



## CPIs for Different Population Groups, Income Groups and Geographic Areas

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## CPIs for Different Population Groups, Income Groups and Geographic Areas

- The Presentation is a study about the inflation published depending on the geographical area within the economy, where the household Final consumption expenditure is allocated either the:
  - i. Household expenditure be allocated to the location (geographical areas) within the economy where transactions take place; or
  - ii. Household expenditure be allocated to the location (geographical areas) within the economy where the households or individuals who make expenditure reside.



## CPIs for Different Population Groups, Income Groups and Geographic Areas

- The study picked one Elementary Aggregate (Product) in the Uganda CPI which is second hand vehicles :
- The Uganda National CPI is compiled using data for both household expenditure (weights) and consumer prices from the urban areas;
- The CPI has 10 consumption baskets of goods and services: three baskets for population income groups and 7 baskets for geographical areas.



## CPIs for Different Population Groups, Income Groups and Geographic Areas

- Three baskets for population income groups:
  - i. Kampala High Income Basket;
  - ii. Kampala Middle Income Basket; and
  - iii. Kampala Low Income Basket



## CPIs for Different Population Groups, Income Groups and Geographic Areas

- 7 baskets for geographical areas:
  - Mbarara Basket;
  - Masaka Basket;
  - Mbale Basket;
  - Jinja Basket;
  - Gulu Basket;
  - Arua Basket; and
  - Fort Portal Basket



## CPIs for Different Population Groups, Income Groups and Geographic Areas

### Determination of the 10 consumption baskets.

- Uganda is demarcated into five CPI Statistical regions:
  - i. Kampala Region is the capital city and its surrounding areas;
  - ii. Central Region;
  - iii. Northern Region;
  - iv. Western Region;
  - v. Eastern Region;



## CPIs for Different Population Groups, Income Groups and Geographic Areas

### Determination of the 10 consumption baskets.

- i. Kampala Region is unique and treated differently.

The household final consumption expenditure for the Kampala Region is decomposed into three population income consumption baskets: Kampala High Income; Kampala Middle Income; and Kampala Low Income.



## CPIs for Different Population Groups, Income Groups and Geographic Areas

### Determination of the 10 consumption baskets.

#### ii. Other Regions.

One consumption basket was selected for the central region;

Two consumption baskets were selected for each of the remaining three regions.





# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Current Practice of the Uganda CPI

- i. The current practice in Uganda is to allocate the household consumption expenditure to the geographical areas within the economy where the households that make such expenditure reside.

Thus, consumer prices for products that are not available in the geographical areas where the expenditure were allocated are priced from other regions where the transactions take place.



# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Alternative approach - Study

- ii. The second alternative which the study is investigating is to allocate household consumption expenditure within the economy to the geographical regions where transactions takes place.

In this case consumer prices are restricted to only those regions where the household transactions are held.



# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Methodology of the Study

- iii. The study has picked one Elementary Aggregate (product) in the CPI which is second hand vehicles.

In the National CPI, substantial expenditure on that product was made by households from all the five regions.

However, for all the 5 regions, Kampala is the only region where transactions for second vehicles take place.



# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Methodology of the Study

The study proportionally re-allocated all the household expenditure on second hand vehicles from other four regions to the Kampala population income group baskets

Thereafter, recomputed the :

- i. Weights; and
- ii. CPI

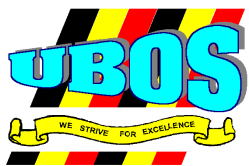
for each of the 10 consumption baskets.



# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Findings of the Weights

The results from this study show that the weights for each of the 10 consumption baskets and weights within each division of the basket changed slightly , apart from Mbarara and Kampala High Income Baskets;



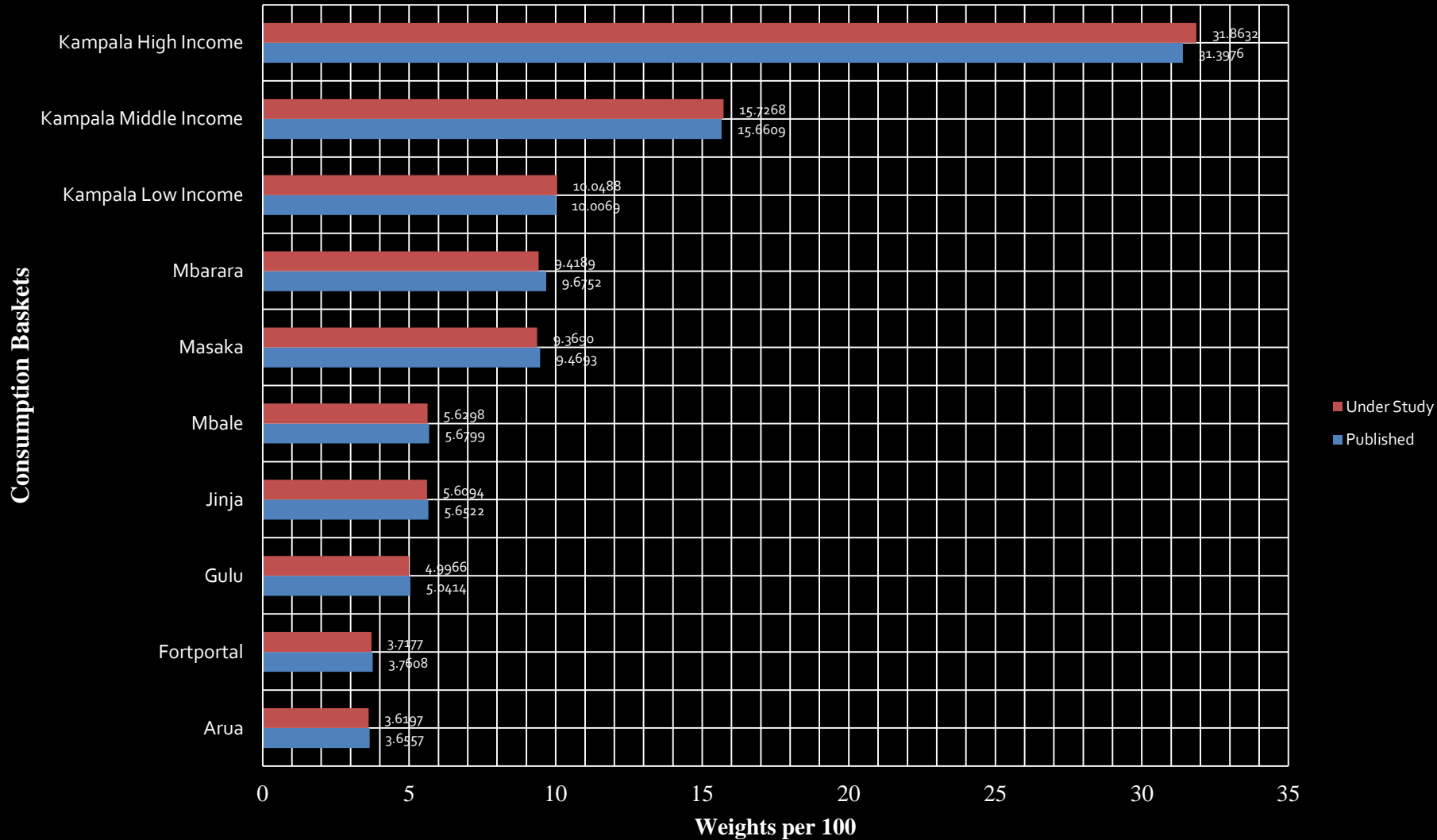
## 1.1 STUDY FINDINGS - WEIGHTS - 10 CONSUMPTION BASKETS

Consumption Basket	Published	Under Study	% Change
Kampala High Income	31.3977	31.8633	1.5
Kampala Middle Income	15.6609	15.7268	0.4
Kampala Low Income	10.0069	10.0488	0.4
Mbarara	9.6752	9.4189	-2.6
Masaka	9.4693	9.3690	-1.1
Mbale	5.6799	5.6298	-0.9
Jinja	5.6522	5.6094	-0.8
Gulu	5.0414	4.9966	-0.9
Fortportal	3.7608	3.7177	-1.1
Arua	3.6557	3.6197	-1.0
<b>Total</b>	<b>1000.0000</b>	<b>1000.0000</b>	



# 1.1 STUDY FINDINGS - WEIGHTS - 10 CONSUMPTION BASKETS

Graph1: All Items CPI Weights for the 10 Consumption Baskets



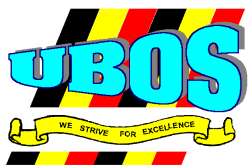


# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Findings of the Weights

However, the results at division level particularly for transport - where used vehicles are classified - indicate varying differences in weights, with Mbarara sub-region registering a substantial change from the published figures due to the relatively very large expenditure on second hand vehicles for the households of that region compared to the other regions in Uganda.





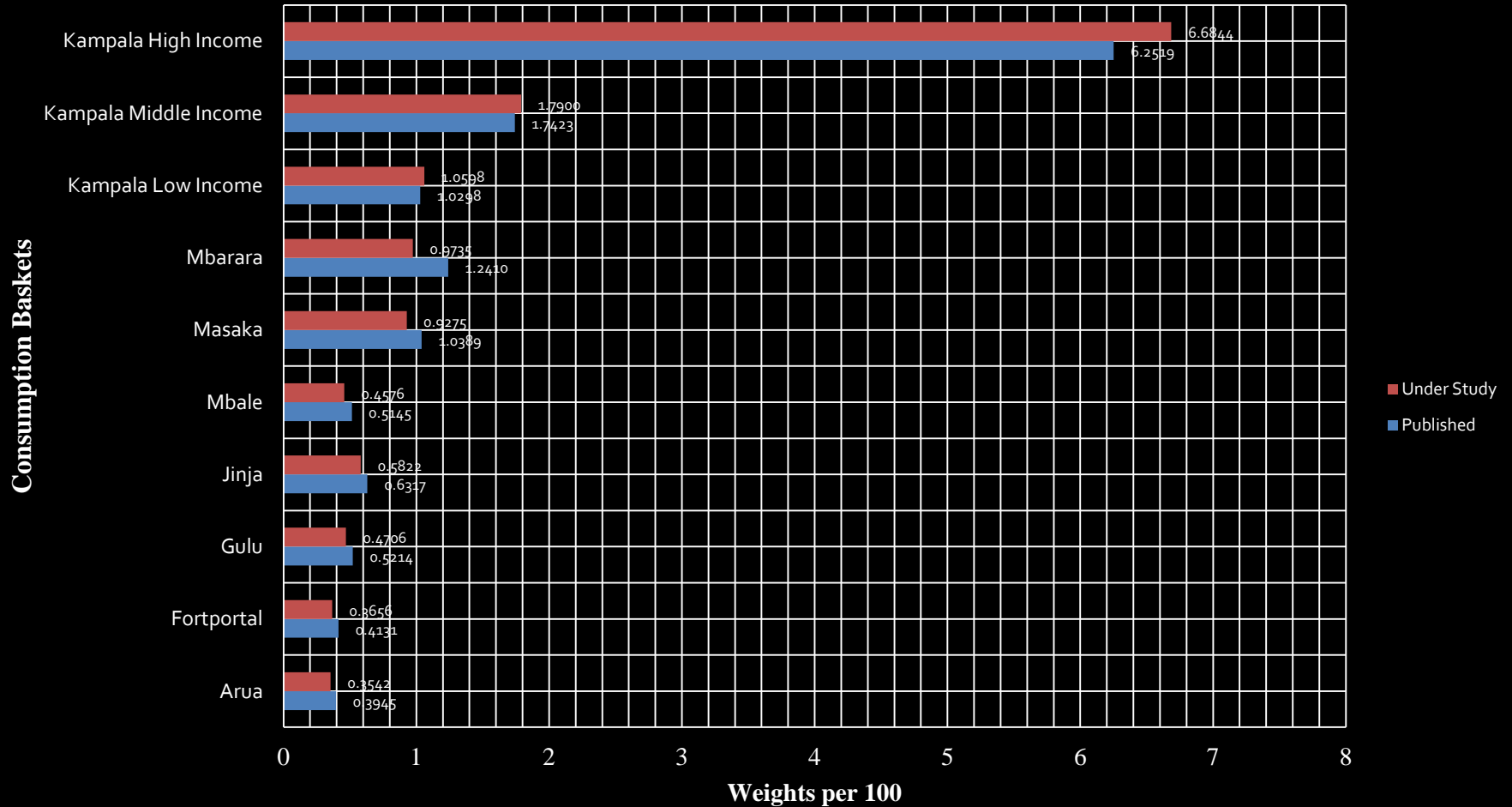
## 1.1 STUDY RESULTS – TRANSPORT WEIGHTS – 10 CONSUMPTION BASKETS

Consumption Basket	Published	Under Study	% Change
Kampala High Income	6.2519	6.6844	6.9
Kampala Middle Income	1.7423	1.7900	2.7
Kampala Low Income	1.0298	1.0598	2.9
Mbarara	1.2410	0.9735	-21.6
Masaka	1.0389	0.9275	-10.7
Mbale	0.5145	0.4576	-11.1
Jinja	0.6317	0.5822	-7.8
Gulu	0.5214	0.4706	-9.7
Fortportal	0.4131	0.3656	-11.5
Arua	0.3945	0.3542	-10.2



# 1.1 STUDY RESULTS – TRANSPORT WEIGHTS – 10 CONSUMPTION BASKETS

Graph2: Transport Division  
Weights for the 10 Consumption Baskets





ANNUAL INFLATION  
ALL ITEMS  
10 CONSUMPTION BASKETS



# CPIs for Different Population Groups, Income Groups and Geographic Areas

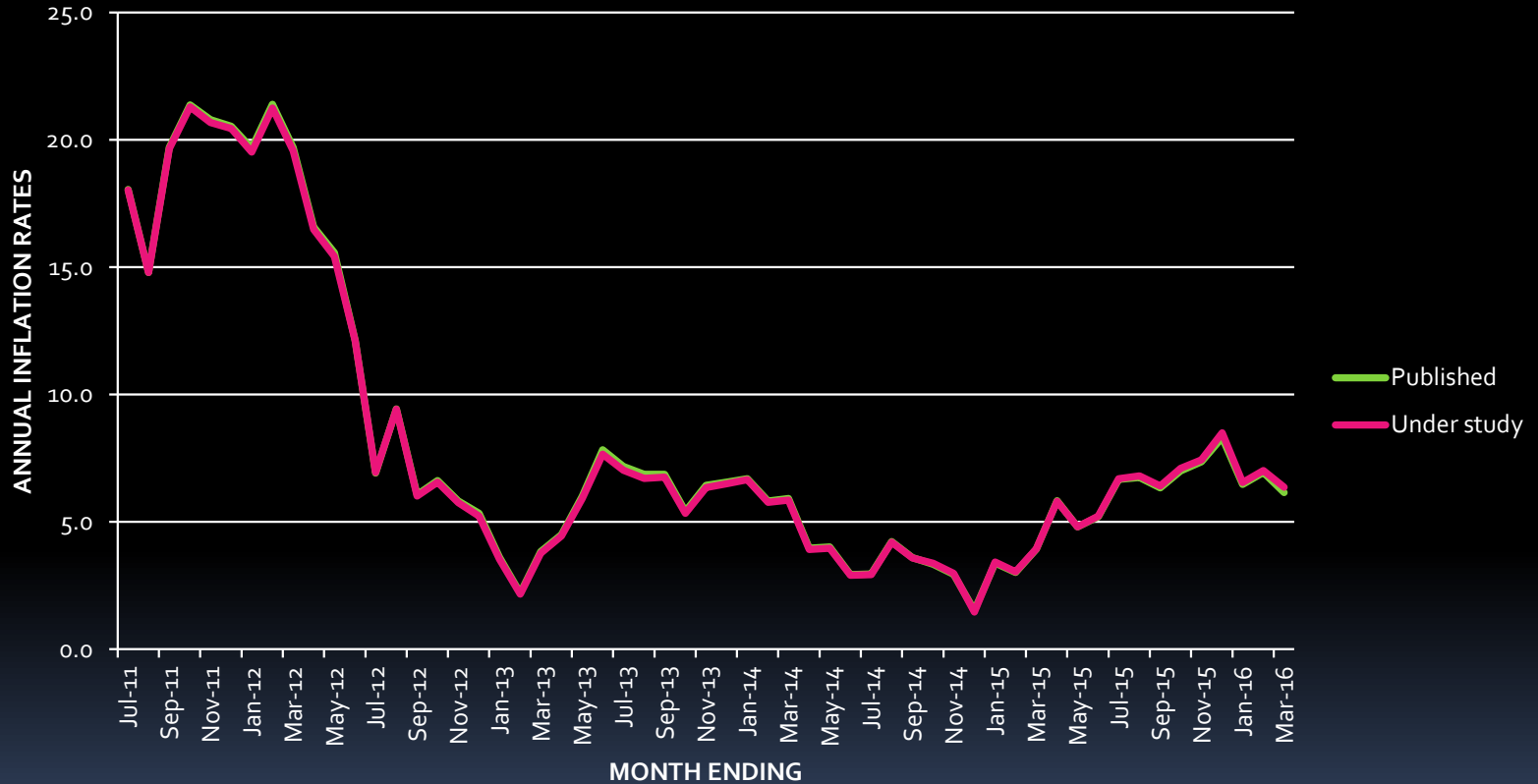
## Findings of the Annual Inflation

There is no significant difference in the All Items Annual Inflation for each of the consumption baskets in both the published and these findings



# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

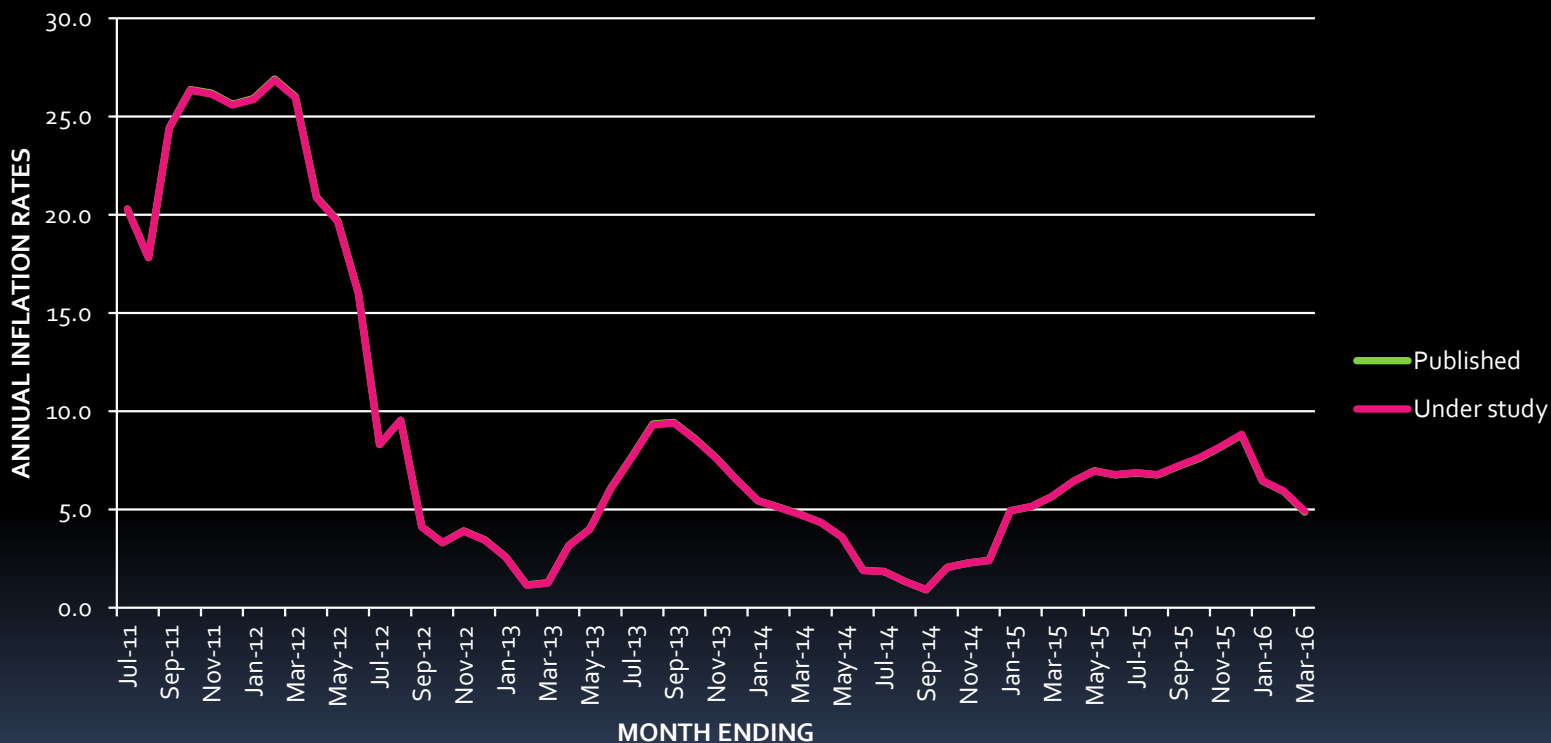
## ALL ITEMS INFLATION RATES KAMPALA HIGH INCOME





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

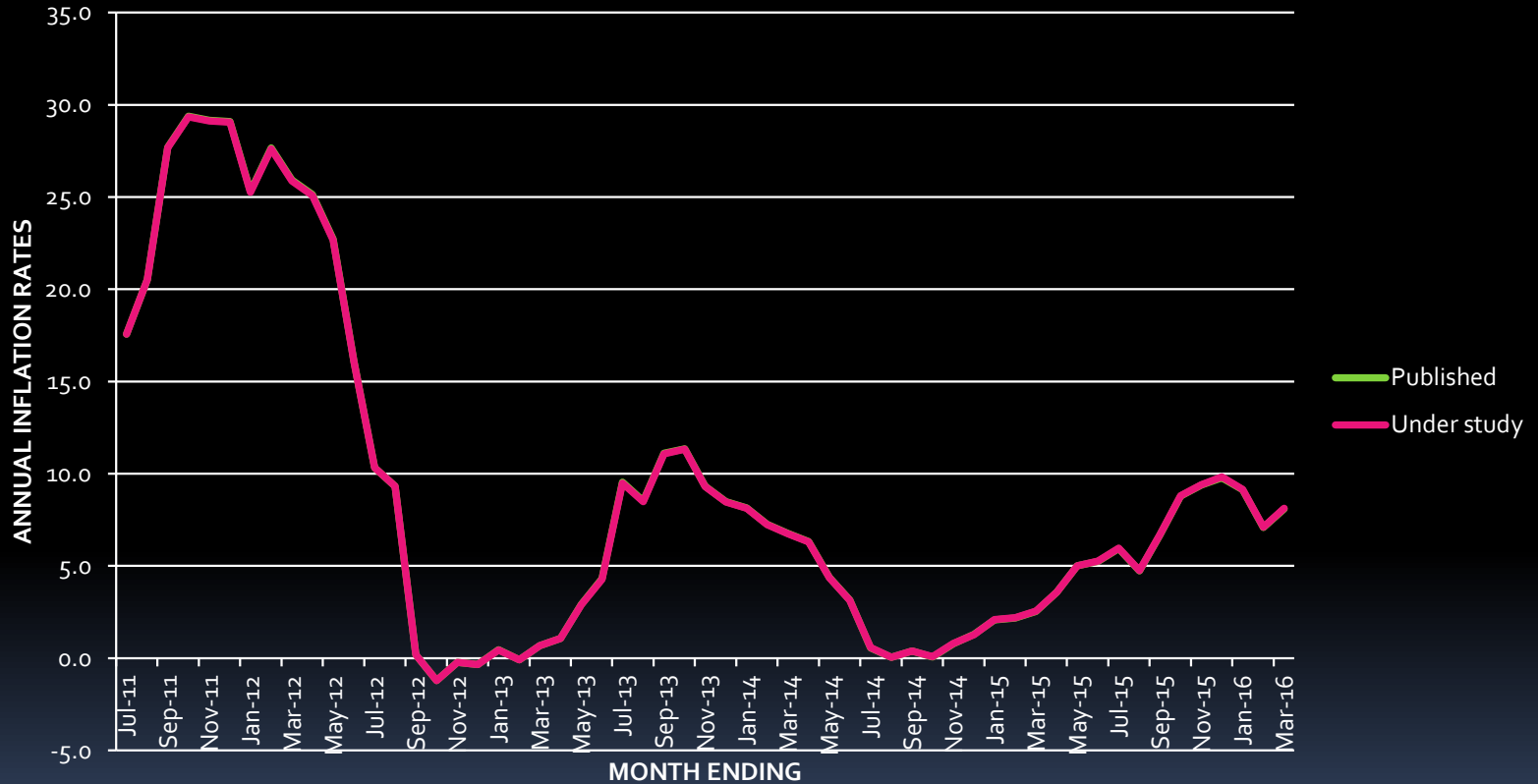
## ALL ITEMS ANNUAL INFLATION KAMPALA MIDDLE INCOME





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

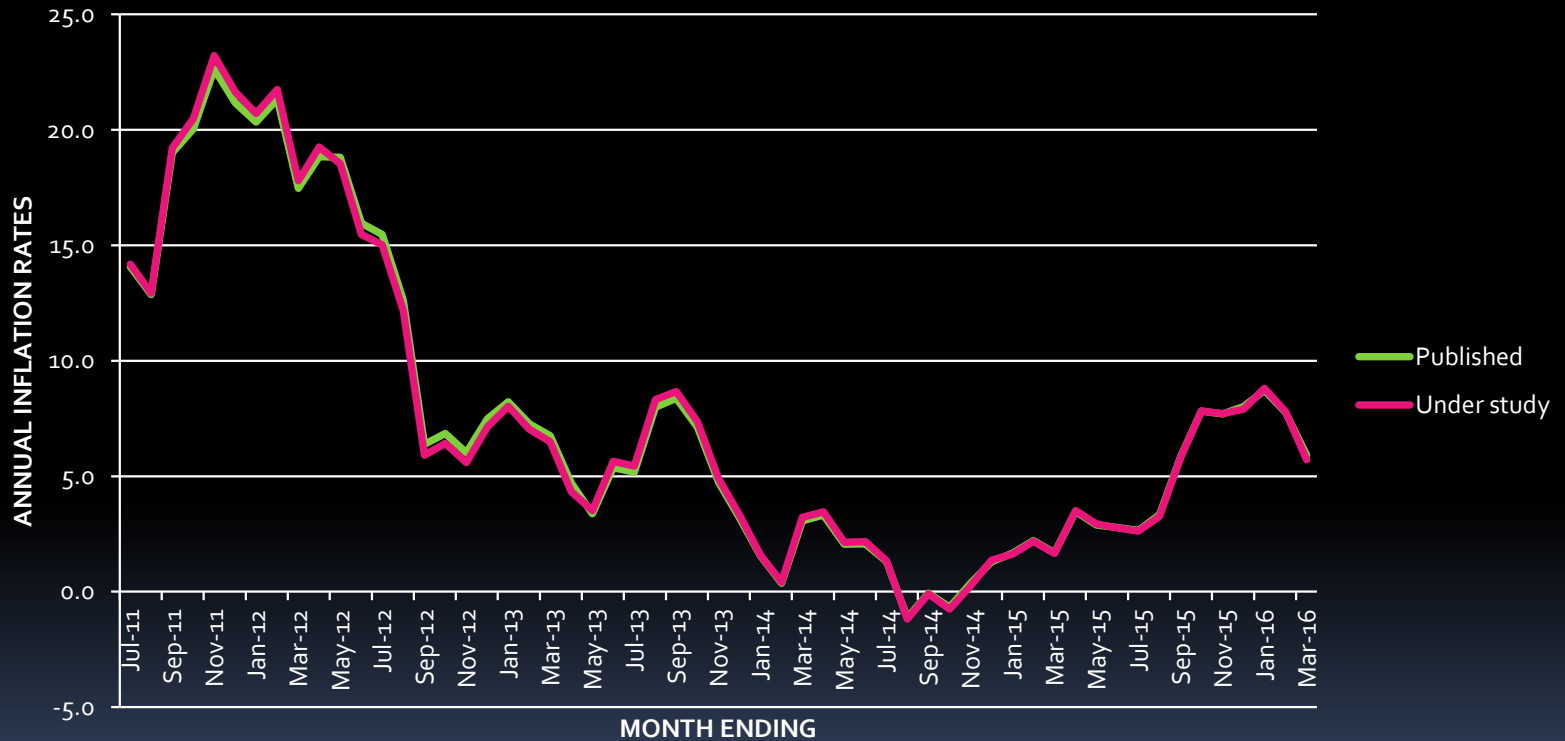
## ALL ITEMS ANNUAL INFLATION KAMPALA LOW INCOME





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

## ANNUAL INFLATION ALL ITEMS MBARARA

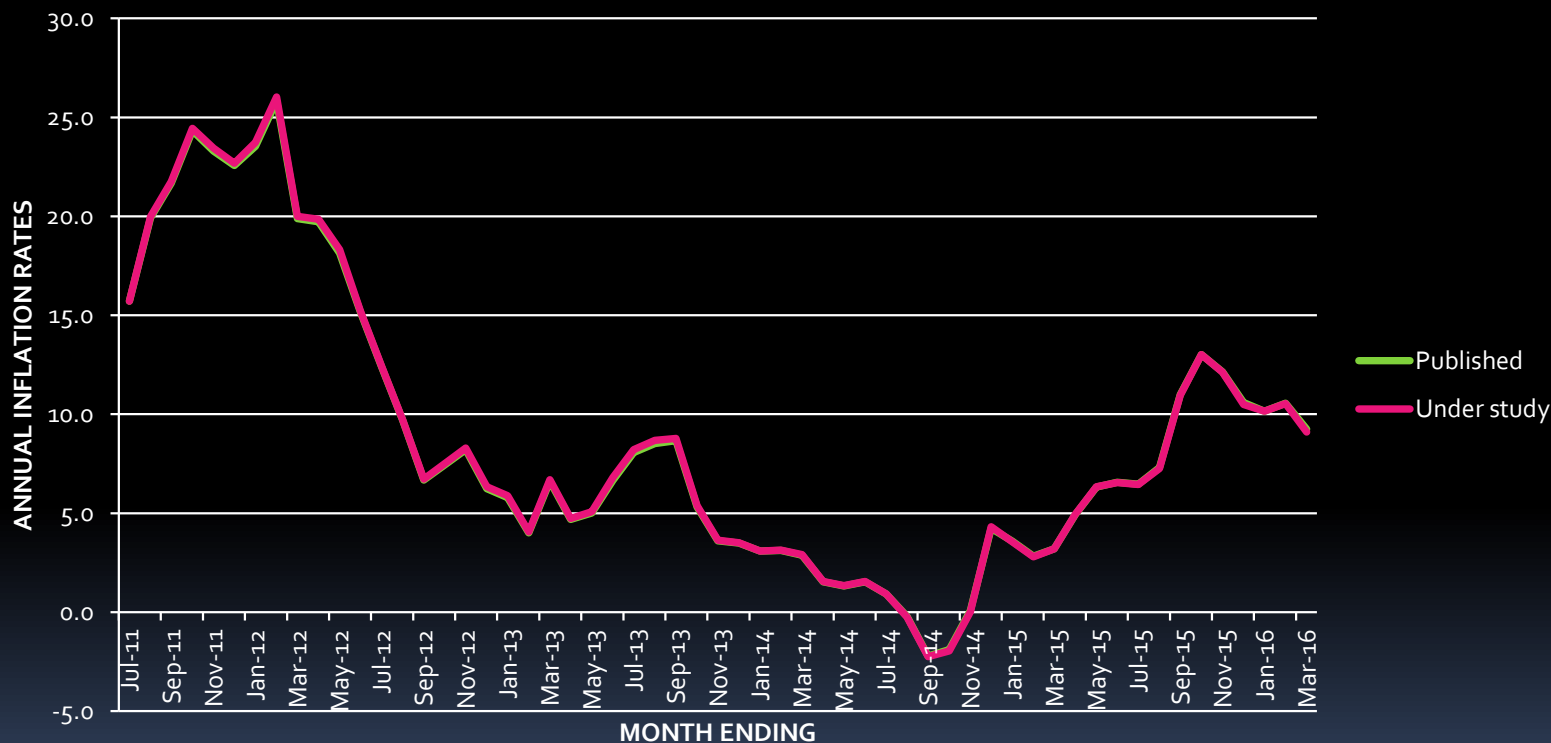






# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

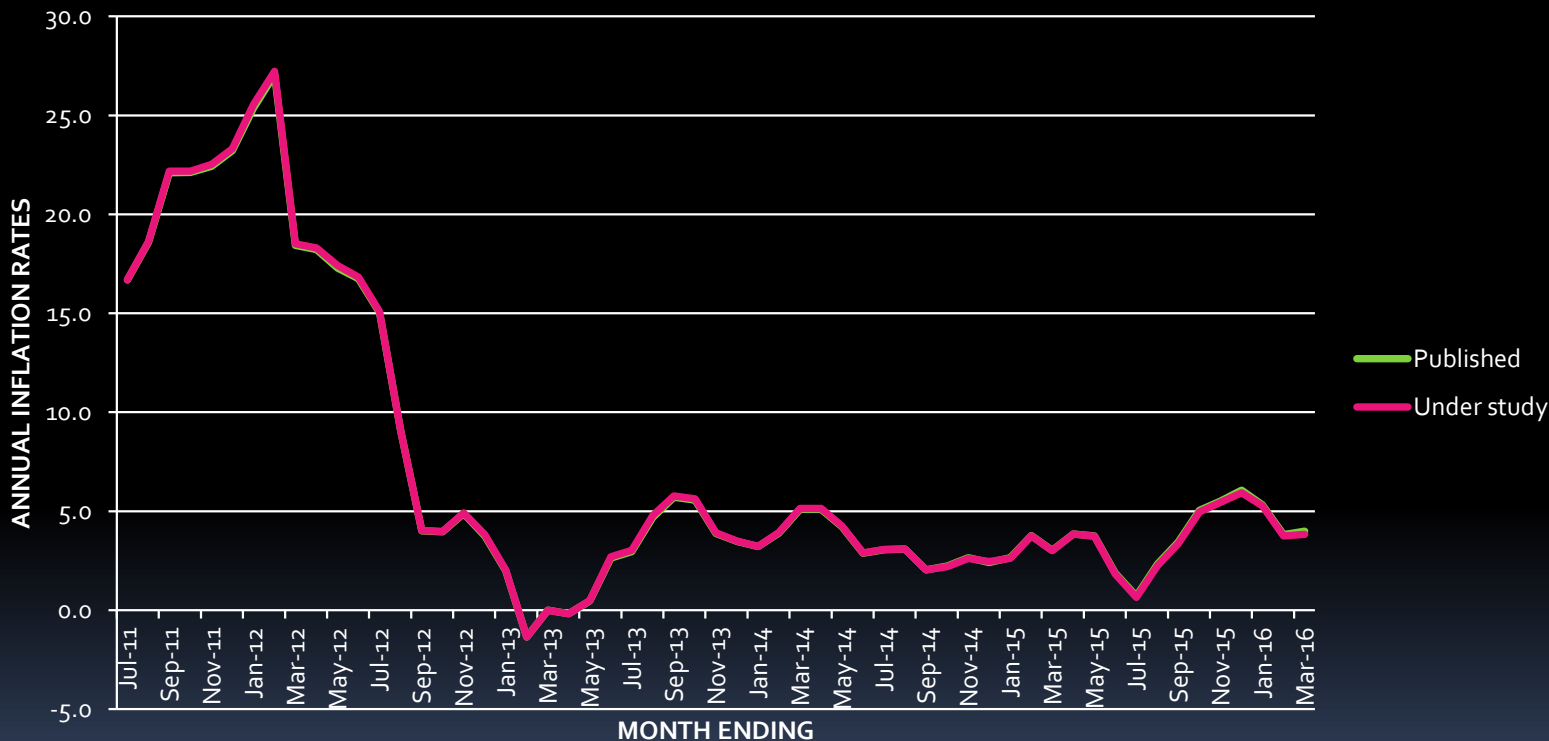
## ANNUAL INFLATION ALL ITEMS MASAKA





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

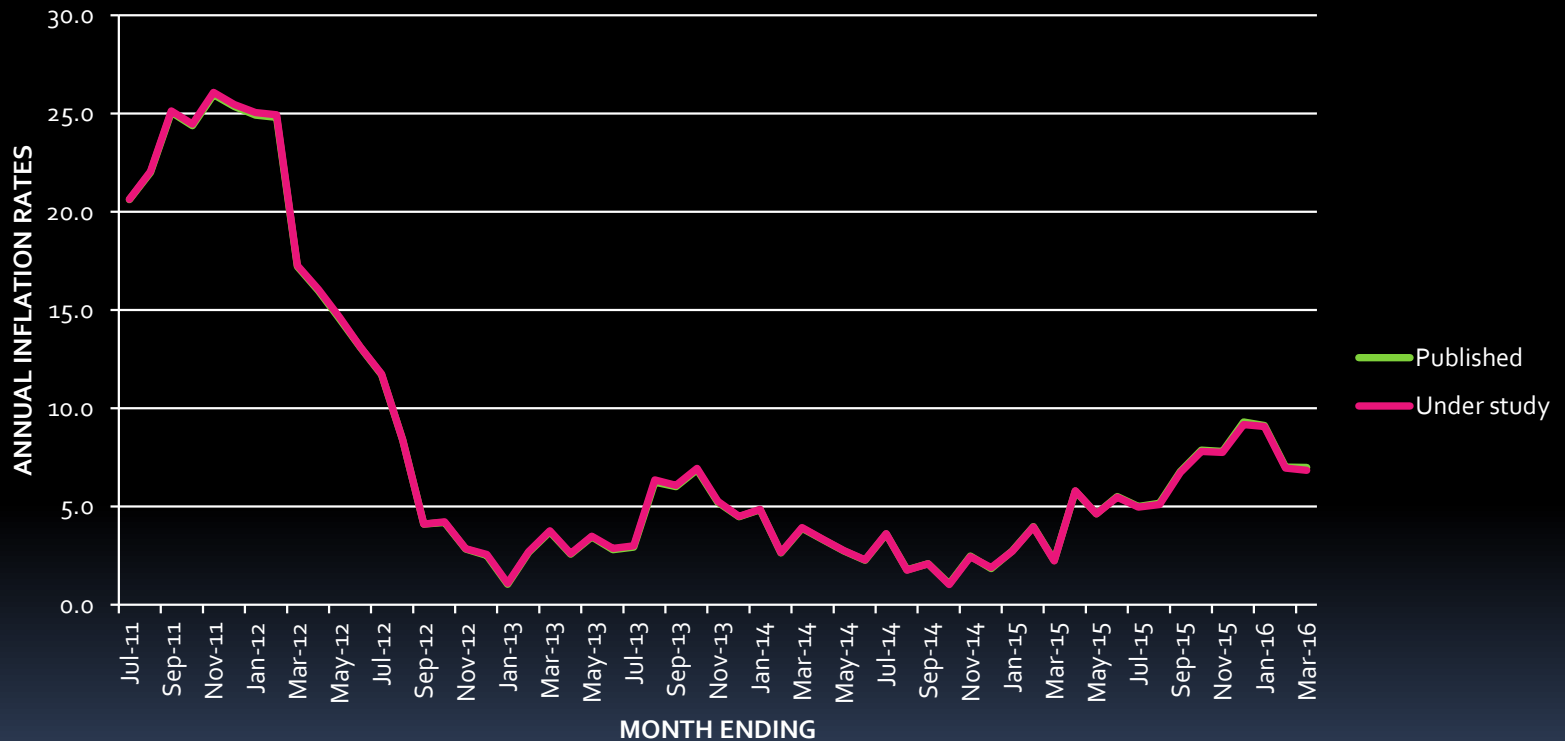
## ANNUAL INFLATION ALL ITEMS MBALE





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

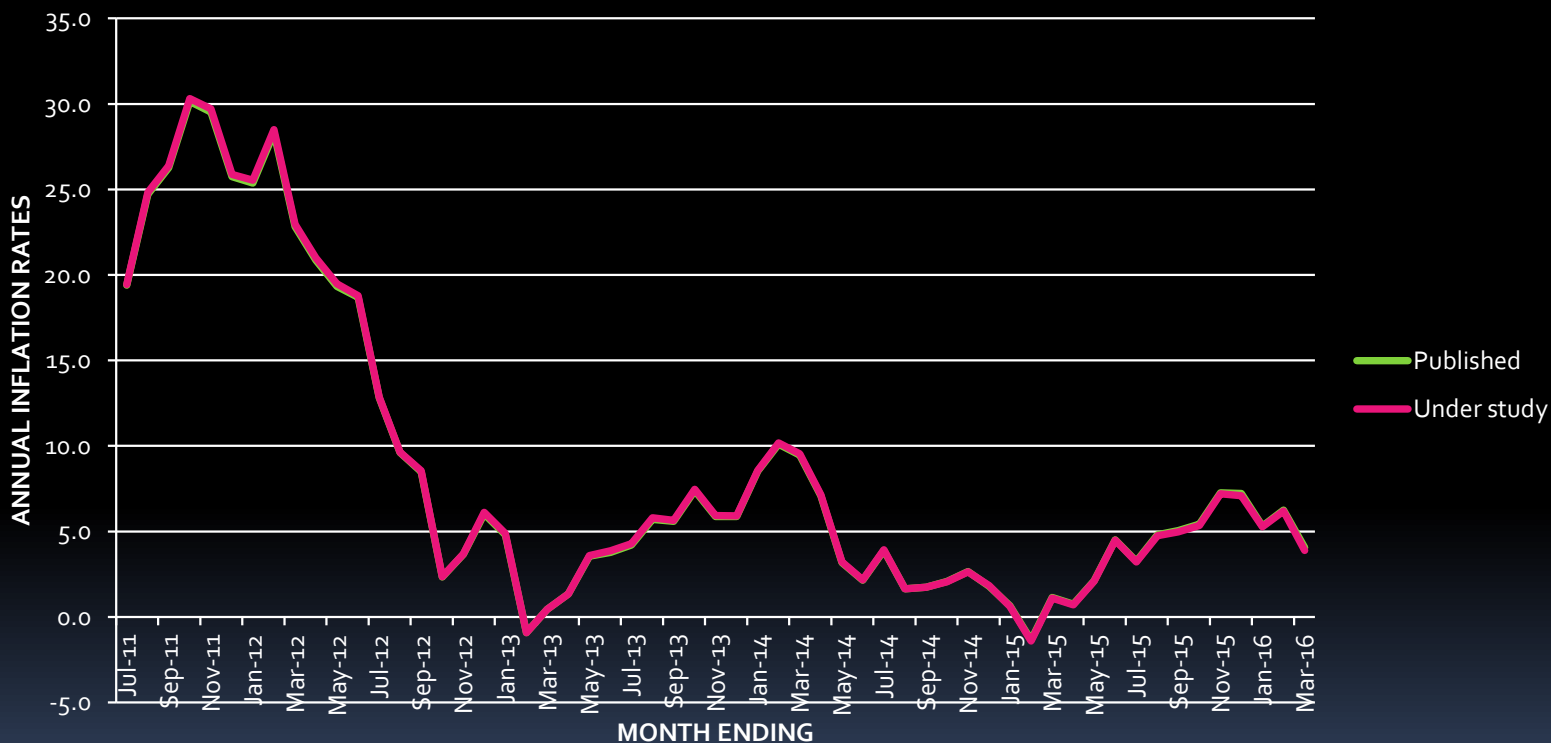
## ANNUAL INFLATION ALL ITEMS JINJA





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

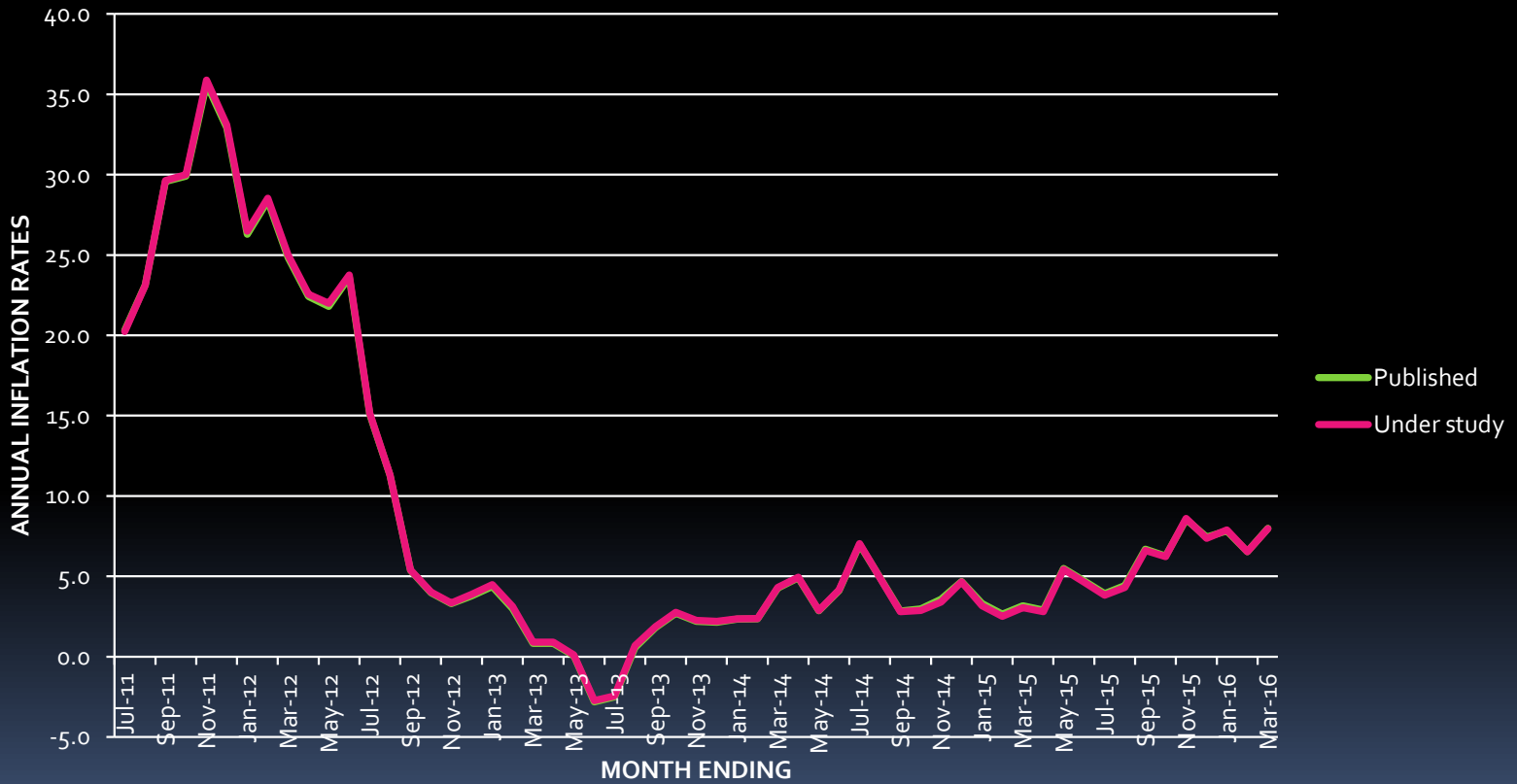
## ANNUAL INFLATION ALL ITEMS GULU





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

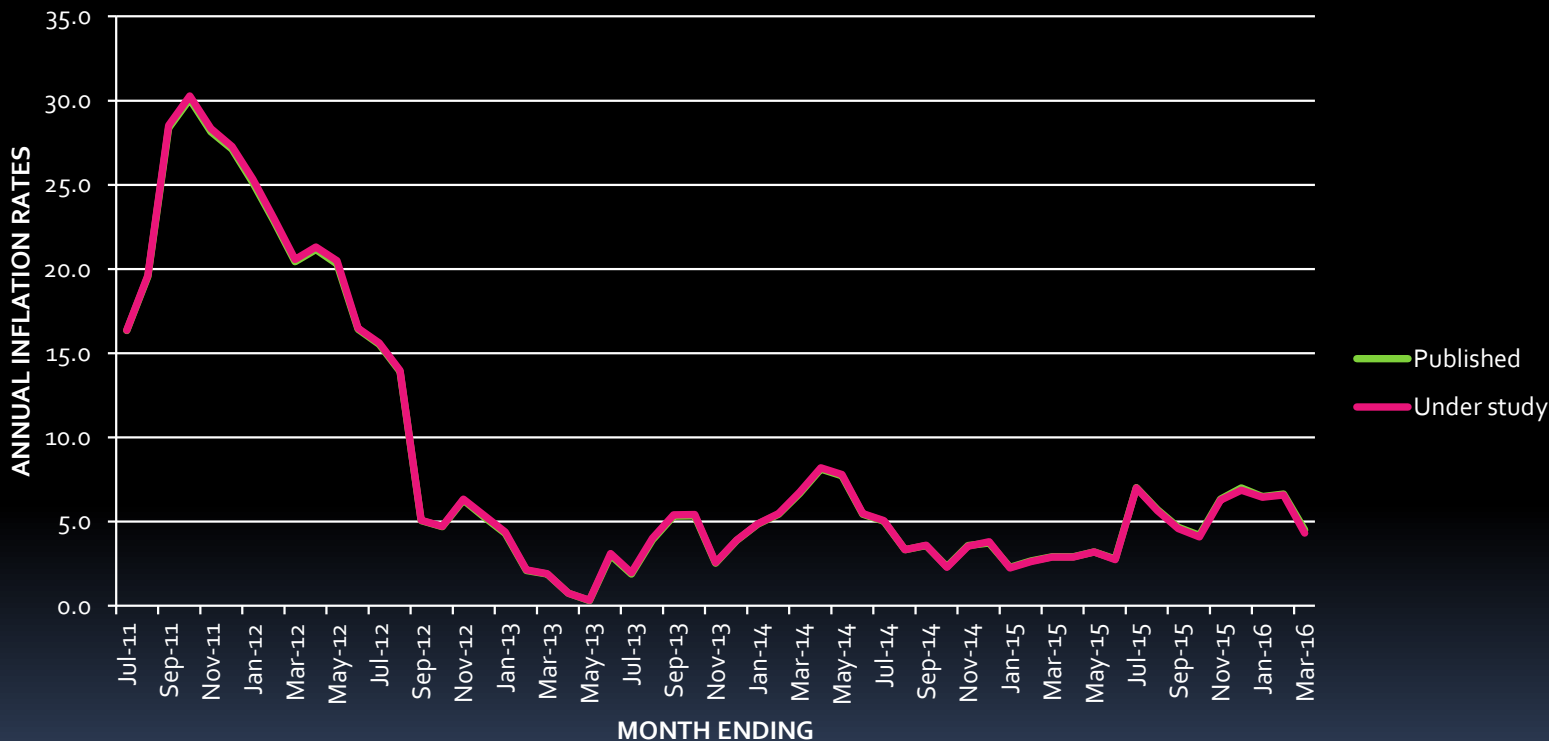
## ANNUAL INFLATION ALL ITEMS ARUA





# 1.1 STUDY RESULTS ANNUAL INFLATION - ALL TEMS

## ANNUAL INFLATION ALL ITEMS FORT PORTAL





ANNUAL INFLATION  
TRANSPORT DIVISION  
10 CONSUMPTION BASKETS



# CPIs for Different Population Groups, Income Groups and Geographic Areas

## Findings of the Annual Inflation

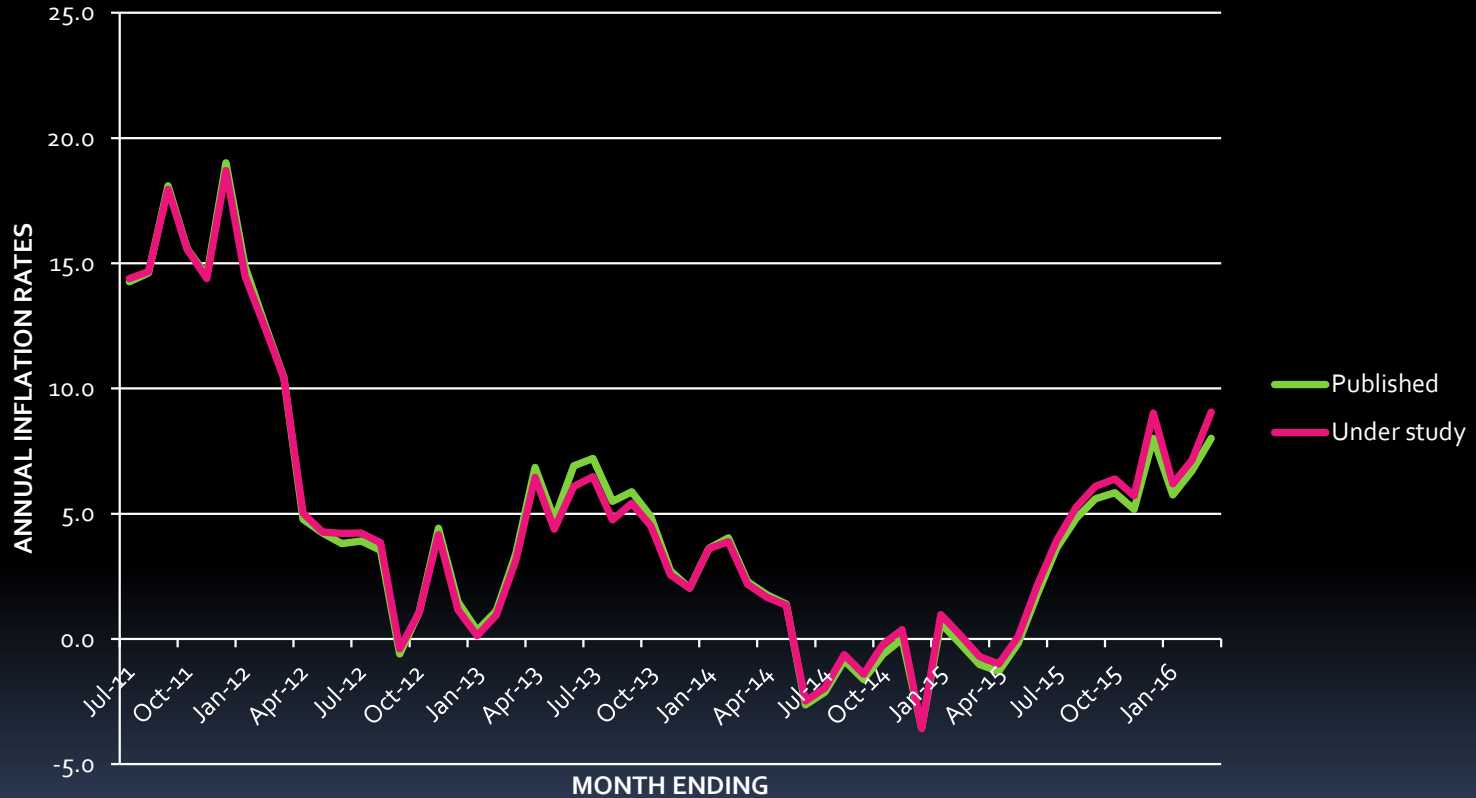
However, the results for the transport division indicate varying differences in annual inflation, with Mbarara sub-region registering a substantial change from the published figures





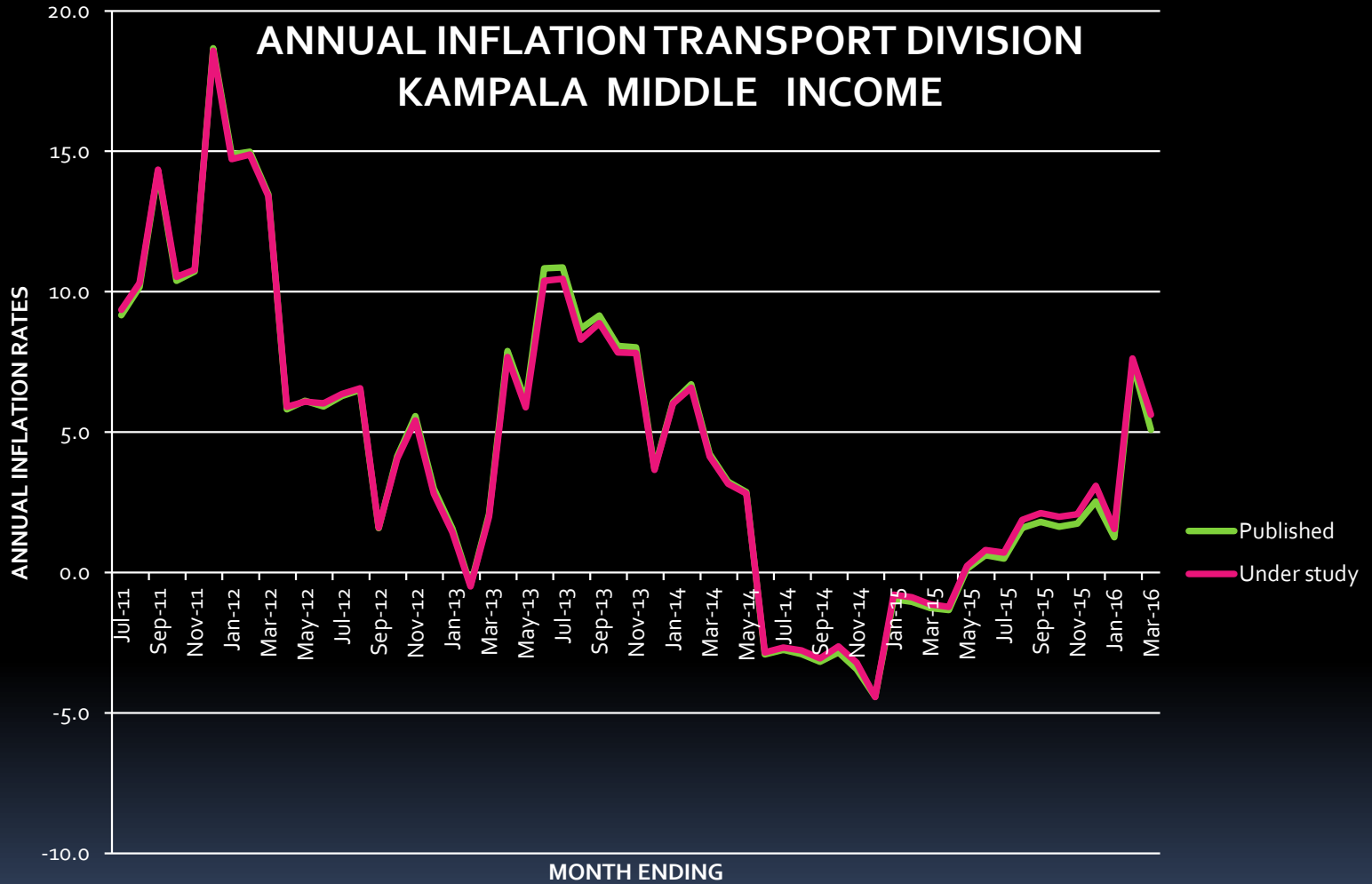
# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

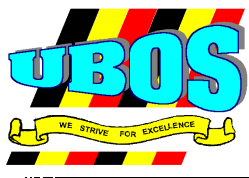
## ANNUAL INFLATION TRANSPORT DIVISION KAMPALA HIGH INCOME





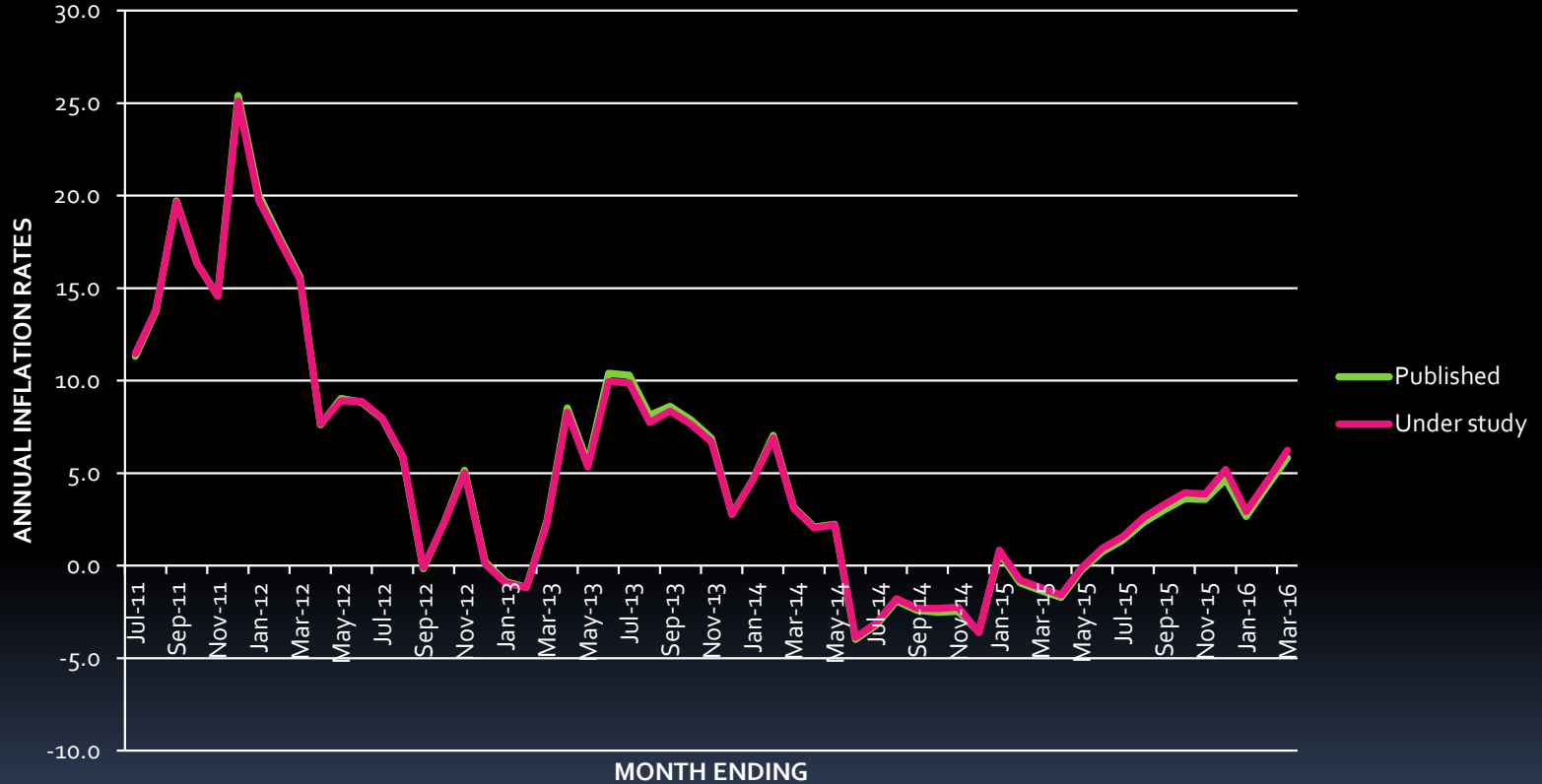
# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT





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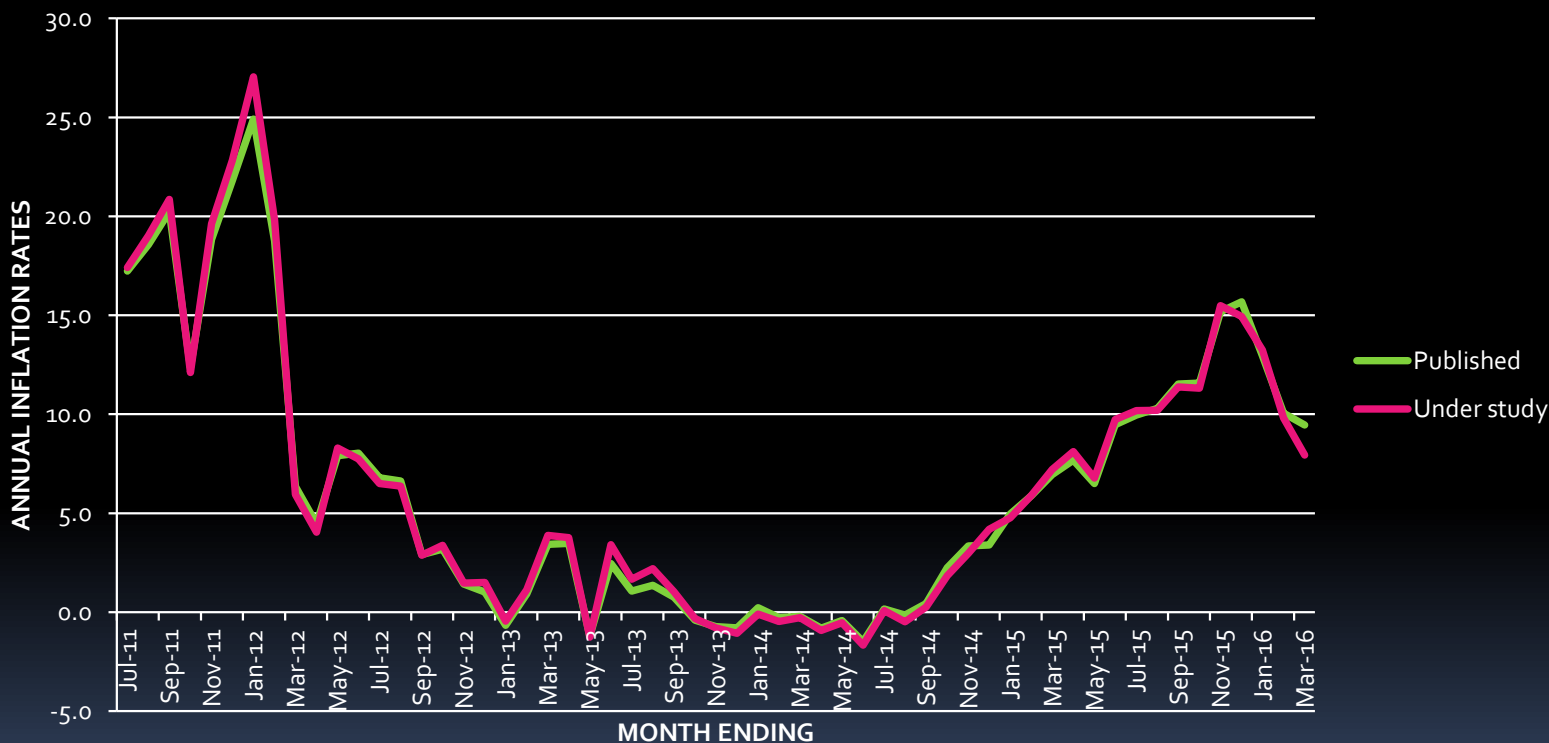
## ANNUAL INFLATION TRANSPORT DIVISION KAMPALA LOW INCOME





# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

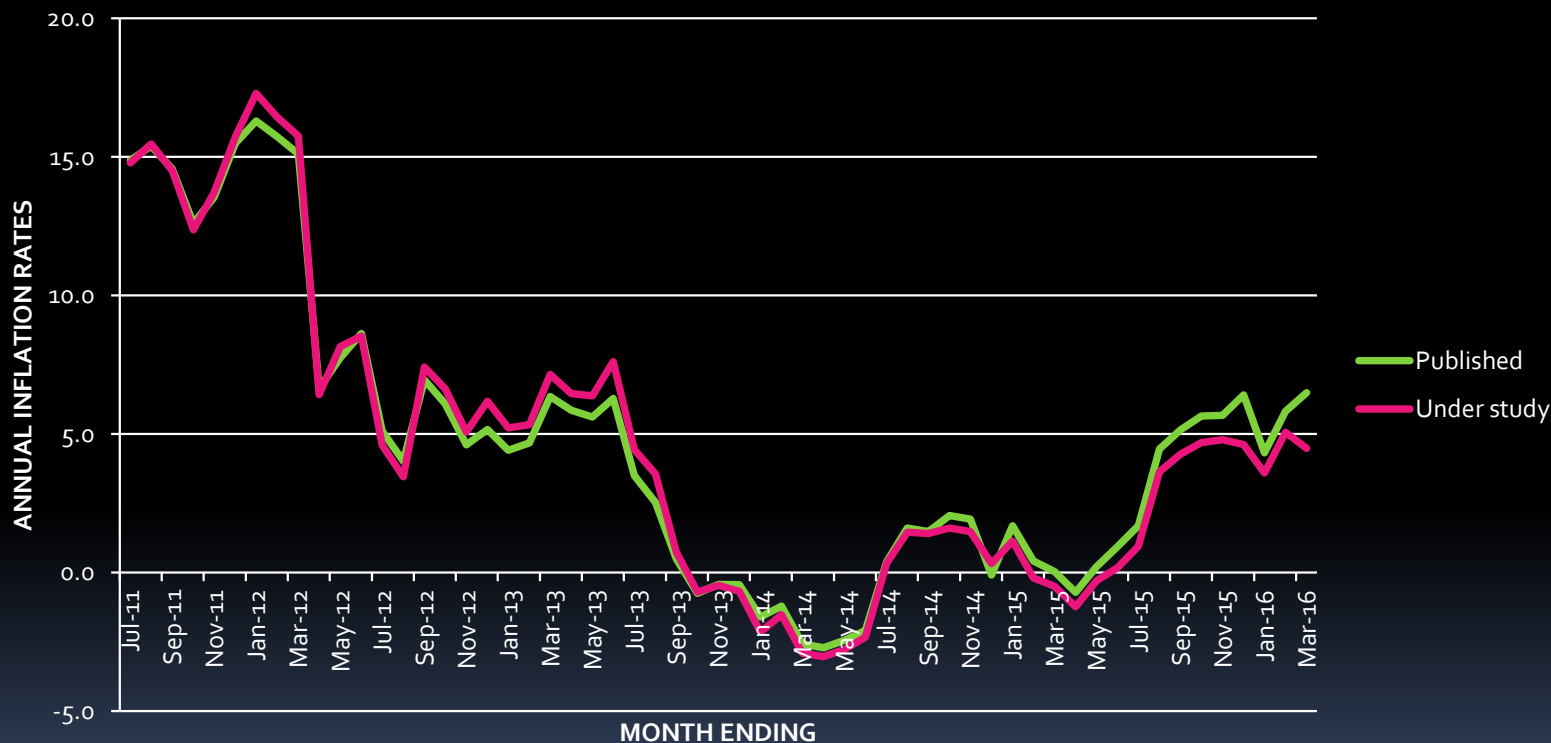
## ANNUAL INFLATION TRANSPORT DIVISION MASAKA





# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

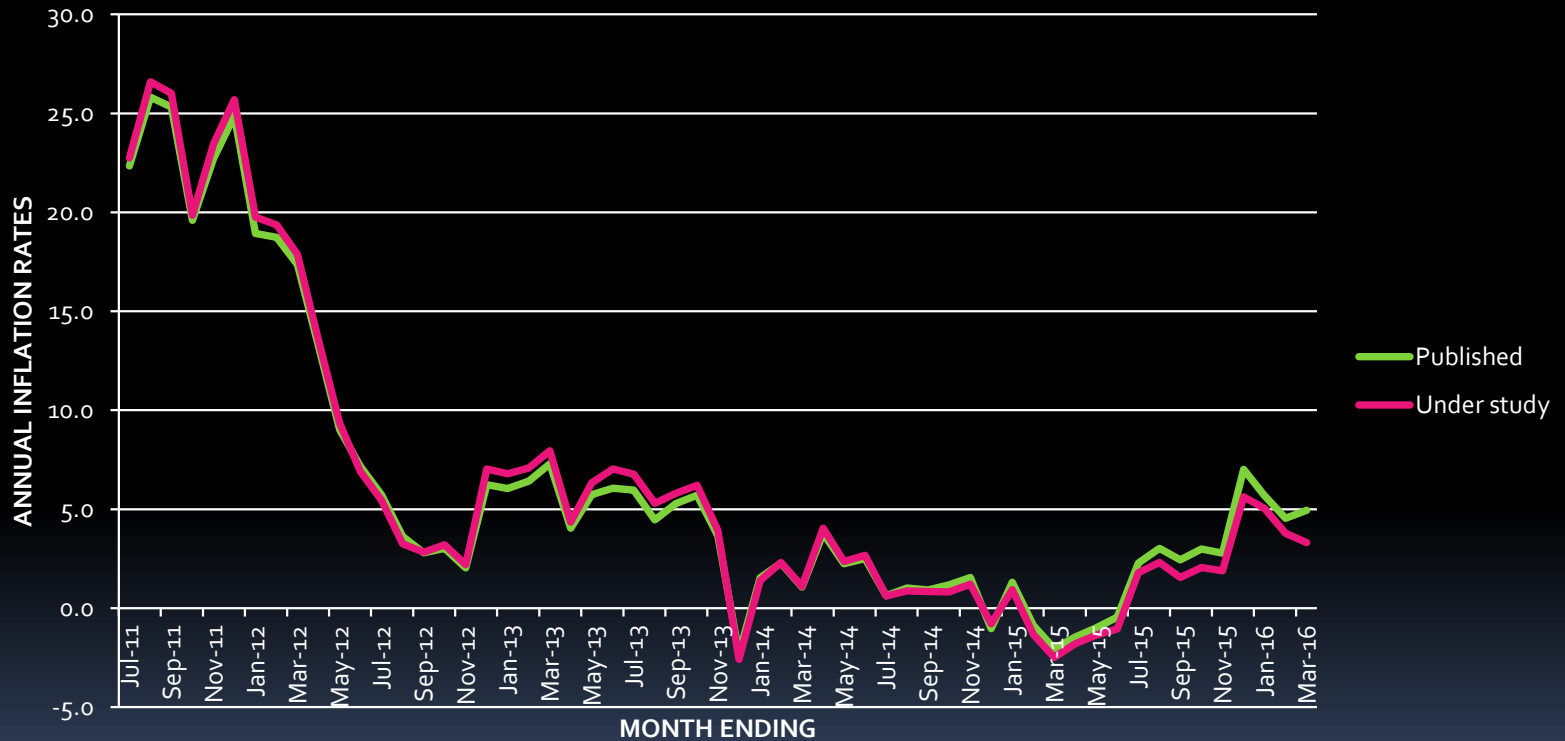
## ANNUAL INFLATION TRANSPORT DIVISION MBALE

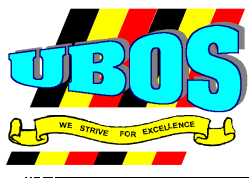




# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

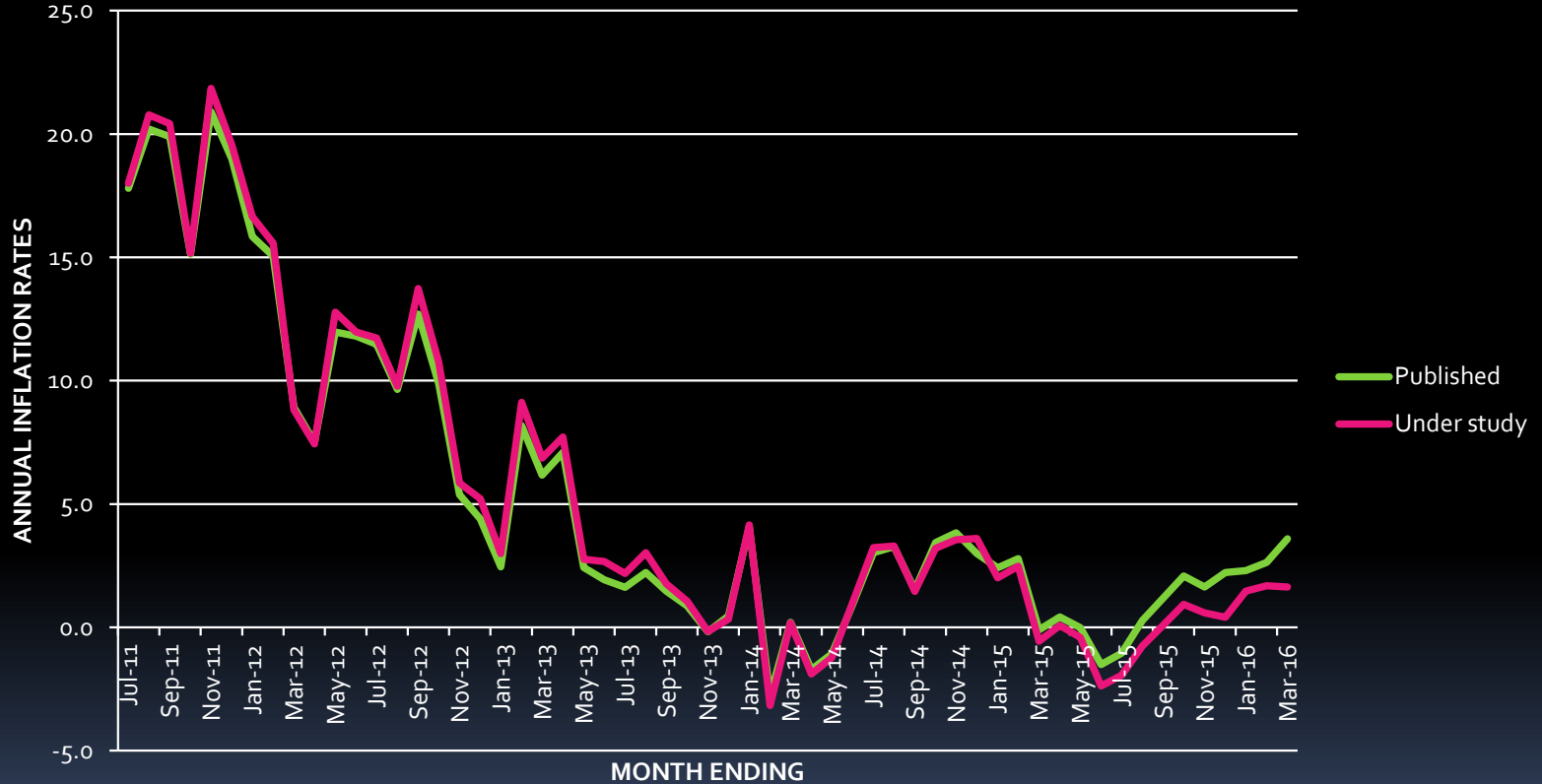
## ANNUAL INFLATION TRANSPORT DIVISION JINJA





# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

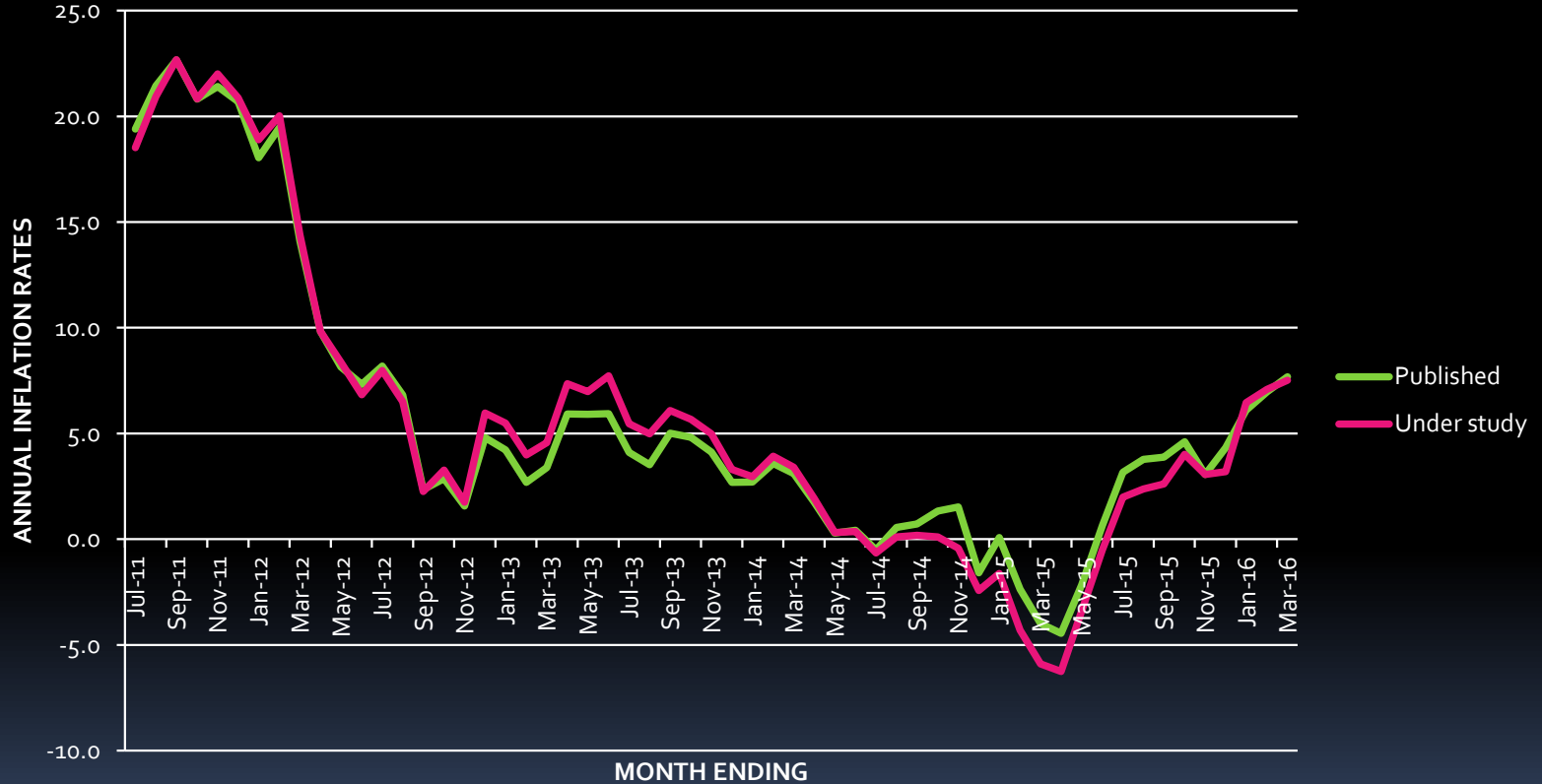
## ANNUAL INFLATION TRANSPORT DIVISION GULU



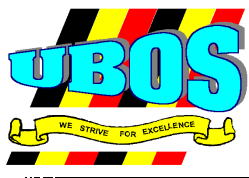


# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

## ANNUAL INFLATION TRANSPORT DIVISION ARUA

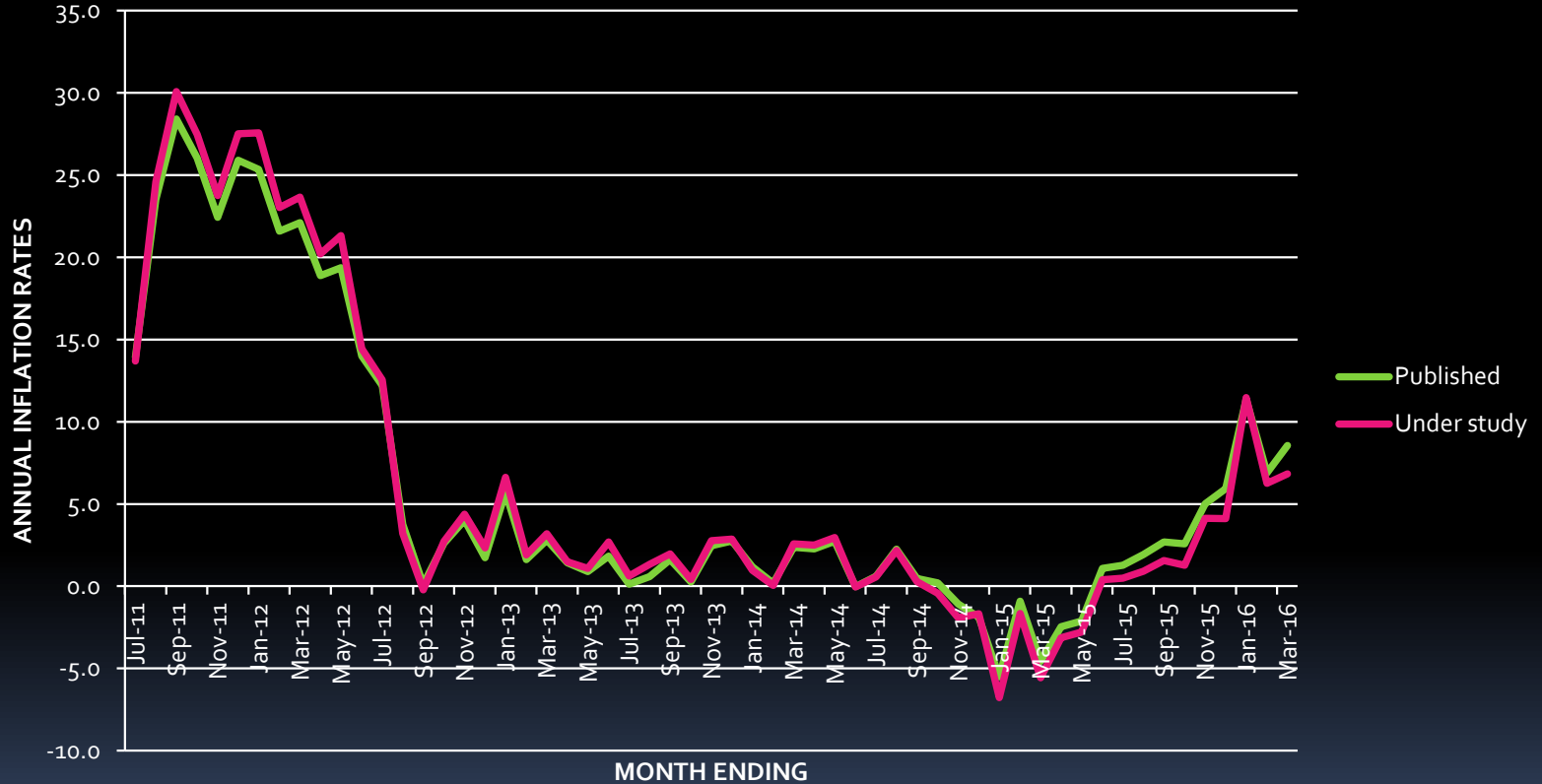


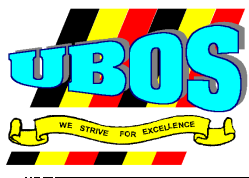




# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

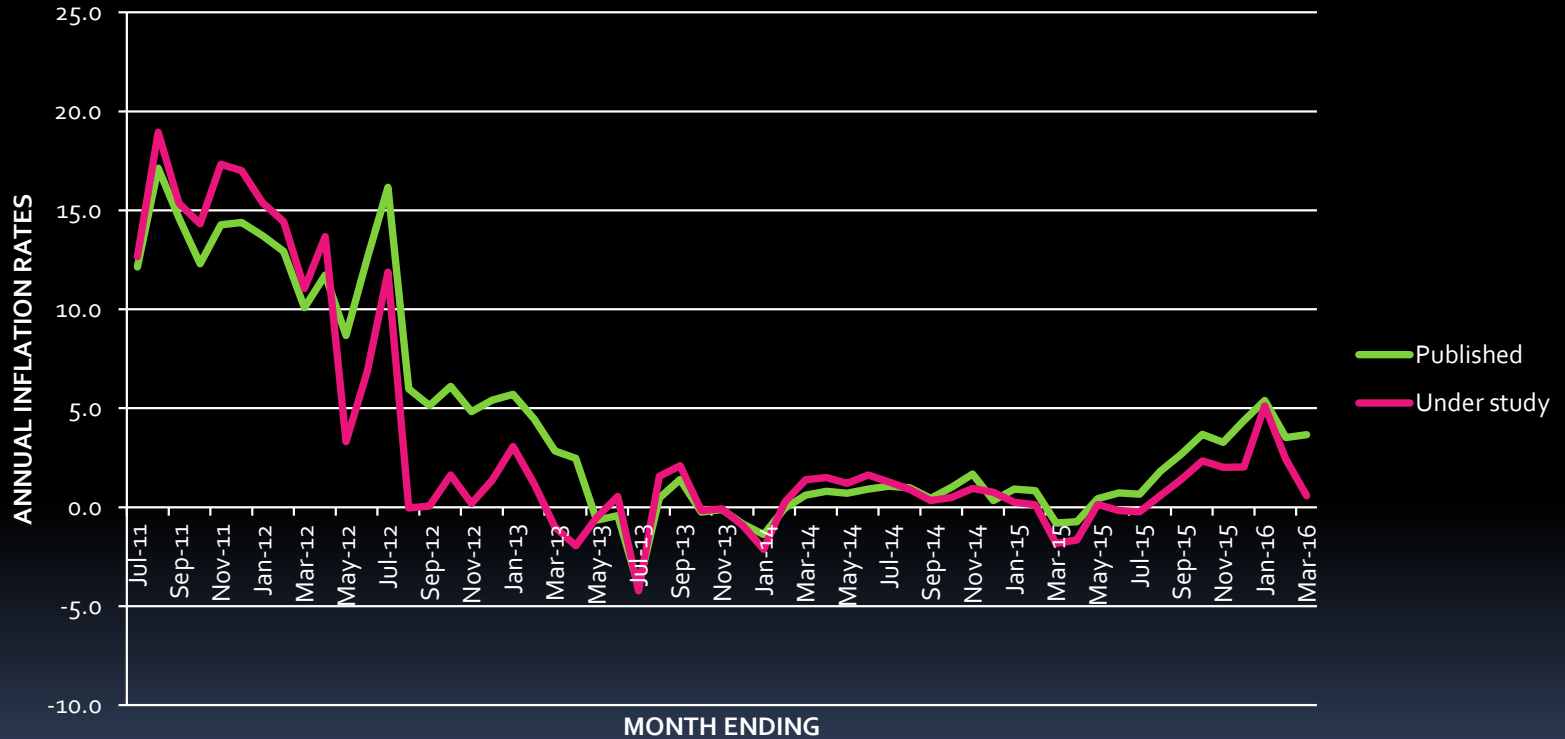
## ANNUAL INFLATION TRANSPORT DIVISION FORT PORTAL





# 1.2 STUDY RESULTS ANNUAL INFLATION - TRANSPORT

## ANNUAL INFLATION TRANSPORT DIVISION MBARARA





# CPIs for Different Population Groups, Income Groups and Geographic Areas

## General Findings of the Study

It appears, therefore, that the differences at the division level annual inflation depend on the importance (weight) of a given item being priced.

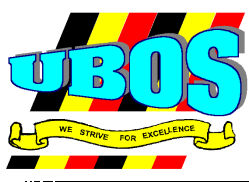
Hence a choice has to be made between including such an item from where actual consumption takes place, or exclude the item and include it in the Capital City from where households purchase it.

These findings should help price statisticians in understanding the implication of the pricing options they employ in compiling regional (Sub-national) CPIs



## Recommendations and Conclusions

- i. The conclusion from the study where the All Items Index has not changed should not be taken globally ;
- ii. The study should be expanded to other products that follow under the same category;



## Recommendations and Conclusions

- iii. Regional Economic Communities (RECs) or Sub-Regional Organizations (SROs) that compile the Harmonised Consumer Price Indices (HCPI) should ensure that all regional member countries do follow the same approach of allocating household expenditure of the consumption baskets within the their economies

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END OF THE PRESENTATION