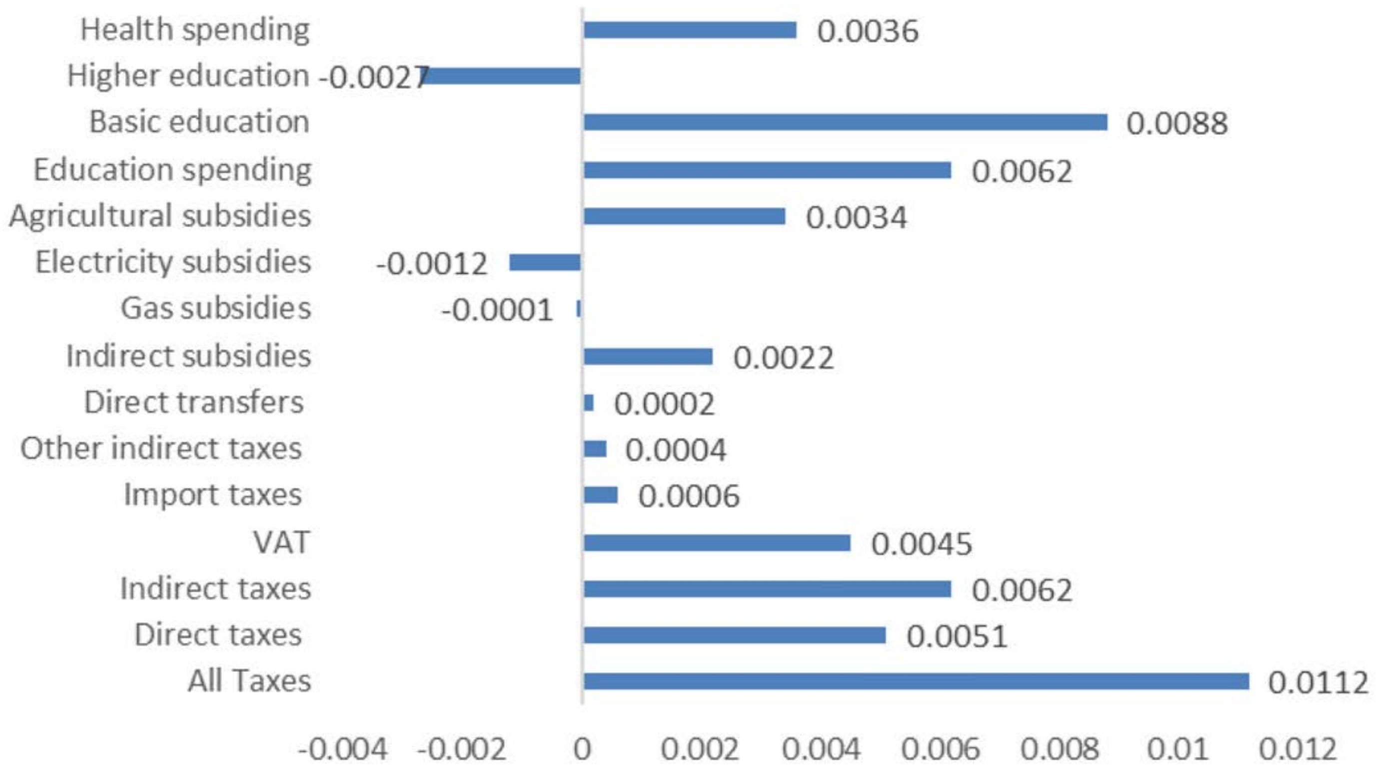
# Marginal contributions to inequality reduction



# Conclusions

- We analyzed the incidence of 74.3 percent of total tax revenue, including the wages and salary taxes, VAT, import taxes and other indirect taxes. We also analyze the impact of spending in Education and health, cash transfers and indirect subsidies representing 30 percent of general government expenditures.
- The results show that the fiscal system is progressive in Mali. However, Fiscal policy has a limited effect on the distribution of revenue in Mali and a negative impact on poverty. The fiscal system reduces the Gini index by only 4.5 percent (0.022 points) and results in a 5.9 percent rise in the poverty rate. The low redistributive impact of fiscal policy in Mali is mainly due to the bad targeting of energy subsidies as well as the small size of per capita benefit for direct transfers.
- The various indirect taxes have a strong impoverishing effect despite being inequality reducing.
- The fiscal system could deliver more benefits to those impoverished by the tax system by transferring more resources (higher levels and broader coverage) through the Jigisemejiri cash transfer program.

# Thank you