



Fertility transition in West Africa: A conundrum

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Introduction

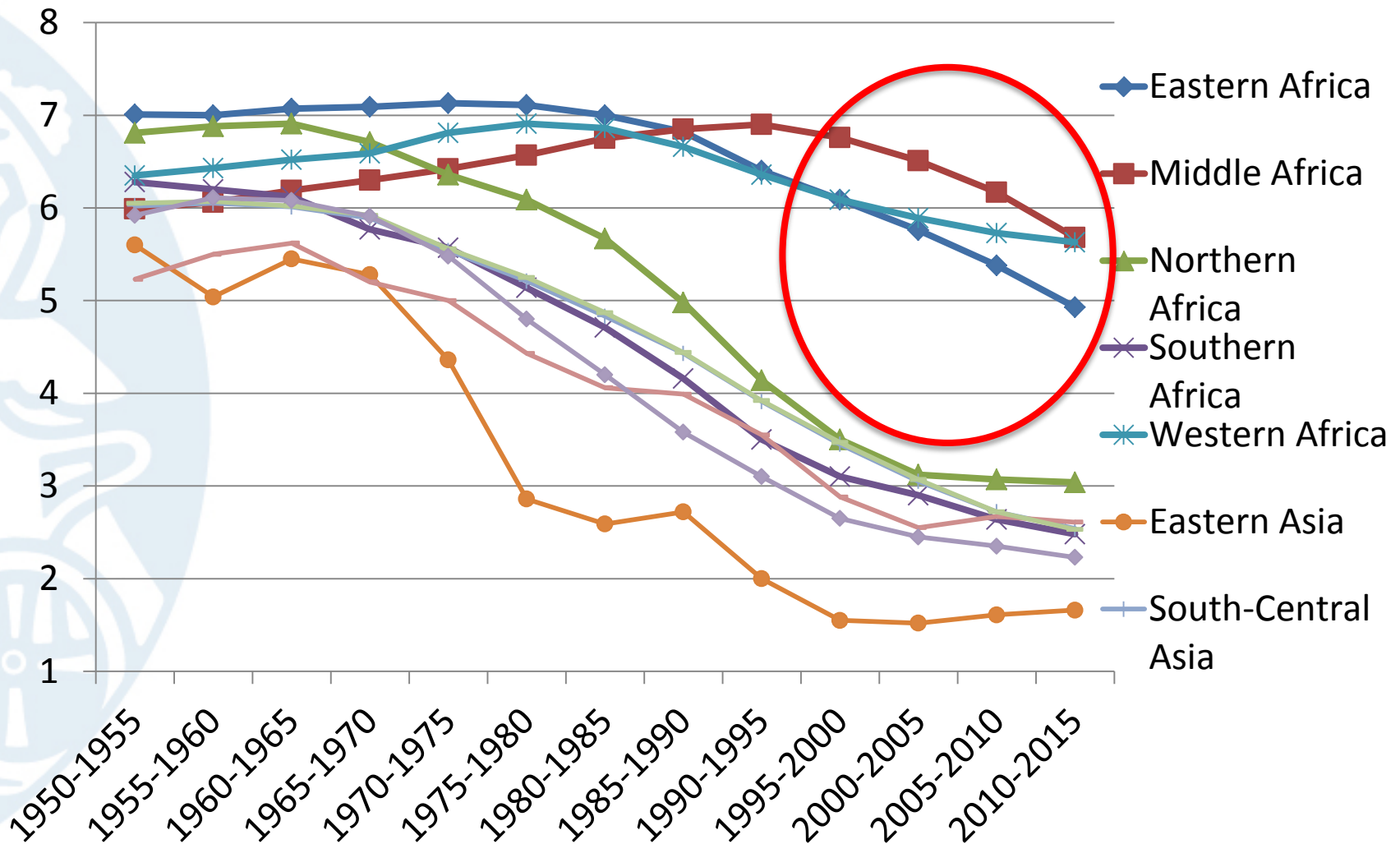
- Historical Europe:
Widespread use of withdrawal and postponement of marriage since the 18th century (Coale and Watkins 1986, McLauren 1990, Van de Walle and De Luca 2006)
- Fertility transition is usually led by wider use of modern method after the advent of modern contraception in the 1960s.

Introduction

Role of traditional and barrier methods in fertility transition

- **Former Soviet Union and Turkey:** widespread of withdrawal with abortion as back-up
- **Albania** - fertility transition driven by withdrawal without legal abortion (Falkingham and Gjonca 2001, Institute of Statistics et al. 2010).
- **Japan:** fertility transition is driven by induced abortion and condom use (Coleman 1983)
- **India** – higher use of sterilisation among the poor and higher use of traditional method among the educated (Basu 2005)
- **Iran:** Use of withdrawal was positively associated with level of education in Iran, but not Turkey (Erfani and Yüksel-Kaptanoğlu 2012)

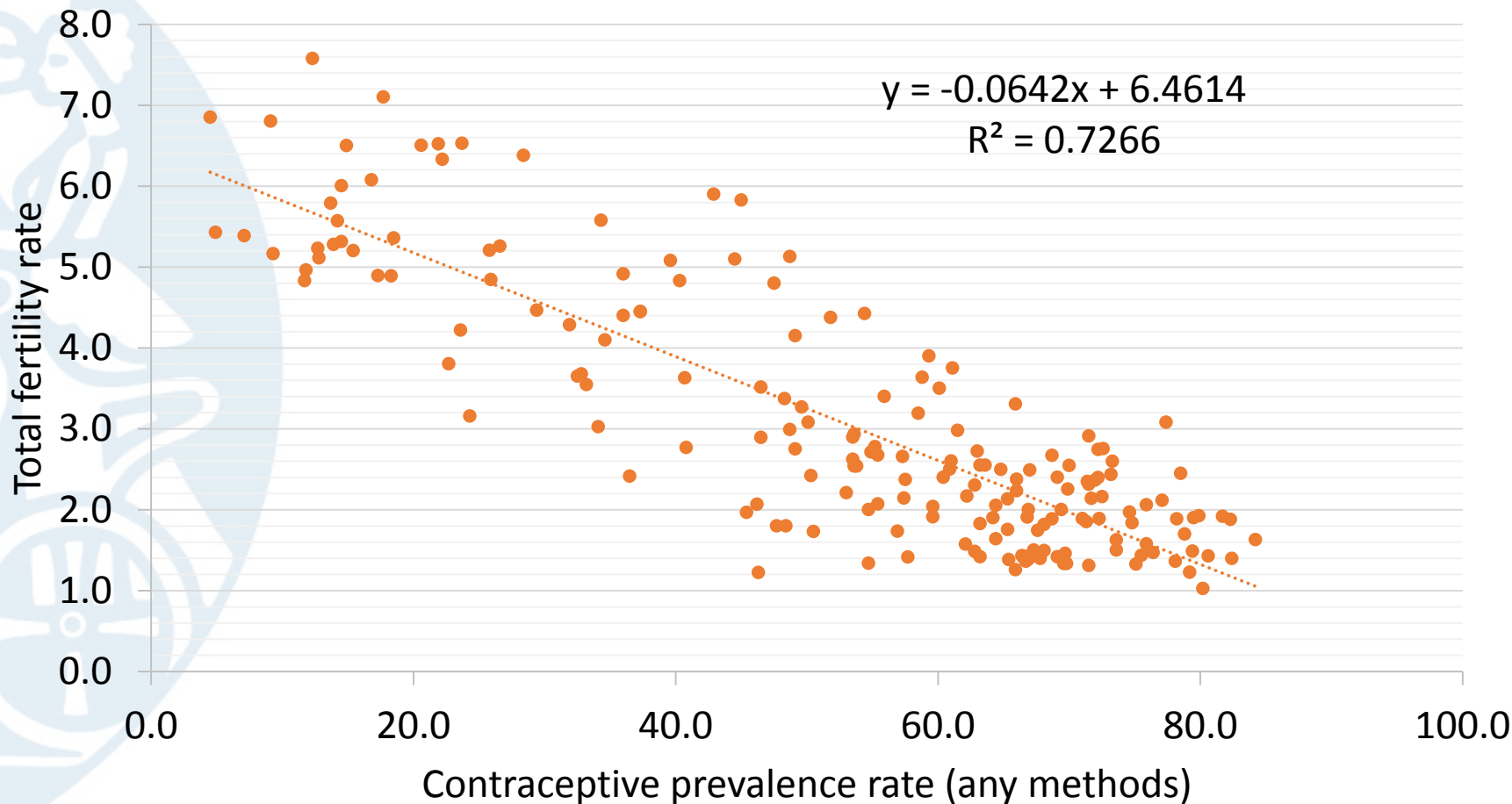
Trends in TFR in Africa and Asia



Relationship between TFR & CPR

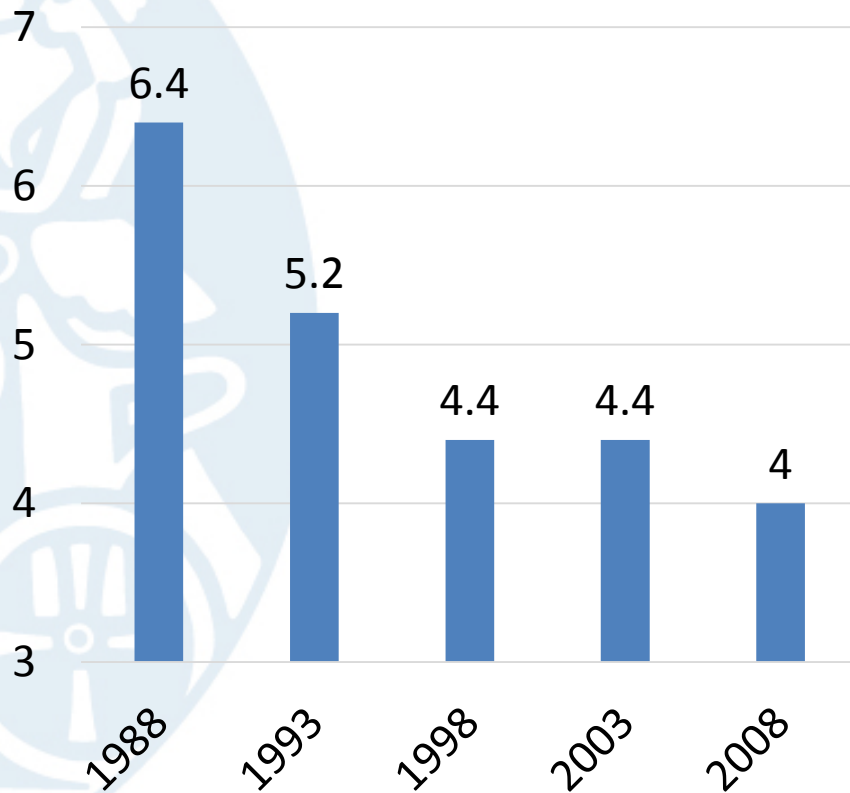


Relationship between TFR and CPR in 184 countries

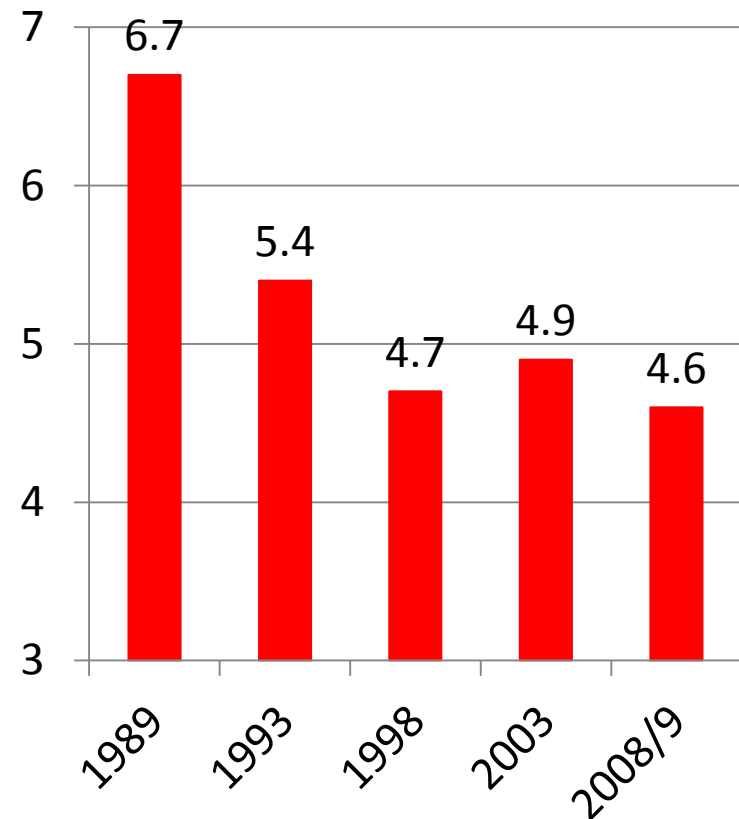


West vs East Africa: TFR

Ghana

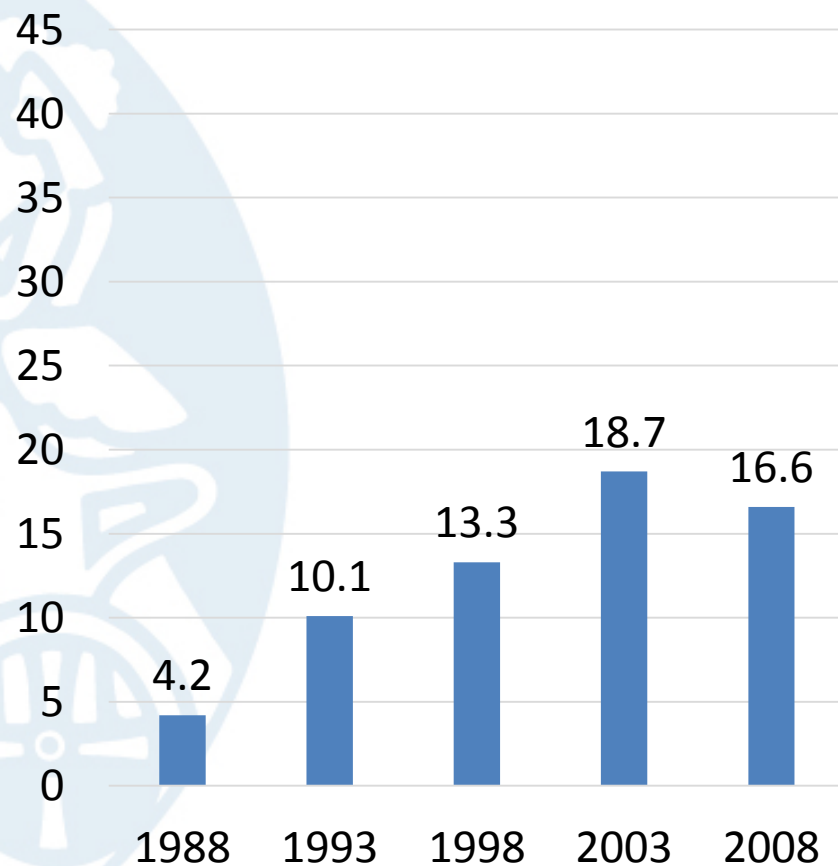


Kenya

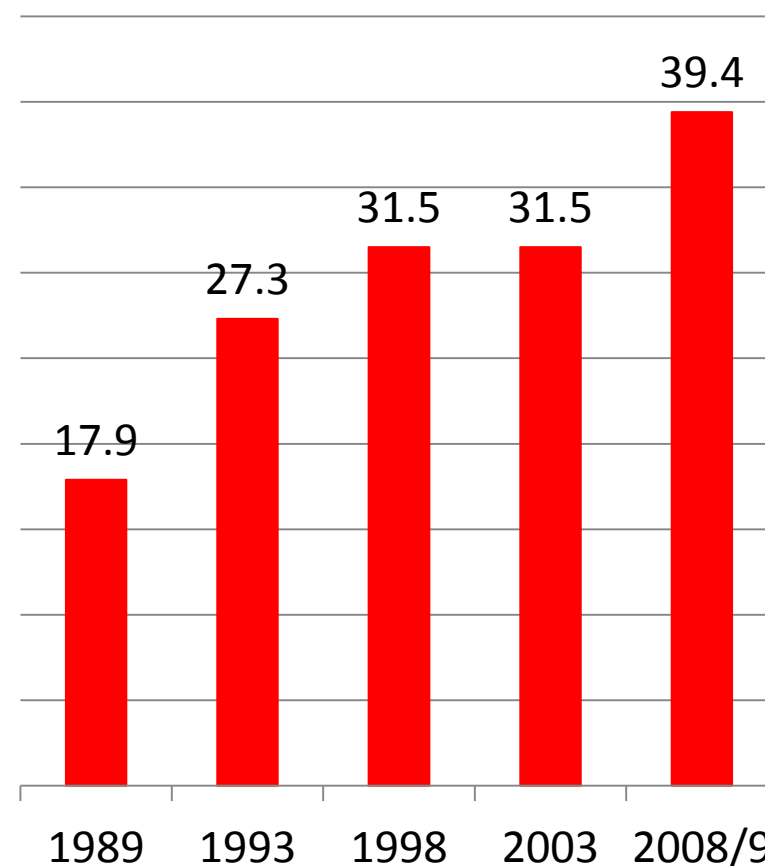


West vs East Africa: CPR (modern methods)

Ghana



Kenya



Aim

Assess changes in proximate determinants of fertility in Western African countries which experienced some decline in TFR

Hypothesis:

Use of traditional methods and non-coresidence, with abortion as a back-up, may be the main drivers of fertility decline among elite groups in Western African countries where strong family planning programmes exist.

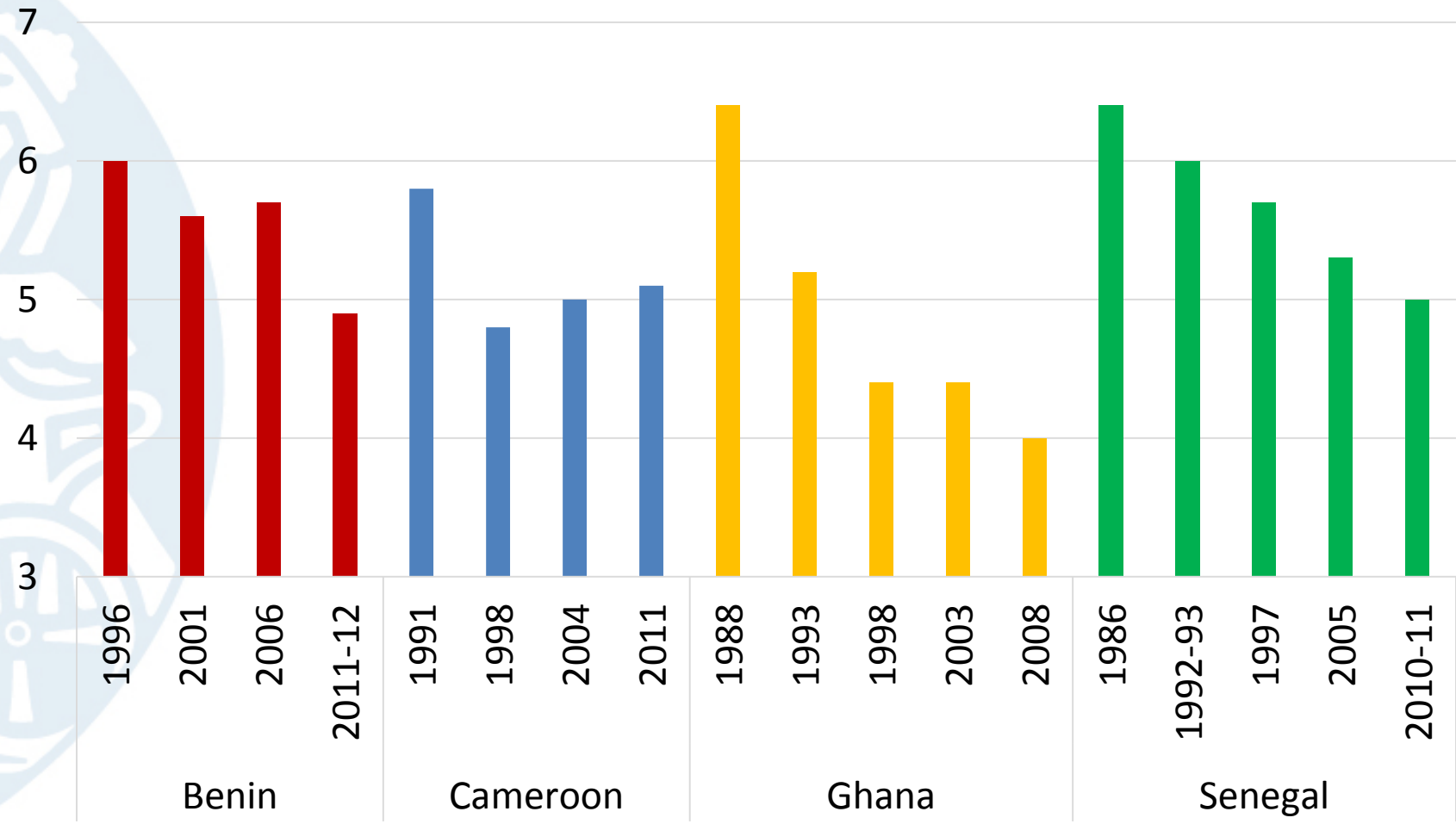
Methods

Data

All Demographic and Health Surveys from 4 countries (Benin, Cameroon, Ghana and Senegal) which experienced more than 0.5 children decline over the past 2 decades

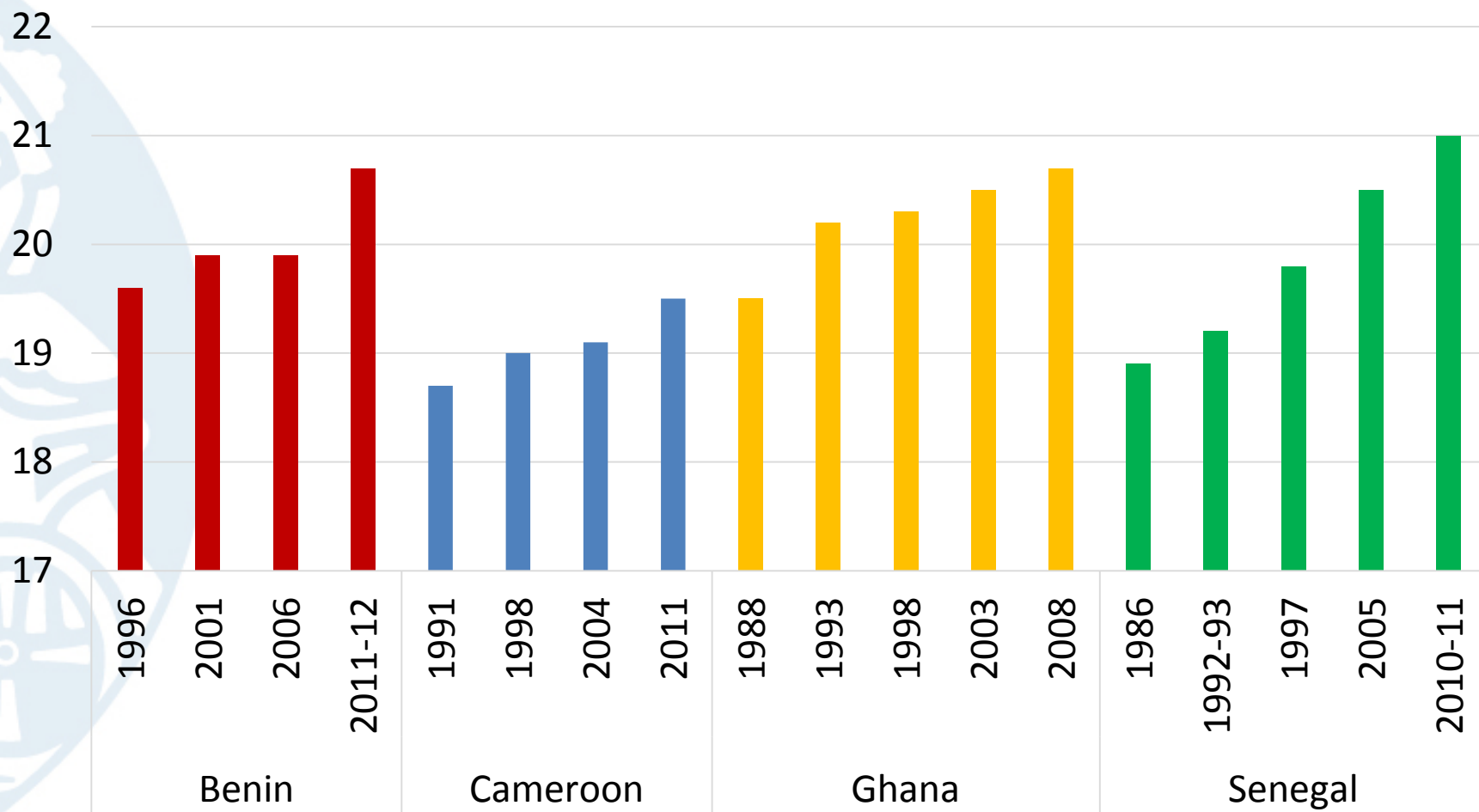


Trend in TFR



Source: DHS STATcompiler

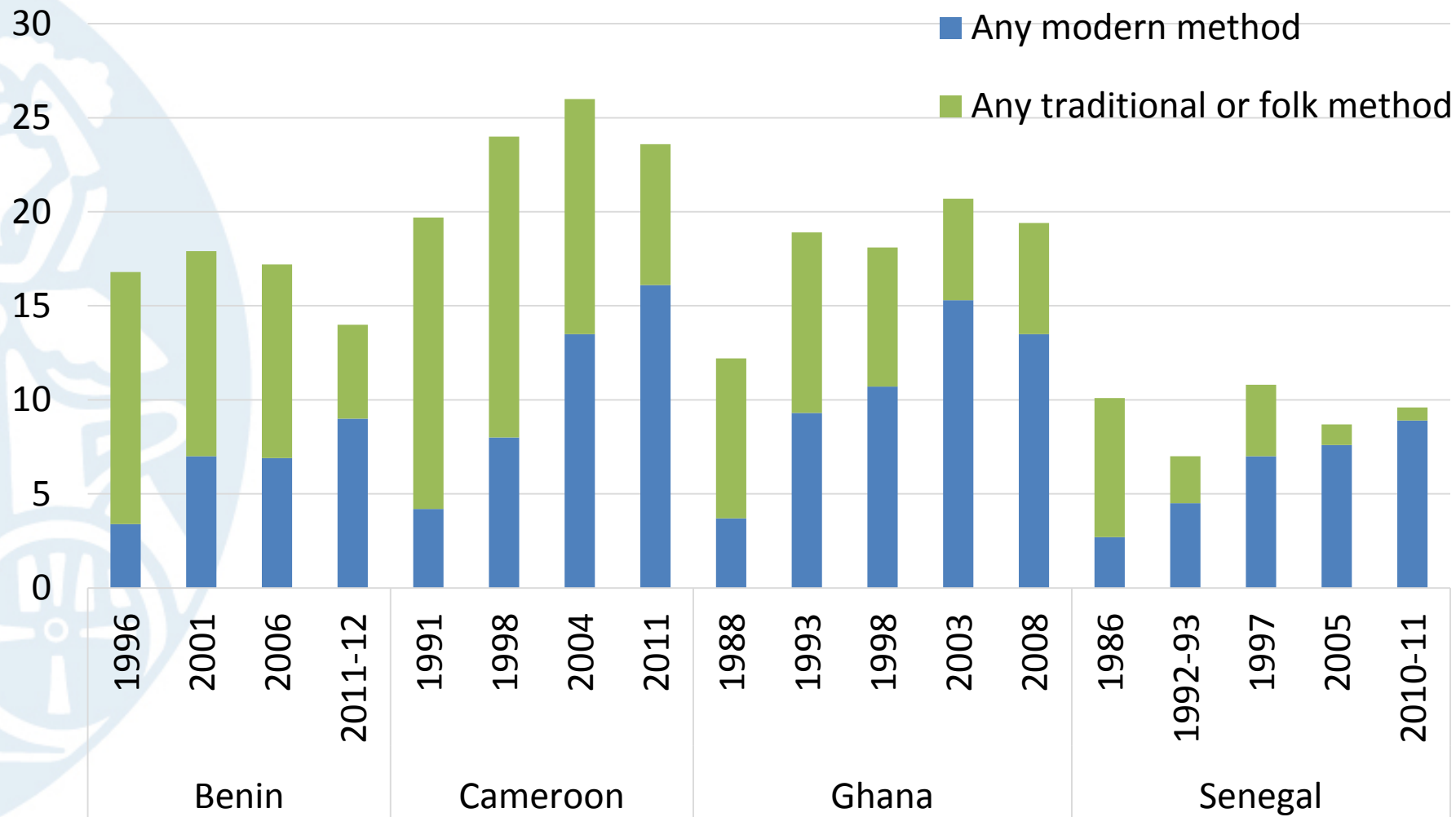
Median age at first birth



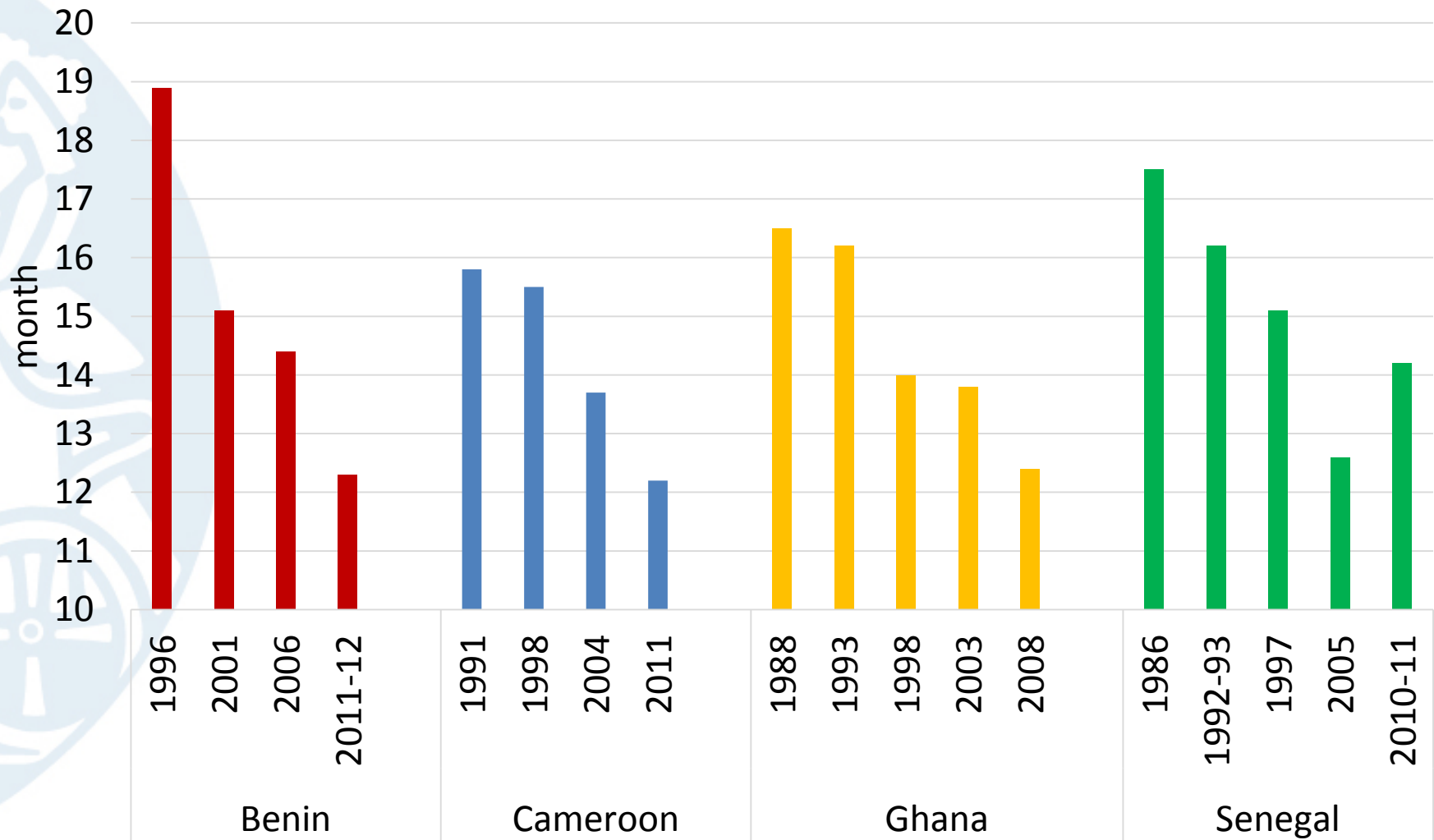
* Median age among women aged 25-49

Source: DHS STATcompiler

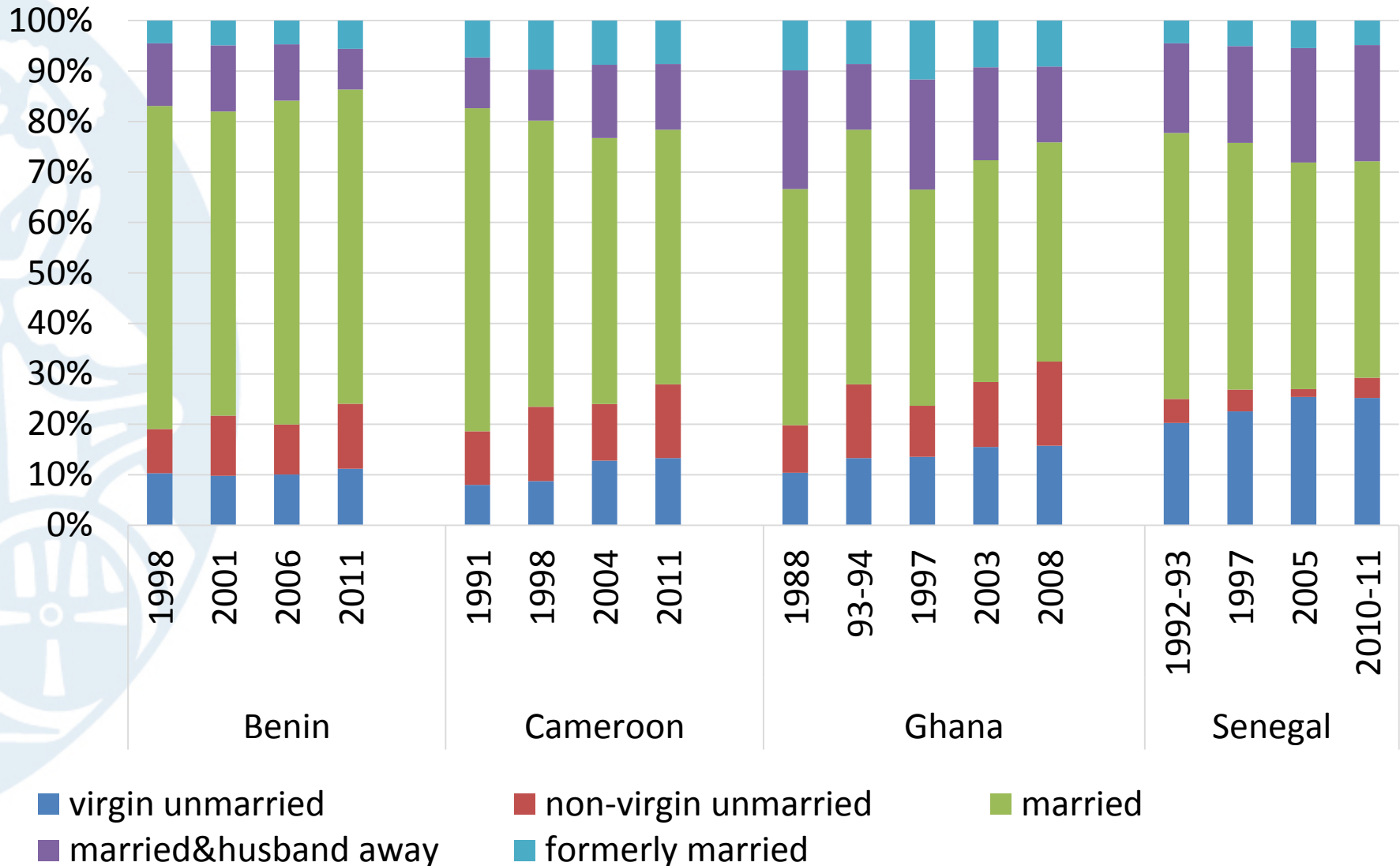
Trends in CPR



Trends in median duration of postpartum insusceptibility



Marital status and co-residence



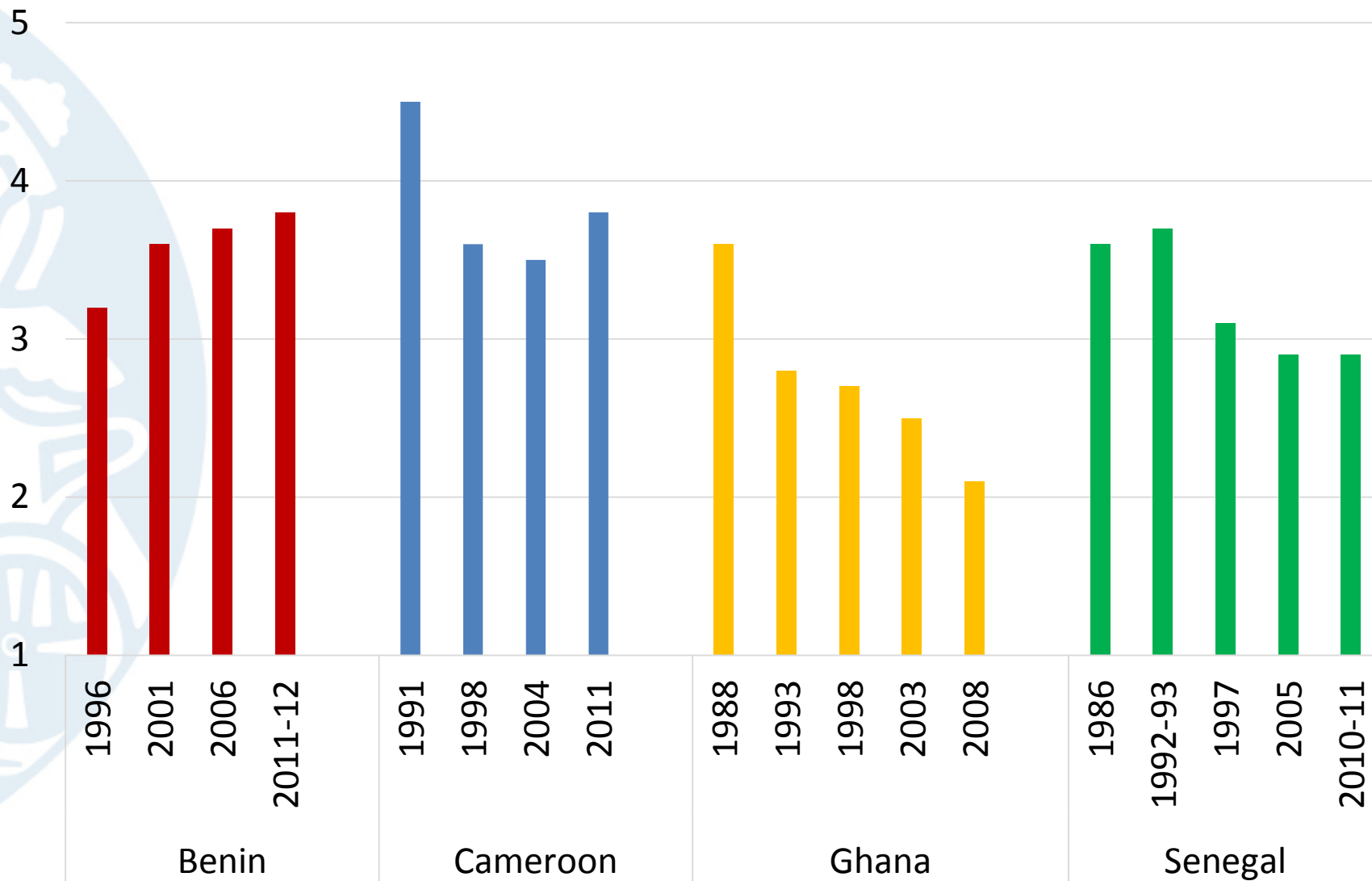
Summary

Analysis at national level

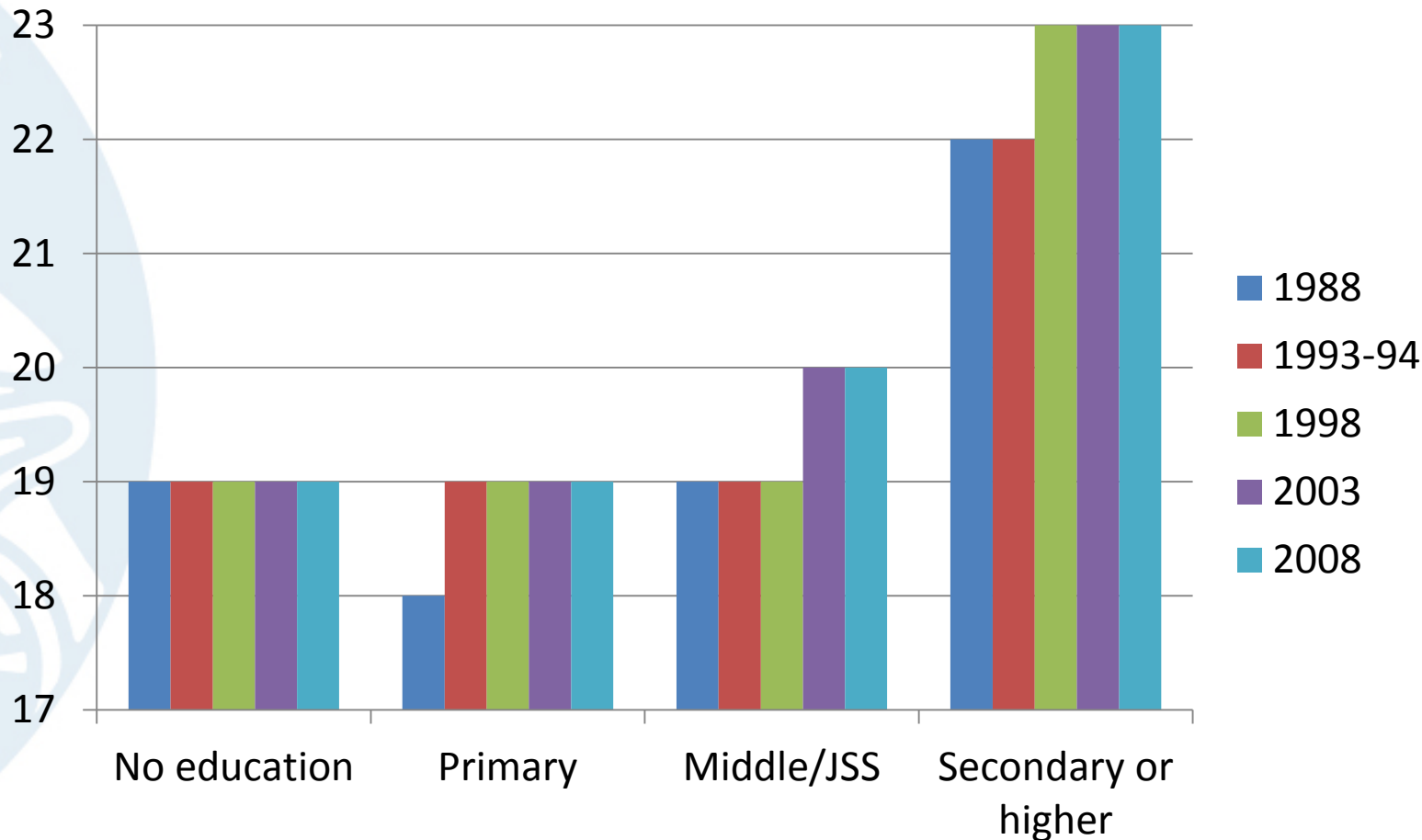
- TFR declined by 0.5-2.4 in the past 2 decades
- Age at first birth increased at different rate (0.8 in Ghana, 2.1 years in Senegal)
- Modern contraceptive use is low (<17%)
- Duration of insusceptability has declined
- Increase in non-co-residential couples in Senegal and Ghana
- Little or some increase in unmarried women

These do not appear to explain fertility decline in the 4 countries

Trend in TFR among women with secondary+ education



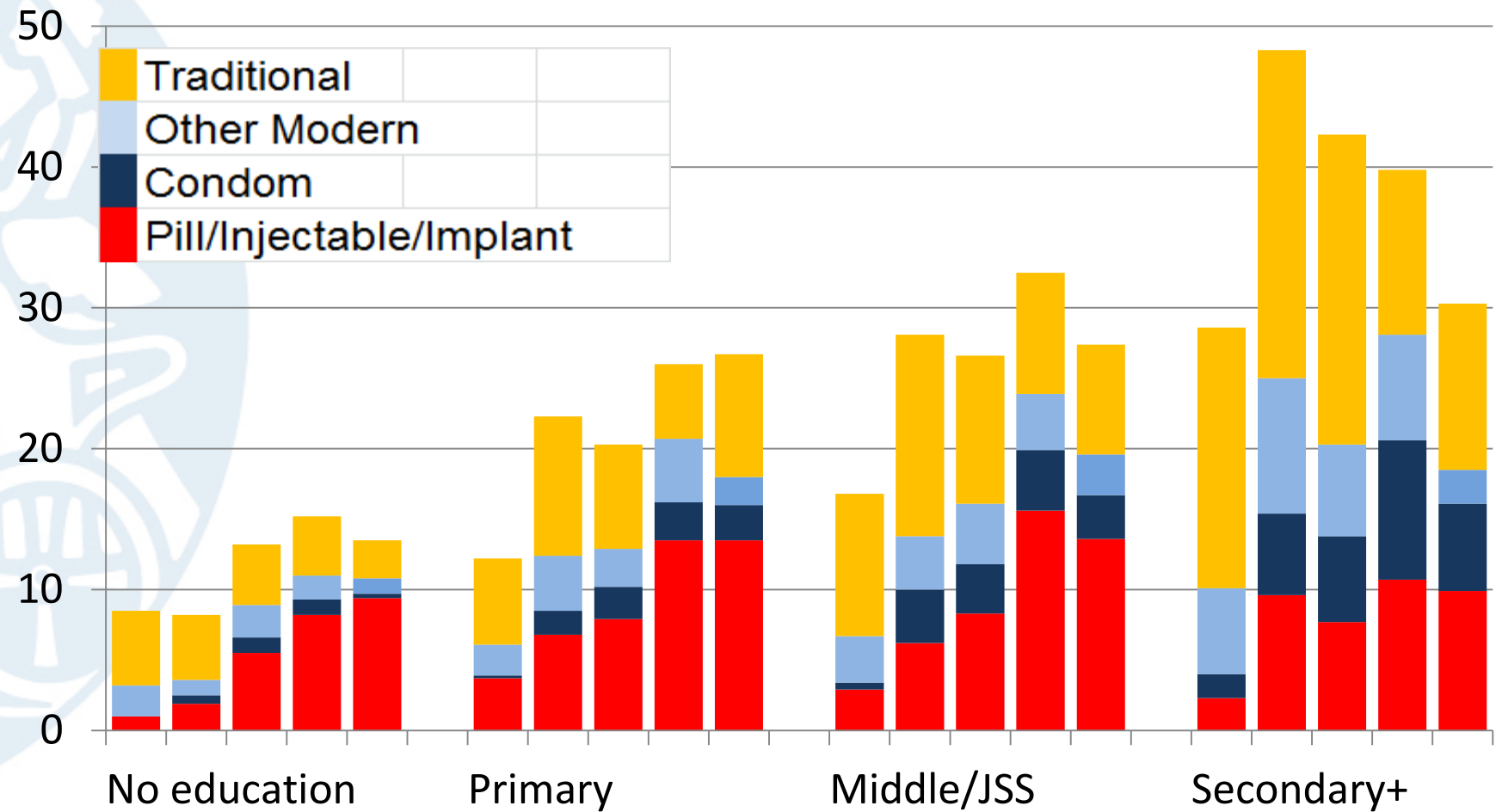
Median age at first birth by level of education (25-49)





Ghana: mixed method

% of married women currently using a contraceptive method, by level of education and method



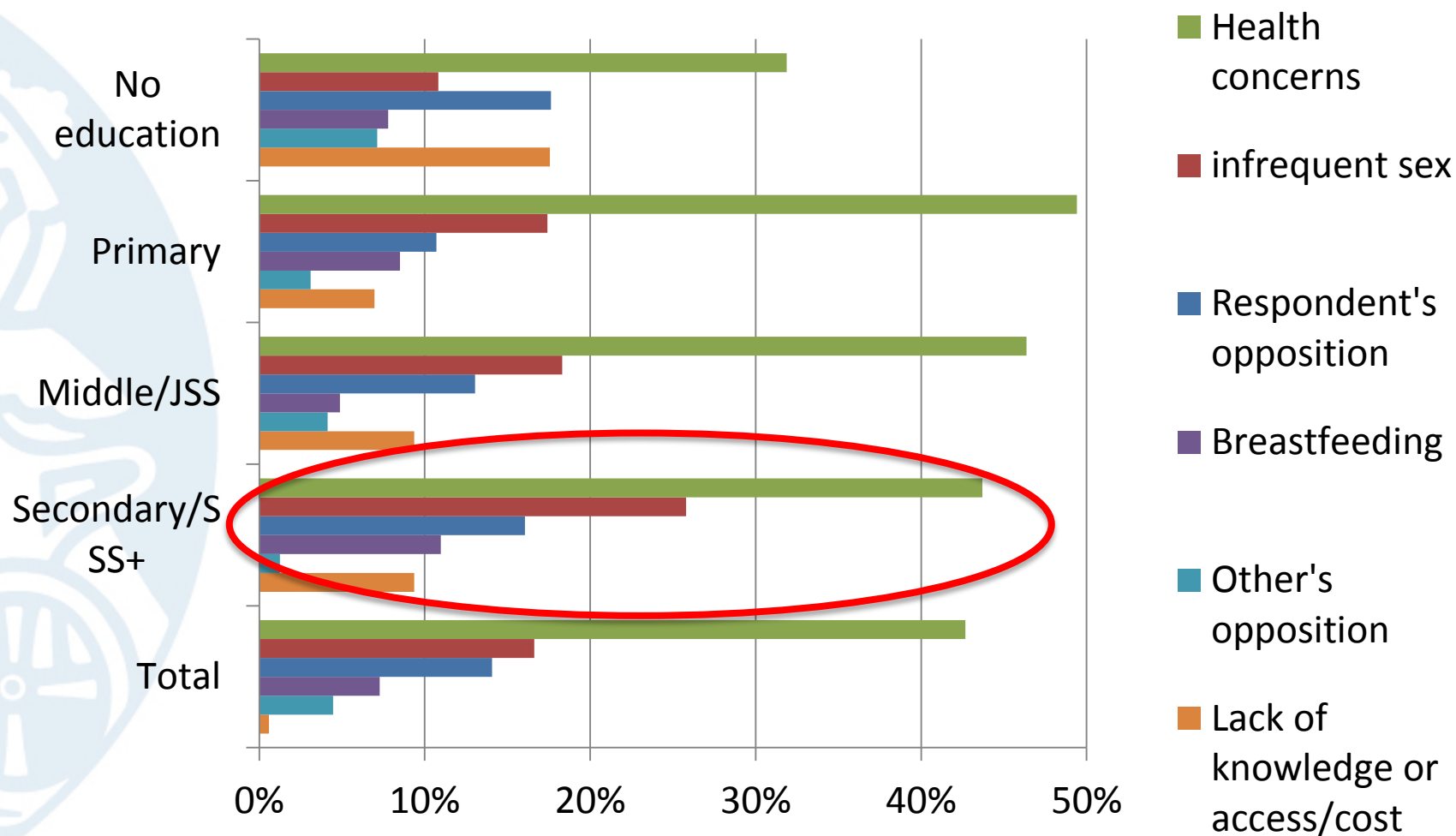
Ghana: Traditional methods



Adjusted odds ratios for currently using traditional or folkloric method vs non-users

	Adjusted OR	95% CI		
Residence (ref. urban)				
Rural	1.05	0.70	1.57	
Area (ref. Southern)				
Greater Accra	1.63	0.94	2.85	
Middle	1.31	0.82	2.07	
Northern	0.09	0.03	0.31	***
Education (ref. no education)				
Primary	2.22	1.16	4.25	*
Middle/JSS	1.80	0.97	3.35	
Secondary/SSS+	2.45	1.14	5.26	*
Religion (ref. Protestant)				
Catholic	0.95	0.50	1.77	
Other Christian	0.85	0.49	1.48	
Moslem	0.69	0.33	1.42	
Traditional/spiritualist	2.25	0.74	6.85	
Other	1.15	0.38	3.47	

Ghana: Reasons for non-use of FP



Source: Machiyama and Cleland (2013)

Ghana: Infrequent sex



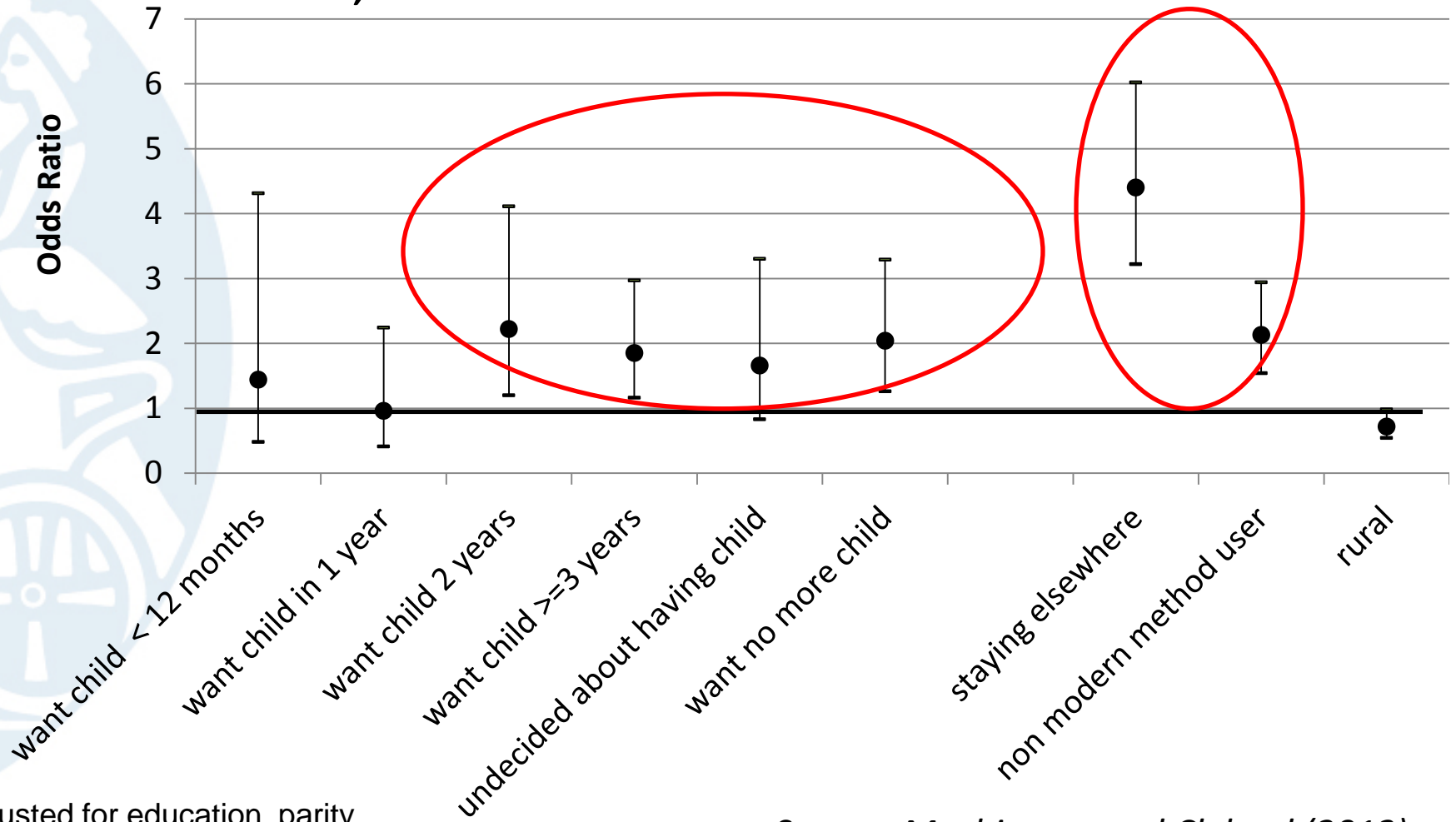
Recency of last sex by whether infrequent sex was given as a reason for non-use, 2008

Recency of last sex	Reason for non-use: Infrequent sex		Total
	No	Yes	
in last 4 weeks	71.3	32.6	64.8
in last 3 months	19.8	28.9	21.3
4 or more months ago	6.2	34.0	10.8
before last birth	0.0	1.6	0.3
Missing	2.7	2.9	2.8
Total	100.0	100.0	100.0



Ghana: Infrequent sex

Adjusted odds ratios for not having sex in the last 4 weeks versus having sex in the last 4 weeks, 2008



Adjusted for education, parity, postpartum status, age group, polygyny


Source: Machiyama and Cleland (2013)



Implications

- An enduring resistance to hormonal methods may lead many Ghanaian women to use non-hormonal methods, i.e. male condom, periodic abstinence or reduced coital frequency as an alternative means of reducing pregnancy-risk.
 - The elite group use less effective method, but the TFR has continuously declined.

 Is Ghanaian fertility transition powered by less effective methods with medical abortion as back-up? (Osei 2009)

 Use of periodic abstinence conforms to norms of modernity and self-discipline in Cameroon (Johnson-Hanks 2002)



Implications

- Further research is needed to understand fertility regulation strategies and strong resistance to FP in Ghana, taking into account living arrangement.
- Re-visit role of traditional methods.





Thank you!

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Trend in level of education

