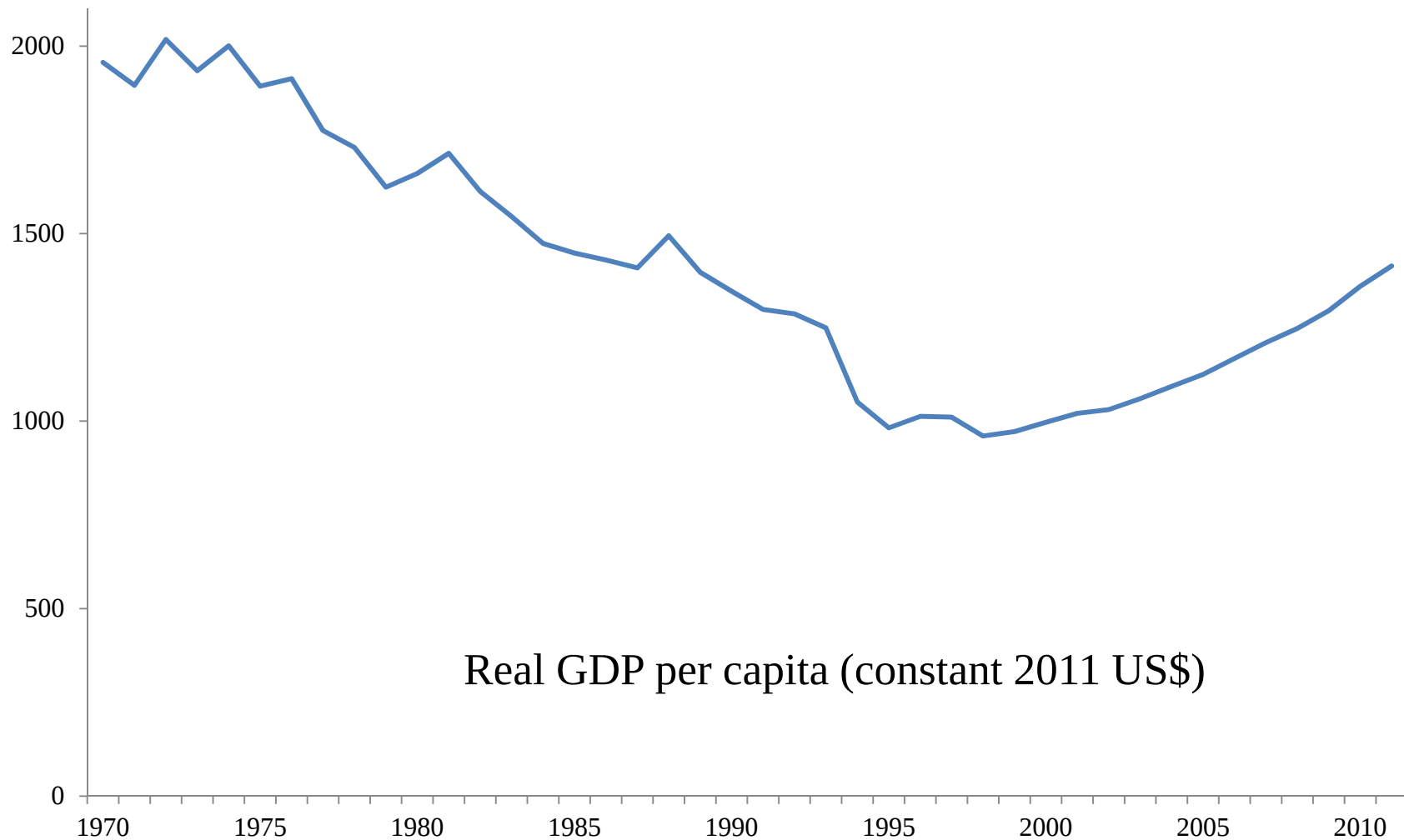


The Inclusiveness of Africa's Recent High-Growth Episode: How Zambia Compares

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Zambia Conference
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Income is Growing After a Prolonged Decline



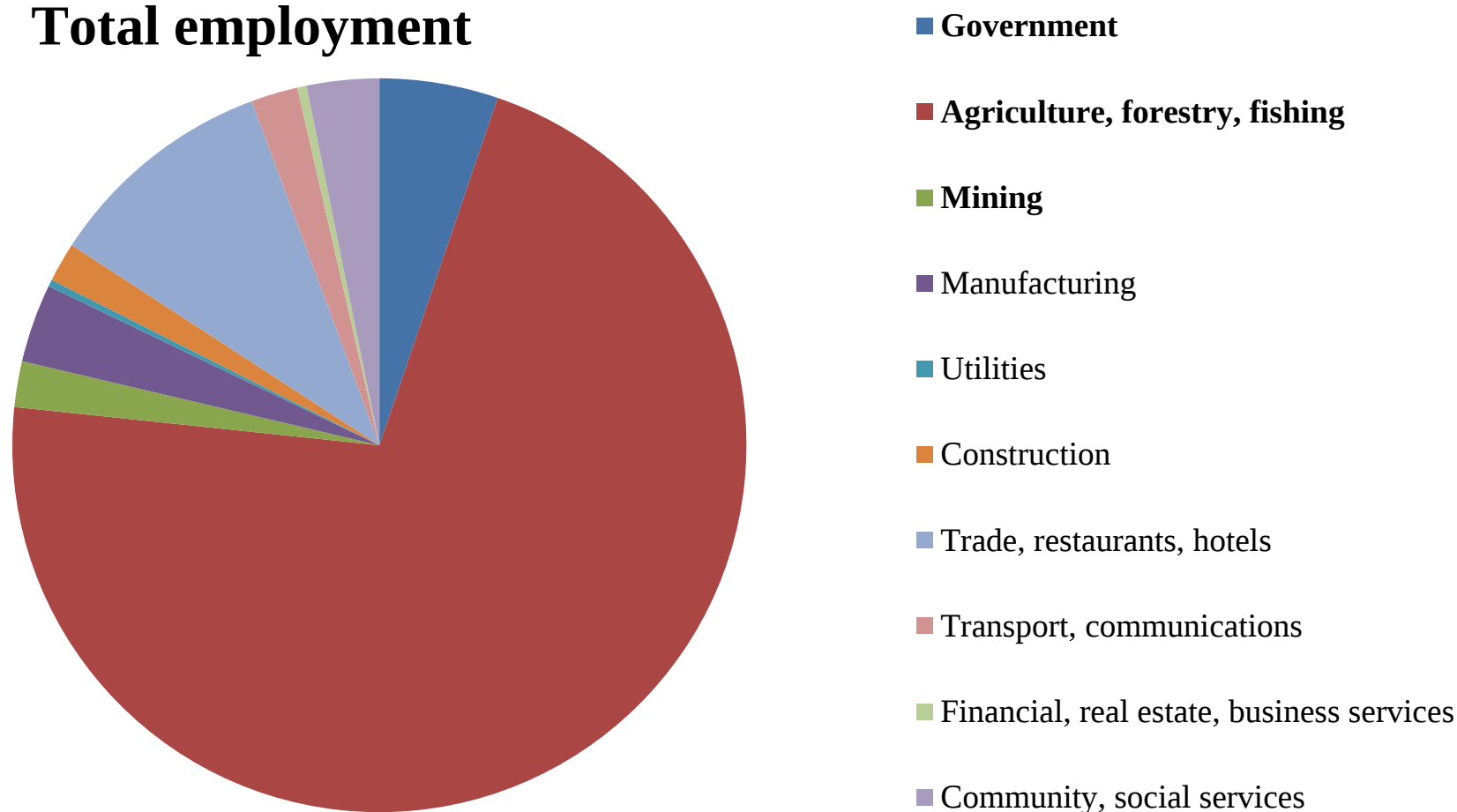
Sources: IMF, World Economic Outlook.

Strong Growth but High Poverty Rates

	1998	2006	2009	2010
Incidence of poverty (%)	72	63		61
Rural	83	80		78
Urban	49	30		28
Unemployment (% of labor force)		14.0		13.2
Rural		5.0		5.0
Urban		32.3		29.2
Growth:			2006-10	
GDP volume (average percent change)			6.4	
Excluding mining			6.1	
Agriculture, forestry, fishing			3.8	
GDP volume per capita			3.9	
Real GDP per capita (US\$, 2010 prices)	847	995	1031	1221

Agriculture the Dominant Source of Employment

Total employment

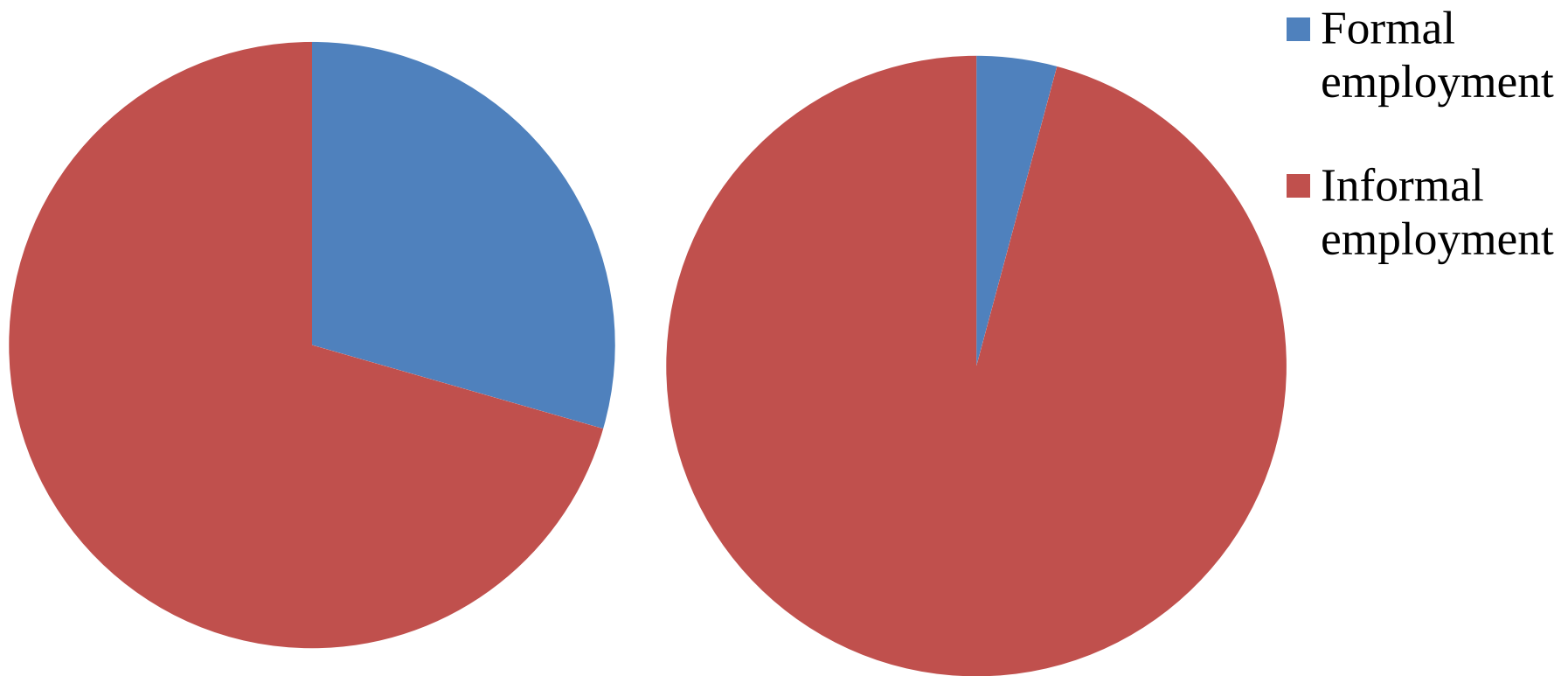


Source: Zambia Central Statistical Office. 2008 Labor Force Survey

Informal Employment Dominant

Urban

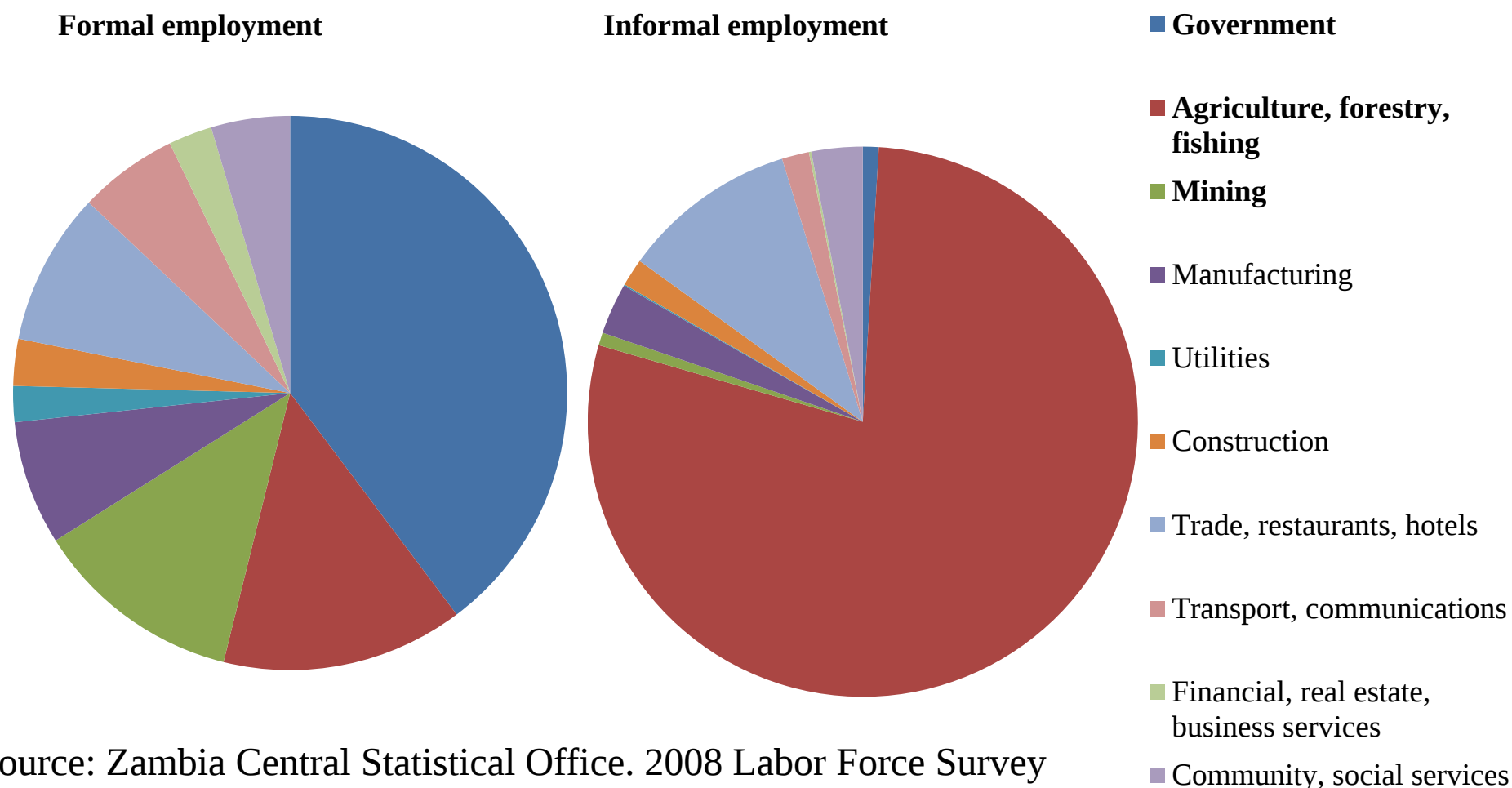
Rural



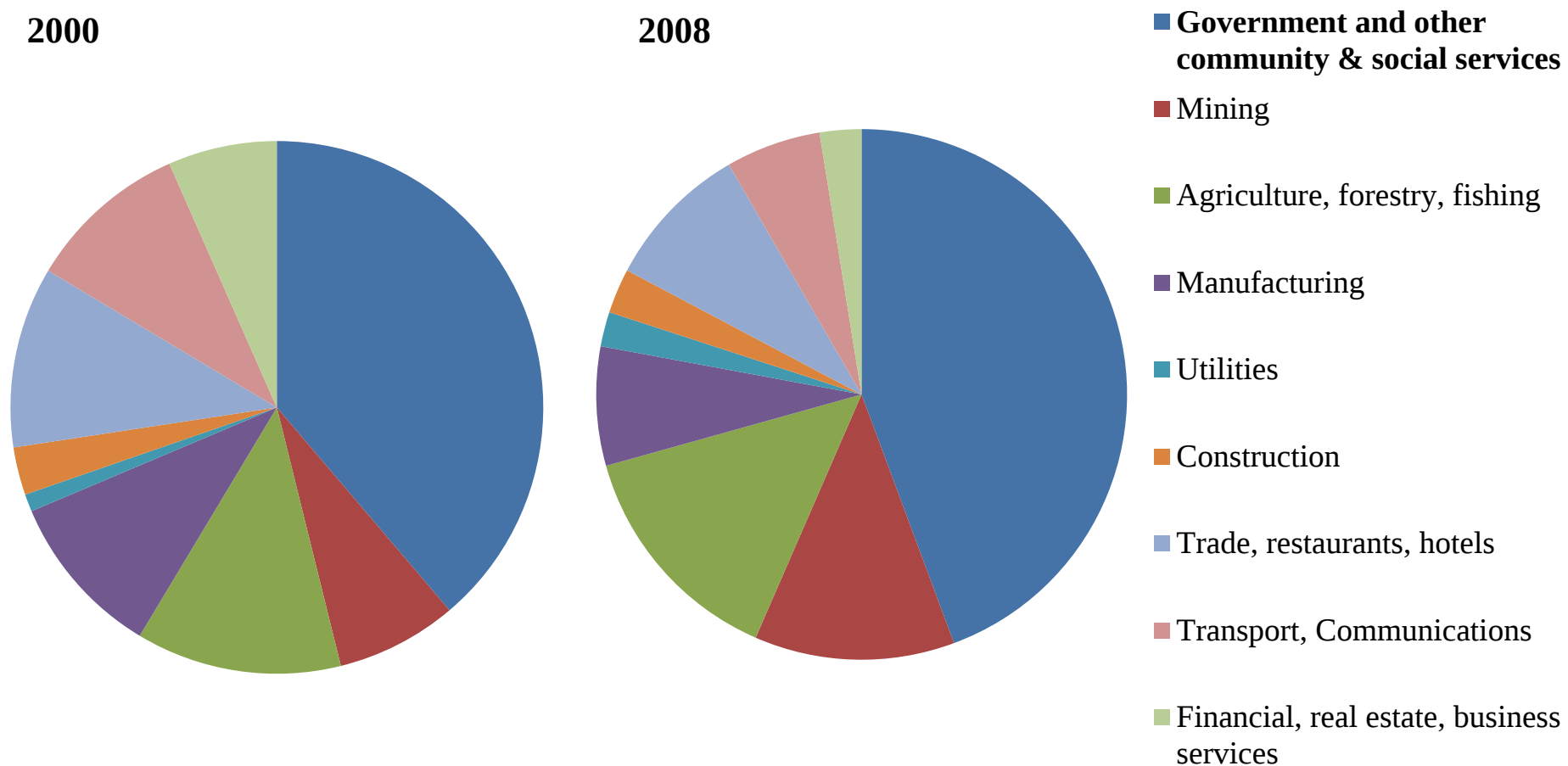
Source: Zambia Central Statistical Office. 2008 Labor Force Survey

Formal Employment Concentrated in Government

Informal Employment Concentrated on Agriculture

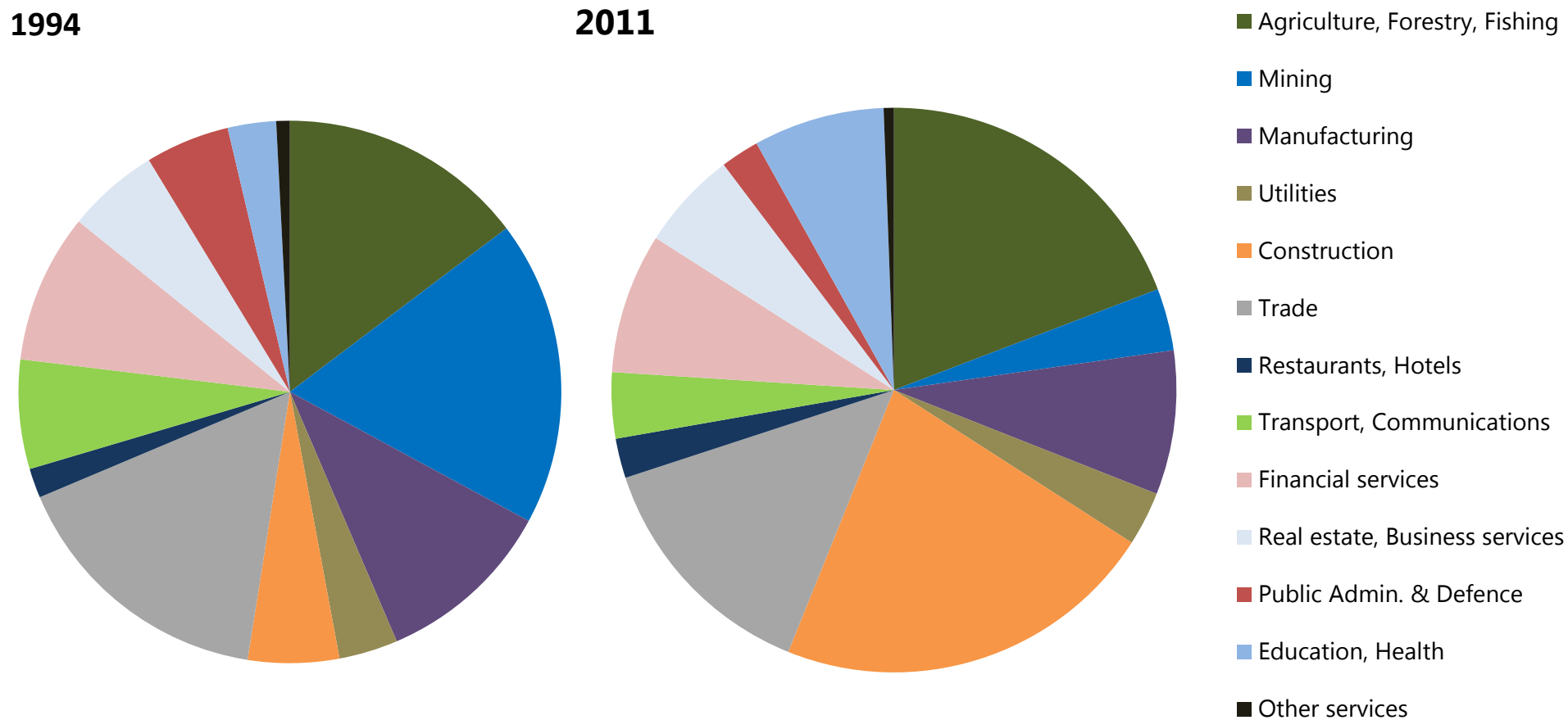


Mining and Government Increasing Share of Formal Employment



Sources: ILO and Zambia CSO (2008 Labor Force Survey)

Value Added in Mining Declining Share of GDP Construction and Agriculture Increasing Share of GDP



Source: Botswana Central Statistical Office.

Outline of Analysis

- Incidence of Growth
- Determinants of Household Consumption
- Evolution of Employment
- Asset Ownership and Access to Public Services
- Conclusions

Country Sample

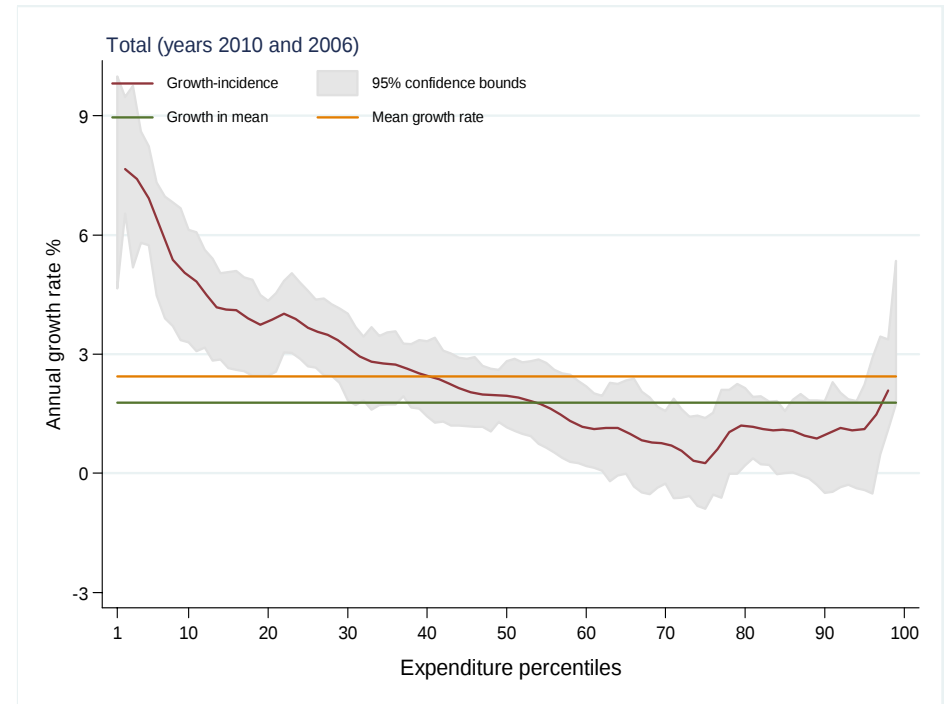
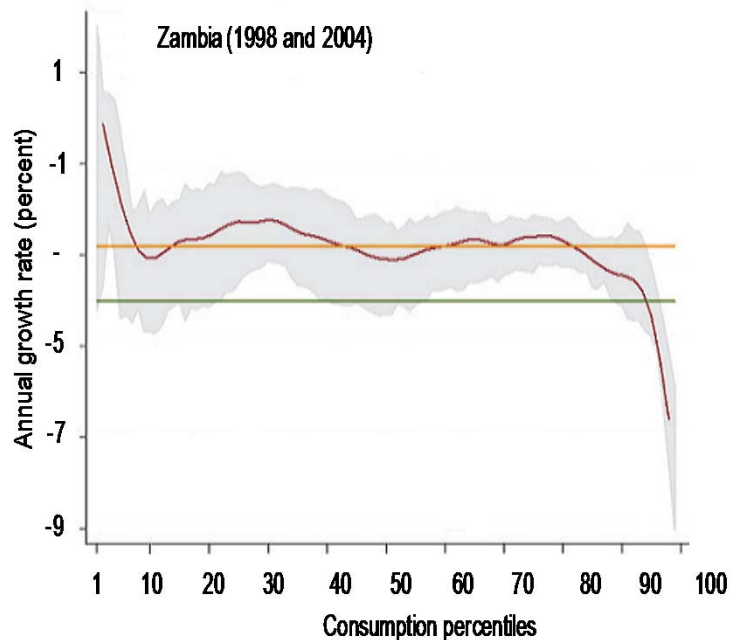
- Zambia surveys: 1998, 2004, 2006, and 2010
- Comparison sample:
 - Cameroon, 2001-2007
 - Ghana, 1998-2005
 - Mozambique, 2002/03-2008/09
 - Tanzania, 2001-2007
 - Uganda, 2002/03-2009/10

How is inclusive growth defined?

- Absolute measure: Did the poorest quartile experience positive real per capita consumption growth?
- Relative measure: Did consumption increase more rapidly among the lowest quartile than the highest quartile?

Growth Incidence Curves For Zambia

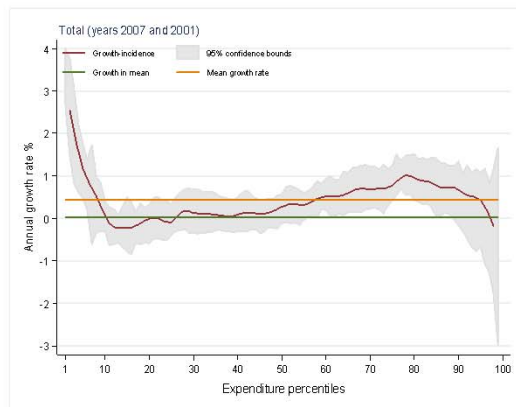
- ▶ In contrast to the earlier period, consumption growth per capita was strong across the board between 2006-10, and tilted toward the poorest segment



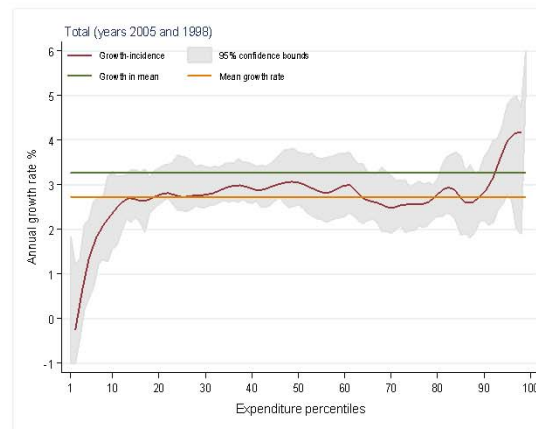
Growth Incidence Curves

- ▶ Zambia's recent experience is similar to Cameroon and Uganda, with consumption tilted toward the poorest

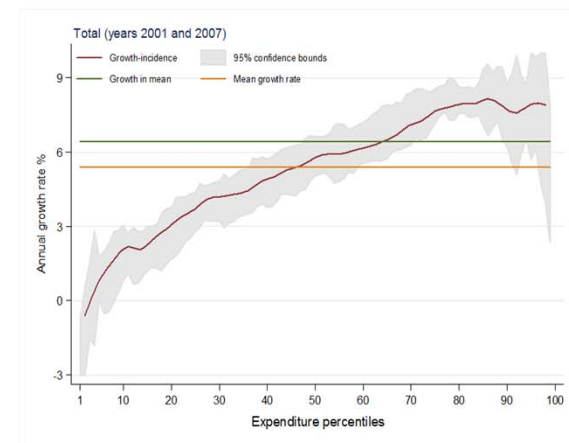
Cameroon 2001-2007



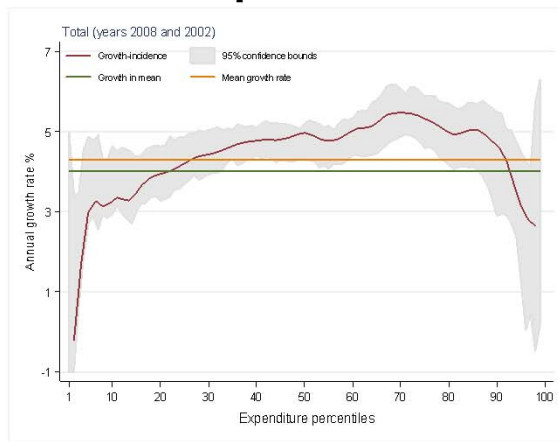
Ghana 1998-2005



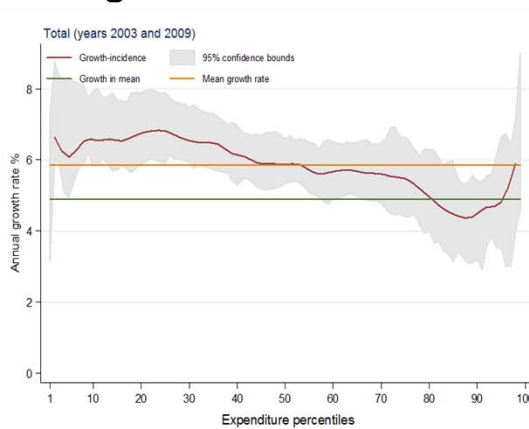
Tanzania 2001-2007



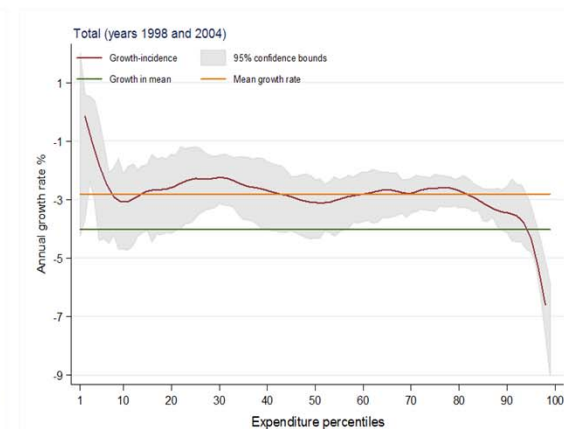
Mozambique 2002-2008



Uganda 2003-2010



Zambia 1998-2004



Macroeconomic, Poverty, and Consumption Aggregates in Sample Countries

(Annual percentage change, except where stated)

	Period	Growth per Capita	Poverty Headcount		Gini Coefficient			Per Capita Consumption				
		Latest estimate	Initial estimate	Latest estimate	NIPA data	Survey data						
						All households	Poorest quartile	Ratio of poorest quartile to average				
Cameroon	2001–07	0.57	9.6	-3.9	←	0.4	0.39	1.0	0.82	1.0	→	1.24
Zambia	1998–2004	1.16	64.3	1.5		0.53	0.51	-1.0	-3.43	-1.9		
	2006-2010	3.57	60.5	-0.6	←	0.56	0.55	3.5	2.54	6.1	→	2.40
Ghana	1998–2005	2.33	30.0	-1.3		0.41	0.43	3.6	3.66	2.6		0.71
Tanzania	2000–07	4.38	67.9	-3.0		0.35	0.38	3.7	6.73	3.9		0.58
Uganda	2002–09	4.45	28.7	-4.1	←	0.46	0.44	3.6	3.40	4.7	→	1.37
Mozambique ¹	2003–09	5.54	60.0	-2.5		0.47	0.46	7.2	3.50	2.9		0.82
									0.69	-1.3		
Memo items:												
Bangladesh ²	1992–2000	3.00	57.8	-1.1		0.28	0.33	0.8	1.80	1.0		0.56
Cambodia ³	1994–2004	5.70	40.2	-0.8		0.35	0.42	5.8	2.80	0.80		0.29
Vietnam ³	1993–2002	5.90	40.1	-2.6		0.34	0.38	4.2	5.50	4.0		0.73

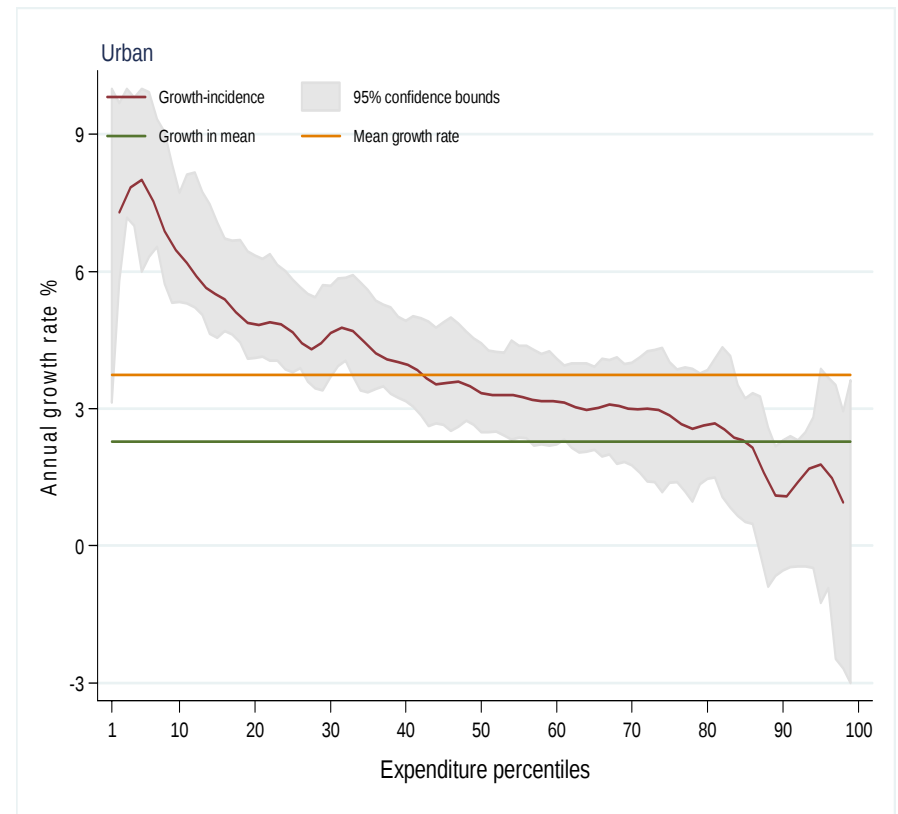
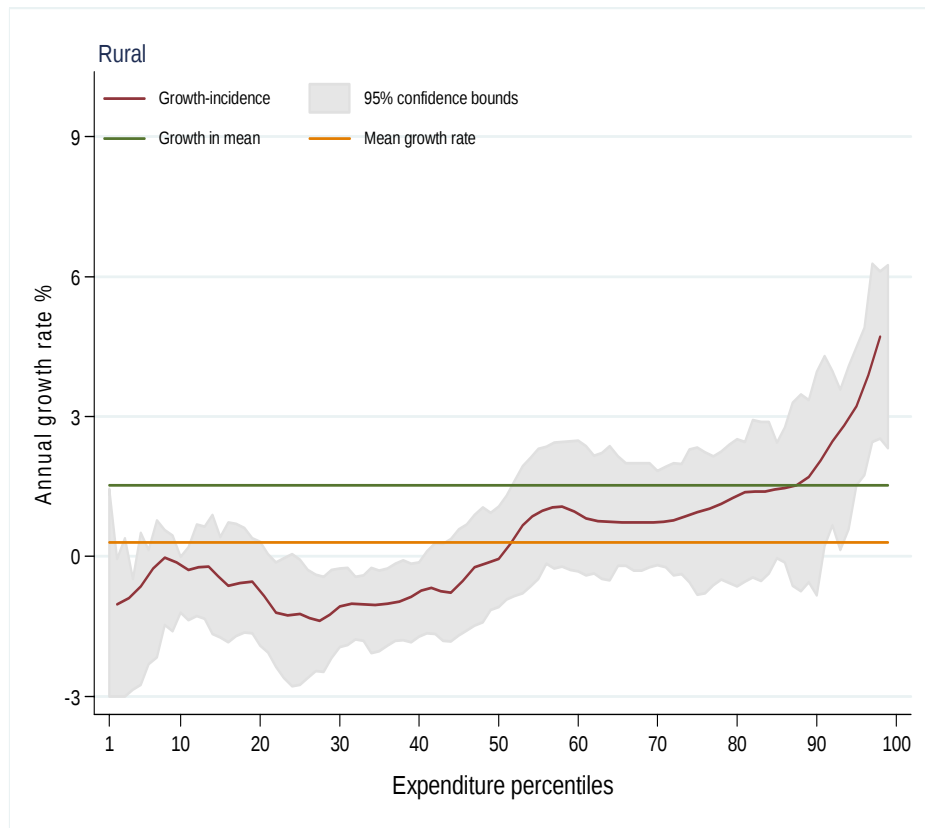
¹ For per capita consumption growth rates, upper line is deflated by aggregate CPI, lower line is deflated by regional CPIs

² Estimate based on Bangladesh growth incidence curve.

³ For Cambodia and Vietnam, the poorest quintile replaces the poorest quartile.

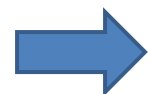
Growth Incidence Curves For Zambia

- ▶ Consumption Growth very weak in rural areas but much stronger in urban areas; partly explaining the slight poverty improvement



Determinants of Household Consumption

- A few variables explain between 60 and 70 percent of household consumption
- Household size is the most important factor with each new member raising consumption but at a declining rate; age and education are also associated with higher consumption
- Large urban-rural differences have provided the incentive for a continued migration from rural to urban areas
- Government workers are the highest paid while agricultural workers earn the least, but their consumption is converging, especially in Zambia



Evolution of Employment

- Significant employment growth based on our definition of all income generating activities
- Agricultural employment growth was strong, especially among rural areas in countries where growth was inclusive according to the relative concept (Cameroon, Uganda, Zambia)
- Formal sector employment growth remains weak and lags far behind comparable LICs in Asia

Employment Indicators

(Annual percentage change, except where stated)

	Period	Total Employment	Employment Output Elasticity	Urban Employment	Agricultural Employment	Rural Agricultural Employment	Formal Sector Employment ¹
Cameroon	2001–07	2.7	0.8	5.6	5.9	4.2	9.5
Ghana	1999–2005	3.4	0.7	6.1	3.5	1.4	13.3
Mozambique	2003–09	4.4	0.6	7.4	3.4	-0.4	16.7
Tanzania	2000–09	3.3	0.5	8.8	2.3	2.1	9.5
Uganda	2002–09	7.5	1.0	9.8	6.0	6.4	13.9
Zambia	1998–2004	1.9	0.6	5.1	-0.2	-1.6	13.8
	2004–2010	3.1	0.5	1.1	6.2	6.5	9.1
<i>Memo items:</i>							
Cambodia	2004–07	4.2	0.4	4.5	3.9	4.7	25.0
Vietnam ²	2000–07	2.9	0.4	6.1	-0.3	n.a.	44.0
Sub-Saharan Africa (sample median)		3.3	0.6	6.1	3.5	2.1	13.3

Sources: Household surveys; Vietnam Ministry of Planning and Investment and UNDP (2010); World Bank (2008).

¹Latest estimate in percent of working-age population.

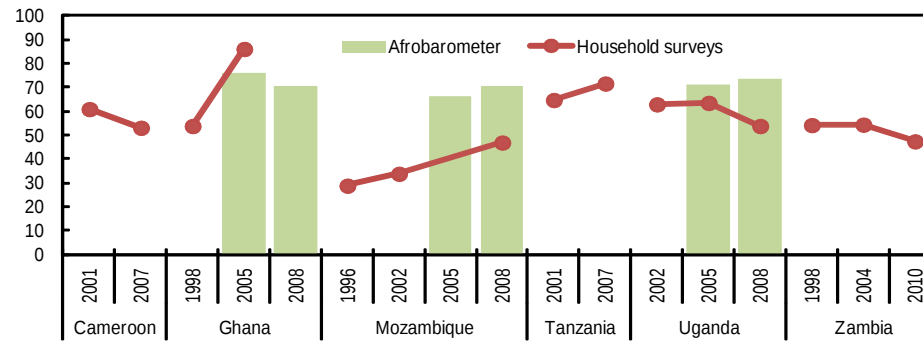
²Agricultural employment is for 2000–08.

Asset Ownership and Access to Resources

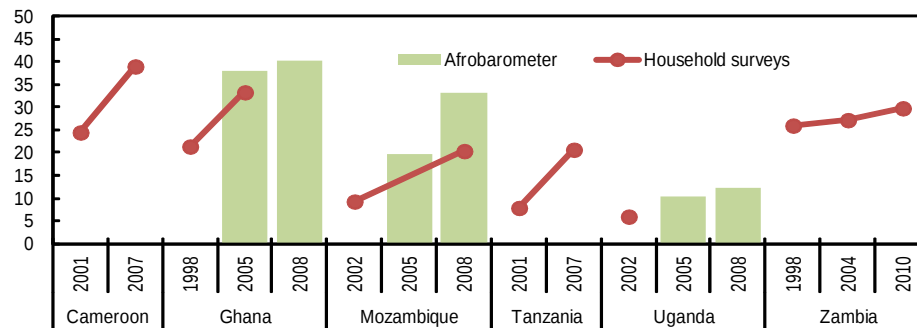
- Ownership of consumer durables
 - Increased considerably over the past decade
 - Ghana and Cameroon have shown the fastest improvement
 - Supports welfare improvement based on consumption growth
- Zambia:
 - 1998-2004: no change
 - 2004-2010: Strong increase
- All countries have shown improvements in access to public resources
 - For Zambia, negligible improvements over the 1998-04 period
 - Access to services (especially piped water, proper sewage and access to a health clinic) has surged since then.

Consumer Durables

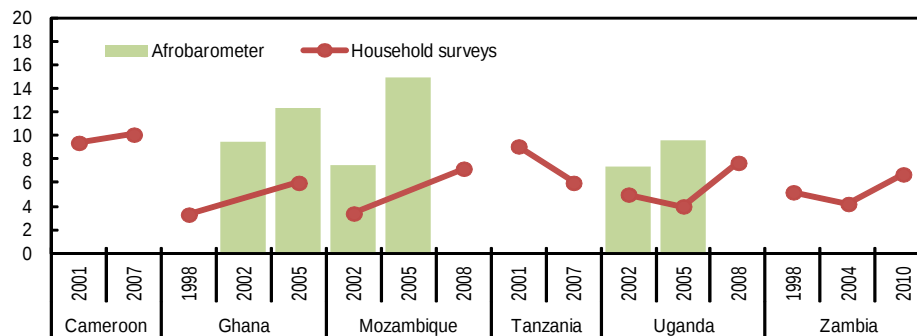
Respondents Who Own a Radio
(In percent of sample)



Respondents Who Own a Television
(In percent of sample)

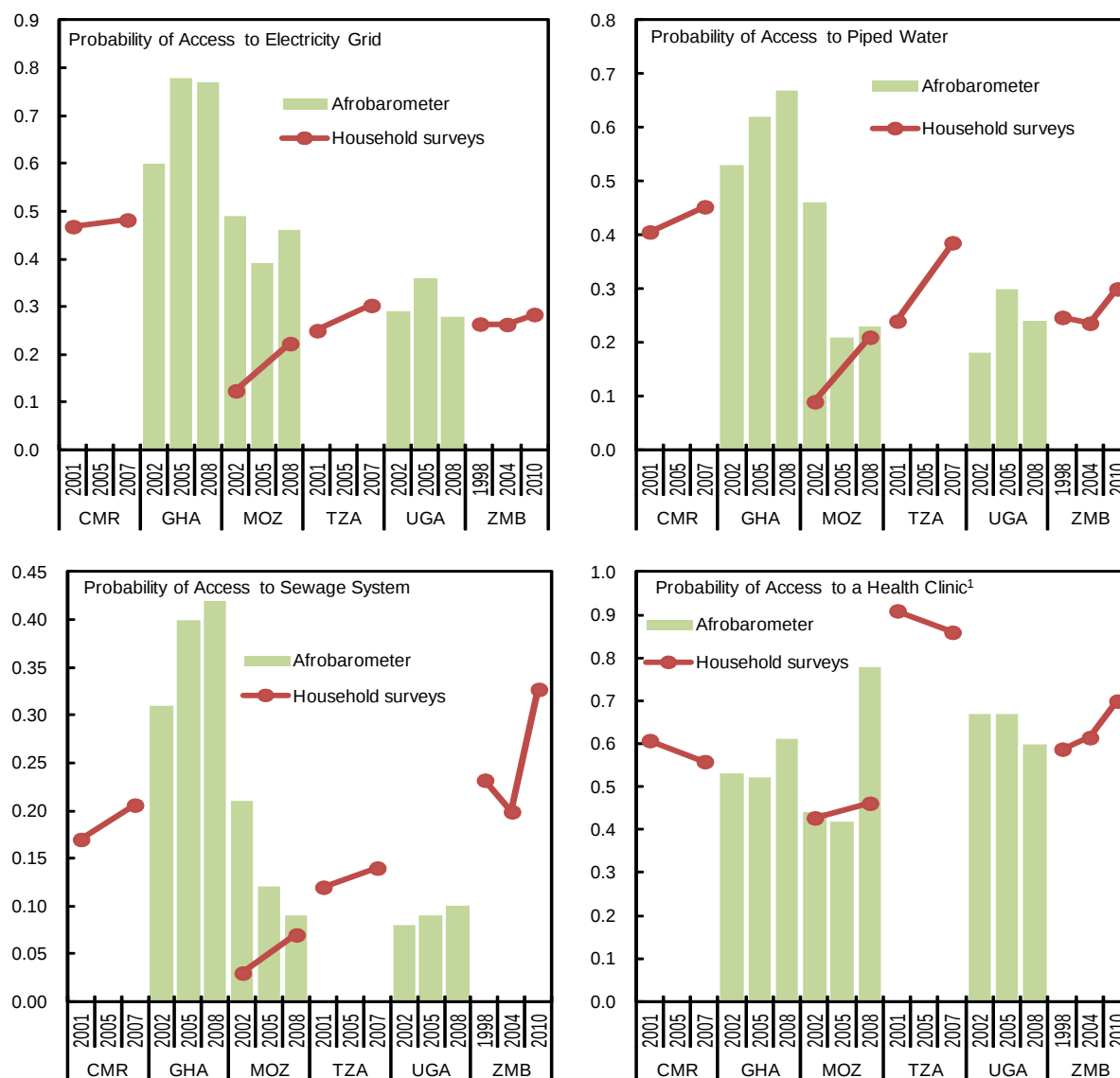


Respondents Who Own a Motor Vehicle
(In percent of sample)



Sources: Afrobarometer; and Household Budget Surveys.

Access to Resources



Source: Afrobarometer; and Household surveys.

Note: Probability of zero signifies no access and 1 signifies full access.

¹Data for Cameroon in 2007 includes hospitals and health clinics. For Mozambique and Zambia, the data reflect the probability of reaching a health unit within 30 minutes.

Conclusions

- **Zambia has made great strides since 2004** in terms of per capita consumption growth, employment growth and access to services
- **But has failed to make durable inroads into the very high poverty rate.**
- This **reflects poor economic performance in rural areas** with no change in real consumption growth per capita for the poorest half of the distribution
- Given strong linkages between agricultural growth and poverty reduction, **policies to improve agricultural output and productivity will accelerate poverty reduction.**

Table 2. Log Household Consumption Determinants ¹

	1998	Zambia 2004	2010 ³	Ghana 2005	Cameroon 2007	Uganda 2009	Mozambique 2008/09	Tanzania 2007
Household size (log)	0.28 ***	0.17 ***	0.3 ***	0.37 ***	0.29 ***	0.24 ***	0.26 ***	0.31 ***
Age (log)	0.03	0.05 ***	0.1 ***	0.13 ***	0.18 ***	0.20 ***	0.16 ***	0.02
Male head of household	0.04 **	0.02	0.03 ***	0.03 ***	0.01	0.08 ***	0.04 ***	0.06 **
Employment dummy	0.15	0.07 ***	0.11 ***	0.16 ***	0.04 **	0.02	0.07 ***	0.21 ***
Agriculture sector dummy	-0.15 ***	-0.04 ***	-0.03 **	-0.23 ***	-0.15 ***	-0.09 ***	-0.12 ***	-0.26 ***
Manufacturing sector dummy ²	-0.04 **	0.03 *	0.12 ***	-0.08 ***	-0.03 **	-0.10 *	-0.11 ***	
Government sector dummy	0.01	0.02	0.06 ***	-0.12 ***	0.19 ***	0.16 ***	0.02	0.15 ***
Primary schooling	-0.05	0.04 *	-0.15 ***	0.07 **	0.08 ***	-0.14 ***	0.12 ***	0.13 ***
Lower secondary schooling	0.09 ***	0.13 ***	-0.04 *	0.16 ***	0.16 ***	-0.04	0.22 ***	0.44 ***
Upper secondary schooling	0.43 ***	0.47 ***	0.18 ***	0.38 ***	0.29 ***	0.01	0.56 ***	0.71 ***
College/nursing/teacher training	1.10 ***	1.03 ***	0.63 ***	0.69 ***	0.59 ***	0.87 ***	1.00 ***	1.23 ***
Urban dummy	0.27 ***	0.12 ***	0.22 ***	0.24 ***	0.21 ***	0.20 ***	0.12 ***	0.23 ***
Diagnostic statistics								
Number of observations	15283	17824	17679	7280	10416	6117	9836	9332
R-squared	0.66	0.59	0.69	0.68	0.69	0.63	0.66	0.66

Sources: IMF staff estimates based on data from various household surveys (see Appendix I).

Note: ***, **, * indicate statistical significance at the 99 percent, 95 percent, and 90 percent levels, respectively.

¹Characteristics refer to head of household except for household size and urban dummy.

²For Zambia, the manufacturing dummy refers to nonagriculture, nongovernment salaried employment.

³The 2010 data excludes expenditures on education, health and recreation because they showed very large declines relative to the 2006 survey

