# Fertility Transitions and Wealth in Comparative Perspective

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**PRELIMINARY DRAFT**

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**ABSTRACT**

The relationship between fertility and socioeconomic status is at the heart of a substantial body of research on population and development. Reductions in fertility improve economic status, and socioeconomic betterment tends to reduce fertility. The Demographic and Health Surveys, a rich source of micro-level data on fertility and socioeconomic status in developing countries, have thus far lacked a comparable measure of wealth across surveys. Using an experimental version of the DHS Comparative Wealth Index (CWI) I examine the relationship between wealth and fertility transitions in seven sub-Saharan African countries: Cameroon, Côte d'Ivoire, Ghana, Kenya, Malawi, Rwanda, and Zimbabwe. Each of these countries experienced a fertility decline from an early survey in the 1990s to the most recent survey in 2008 or later, as well as an increase in comparative asset-based wealth scores. CWI scores for respondents in an early (1990s) and a later (post-2007) DHS survey in each country were pooled and classified into terciles. In five of seven countries, fertility declines were largest among the top comparative wealth tercile; in Kenya fertility declined equally among the middle and upper tercile and in Rwanda fertility declined the most among the bottom tercile. Meanwhile, the proportion of women in the middle and upper tercile increased in nearly every country.

Using Poisson decomposition regression, I find that in six of seven countries, changing characteristics of the population (endowments), including socioeconomic status, were more strongly tied to reductions in fertility than were the effect of any given factor on fertility rates (coefficients). Côte d'Ivoire, which had an unusual pattern of change in wealth over time, was the only exception to this trend. Overall, the *effect* of wealth on fertility did not significantly change over time, but even after controlling for other factors, increases in asset-based wealth had a significant relationship with reductions in fertility in every country studied.

## INTRODUCTION

The relationship between socioeconomic status and fertility has been a main theme of demographic research for several decades. While educational attainment has served as a key indicator for socioeconomic status, an important branch of literature examines the relationship between income, wealth poverty, and fertility. Researchers have studied the improvements in economic status associated with fertility, as well as the influence of economic status on fertility (cf. Bongaarts and Watkins 1996, Bollen, Glanville, and Stecklov 2002, Becker 1981, Easterlin 1975). At the aggregate level, fertility transitions are significantly associated with increases in GDP (Shapiro and Gebreselassie 2008), but comparable data on wealth across countries has generally hampered micro-level analysis of the relationship between fertility and wealth over time.

This paper seeks to complement existing research by examining the relationship between changes in wealth and fertility over time in seven developing countries. I make use of the Comparative Wealth Index (CWI), which was recently developed by Rutstein and Staveteig (2014) to make the DHS Wealth Index comparable across countries and over time, to test how well absolute changes in economic status are associated with decreases in fertility within countries at the aggregate and individual level. Broadly speaking, fertility declines can be partitioned into (1) increases in economic well-being, (2) declines in fertility at any given level of economic status. The CWI enables comparisons of the relative influence of each factor.

## DATA AND METHODS

This paper uses data from nationally-representative Demographic and Health Surveys conducted in each country. Countries were selected with based on the availability of the CWI and time period of surveys. In order to qualify, a country needed to have had a DHS in the first five years that the CWI was available (1990 to 1994) and a later DHS from 2008 and beyond. In other words, at least 13 years have elapsed between the earlier and later surveys. Eight countries met these conditions: Burkina Faso, Cameroon, Côte d'Ivoire, Ghana, Kenya, Malawi, Rwanda, and Zimbabwe. However the CWI was not available for the most recent survey in Burkina Faso and so the study focuses on seven countries.

The CWI is based on the Demographic and Health Surveys (DHS) Wealth Index, which is computed by principal components analysis of key assets (including radio, television, car/truck, land, livestock), construction materials (floor, roof, walls), and sanitation (including type of toilet) (Rutstein and Johnson 2004). One key limitation of the original DHS Wealth Index is that it ranks households within a given country at a given point in time; there is no way to compare the relative well-being of families and individuals across surveys. A household in the highest wealth quintile in Ethiopia may be in the lowest wealth quintile in Albania. The method to derive CWI scores, which is described by Rutstein and Staveteig (2014) uses an anchoring approach developed to produce comparable cross-country estimates of self-reported health and mobility for the World Health Survey (Murray et al. 2003, Murray et al. 2000) that has subsequently been applied to produce measures of permanent income from assets across countries (Ferguson et al. 2003).

In order to compare wealth over time, the data from earlier and later surveys in each country were pooled and the weights were normalized so that any difference in sample sizes between rounds would not bias the results. CWI terciles were computed for the pooled data from each country in order to establish an 'absolute' wealth standard that was meaningful across rounds.[1] Fertility rates were computed for each survey's tercile.

## RESULTS

### Aggregate trends in fertility and wealth

As shown in Figure 1, fertility rates declined in all seven countries over the course of the time period studied by an average of 15% over the time period studied. Declines in fertility were largest in Rwanda and Ghana and smallest in Zimbabwe and Côte d'Ivoire.

[1] Rutstein and Staveteig (2014) use CWI quintiles from the baseline survey, Vietnam 2002, as the universal standard for survey comparison. In the seven focal countries, the bottom quintile did not sufficiently differentiate wealth groups—the majority of the household population in each survey fell into the bottom quintile—for this reason, relative terciles within each country are used instead. This approach allows more meaningful disaggregation of wealth groups within each country but has the disadvantage of requiring recomputation each time the surveys are changed.

**Figure 1. Total Fertility Rate by year, focal countries**

Figure 2 shows the distribution of the CWI for each survey. Average household standard of living improved in six of seven countries as employment opportunities increased, sanitation services expanded, and consumer durables became more widely available. In Côte d'Ivoire there was a slight decline in the average CWI between the earlier and later surveys.

The earlier survey in each country tended to have a more compressed distribution of the CWI than the later survey, particularly in Rwanda and Malawi. This trend partly reflects the dearth of asset questions asked prior to the development of the wealth index in 2001, which made it more difficult to differentiate household wealth in earlier surveys. However the comparative distributions also lend support to Kuznets' hypothesis that inequality and economic well-being follow an upside-down "U"-shaped curve, whereby inequality increases with initial improvements in economic status (1955). In Cameroon, Côte d'Ivoire, and Zimbabwe, the distribution of wealth in the later survey is bimodal, perhaps reflecting the emergence of a middle class.

**Figure 2. Comparative Wealth Index by year, focal countries**

## Intra-country changes in fertility and wealth

Intra-country patterns of change in fertility rates by wealth and in the proportional distribution of women in each tercile are shown for each of the seven countries in Figures 1 to 14. In five of the countries studied, the decline in fertility was largest among the highest CWI tercile, and in three countries—Cameroon, Côte d'Ivoire, Malawi—the pace of the fertility decline among the highest tercile was faster than the overall decline in fertility. In some countries such as Cameroon and Zimbabwe, the lower and middle terciles actually experienced an *increase* in fertility over the course of the time period studied. In Kenya the fertility decline occurred at the same rate among the middle and highest tercile. In Rwanda all three terciles experienced a decrease in fertility, but the decline was largest among the *lowest* CWI tercile.

**Tables 1-14. TFR by pooled CWI tercile, focal countries / Percent in pooled CWI tercile by year**

The second entry for each country in Tables 1 to 14 shows the point difference change in the proportion of women in each comparative tercile. In most countries the share of the population in the lowest comparative tercile declined and the share in the highest tercile increased. Fertility rates have an inverse relationship with wealth; as the population becomes wealthier fertility will decline even if the rates among any given wealth group remain stagnant, so the shift upwards in economic status also has an important effect on overall declines in fertility.

It is important to acknowledge the likelihood of some degree of reverse causation between fertility and wealth: as couples have fewer children they are likely to become wealthier. In DHS surveys, wealth is measured at the time of the survey but fertility is measured retrospectively. In the absence of longitudinal data it is nearly impossible to gauge the level of reverse causation. However there is a large body of literature on the relationship between fertility and economic status, much of which suggests that increases in income (in this case wealth, which can be considered a proxy for permanent income) tend to drive reductions in fertility more than vice versa. Additionally, many of the assets captured by the wealth index are semi-permanent characteristics of the dwelling, such as roof, flooring, and sanitation, assets and services that are difficult to interchange with one fewer child.

**Poisson decomposition of children born in the past 5 years**

Prior to the development of the CWI, researchers were largely limited to aggregate comparisons of economic status at the population level using GDP per capita or indices such as unsatisfied basic needs.[2] The CWI enables comparisons of absolute wealth among individuals and households in different surveys. To investigate the effect of wealth on changes in fertility net of other important factors, such as increases in education and urbanization, a multivariate Poisson decomposition regression model was run on pooled data from each country, using a count of the number of children born in the past five years as the dependent variable.

[2] It has always been possible to find common asset measures across surveys and pool them to compute a standardized wealth index, however a unique feature of the CWI is its use of anchoring points to allow it to make use of the entire distribution of assets within each survey (see Rutstein and Staveteig 2014 for additional details).

Decomposition regression enables a comparison of the extent to which differences between groups (in this case, respondents in earlier and later surveys) are due to differences in endowments, or composition of the population, versus differences in coefficients, or the extent to which any factor affects the outcome differently between the two groups. The implementation of this method in Stata used in this paper was developed by Powers et al. (2011). The independent variables used in each model were CWI terciles, marital status, education, urban/rural residence, age group, and parity at the start of the 5-year period.

The results of the Poisson decomposition models for each of the seven countries are shown in Tables 15 to 21. In each table, the top rows indicate the overall difference due to endowments, coefficients, and residuals. The more recent survey year was used as the higher level, meaning that percentages reflect the degree to which the factor contributed to a *decline* in fertility over the course of the period. The lower two panels display standard coefficients and z-scores are shown for the independent variables, as well as the proportion contribution to the difference between groups. Negative percentages indicate that the factor actually contributed to an *increase* in fertility net of other factors.

**Table 15-21. Poisson decomposition of births in the past 5 years, focal countries**

In every country except Côte d'Ivoire, regression models find that the majority of the decline in fertility was due to changes in the *characteristics* of the population rather than changes in the way these characteristics were related to fertility. The proportion of women that were married declined, education increased, and the population became wealthier, and all of these changes are associated with reduced fertility. In Cameroon and Rwanda the model finds that the difference between the two rounds was almost entirely (95 and 99%) due to changes in these characteristics, and in Ghana the model finds that changes in these characteristics were actually responsible for more than 100% of the difference, counterbalanced by changes in the effects of characteristics on fertility. Although none of the coefficients in Ghana were individually significant, the overall effect of characteristics served to increase fertility but was balanced by changes in characteristics, such as increased secondary education and increased wealth, that are associated with lower fertility. In Côte d'Ivoire, almost all of the compositional changes had a significant effect on fertility, but none were as important as the *effects* of these changing characteristics on fertility. In particular education, parity, and wealth were more strongly associated with lower fertility in the later survey. This finding partly reflects the way in which

wealth changed over time in Côte d'Ivoire (as was shown in Table 4), where the proportion of women in the middle tercile increased while the proportion of women at both the bottom and the top tercile declined.

The findings indicate the importance of marital status and education on fertility in most countries. In Cameroon and Ghana the decline in the proportion of women married at the time of the survey had a larger effect on fertility than did increases in wealth after controlling for other factors. Increases in education, particularly the increase in the proportion of women with a secondary education, also contributed to declines in fertility after controlling for other factors.

In every country studied, compositional improvements in wealth over time were significantly associated with reductions in fertility even after controlling for age, education, residence, and parity. Yet in no country were changes in the *effect* of wealth on fertility statistically significant after controlling for other factors.

## PRELIMINARY CONCLUSIONS

In the seven countries studied the aggregate relationship between comparative wealth and fertility suggests improvements in absolute economic well-being (particularly movement into the top tercile), coupled with reductions in fertility among women in the highest tercile have substantially contributed to the fertility transition. Fertility declined among the highest pooled wealth tercile in every country. In some countries fertility rates declined in lower and middle terciles as well, but only Rwanda and Kenya were exceptions to the primacy of fertility decline among women in the top wealth tercile.

Using Poisson decomposition regression to examine the effect of changing characteristics of the population (endowments) separate from the effects of these characteristics on fertility (coefficients), I find that in six of seven countries changes in the endowments of the population—marital status, education, age, urban residence, parity, and CWI—contribute to the majority of the fertility decline over the period. In no country was the *effect* of economic status (wealth tercile) on fertility itself significantly different in the later survey after controlling for other factors. Instead, increases in the proportion of women in the upper two wealth terciles had a statistically significant and relatively important effect on the reduction in fertility after controlling for other factors. Côte d'Ivoire, which had an unusual pattern of change in wealth

over time, was the only exception to this trend: changes in the *effect* of covariates on fertility were more important contributors to the fertility decline than were changes in the composition of women in any group. Overall, the results suggest that—independent of age structure, increased education, and delayed marriage—improvements in economic well-being have played a significant role in several recent fertility transitions in sub-Saharan Africa.

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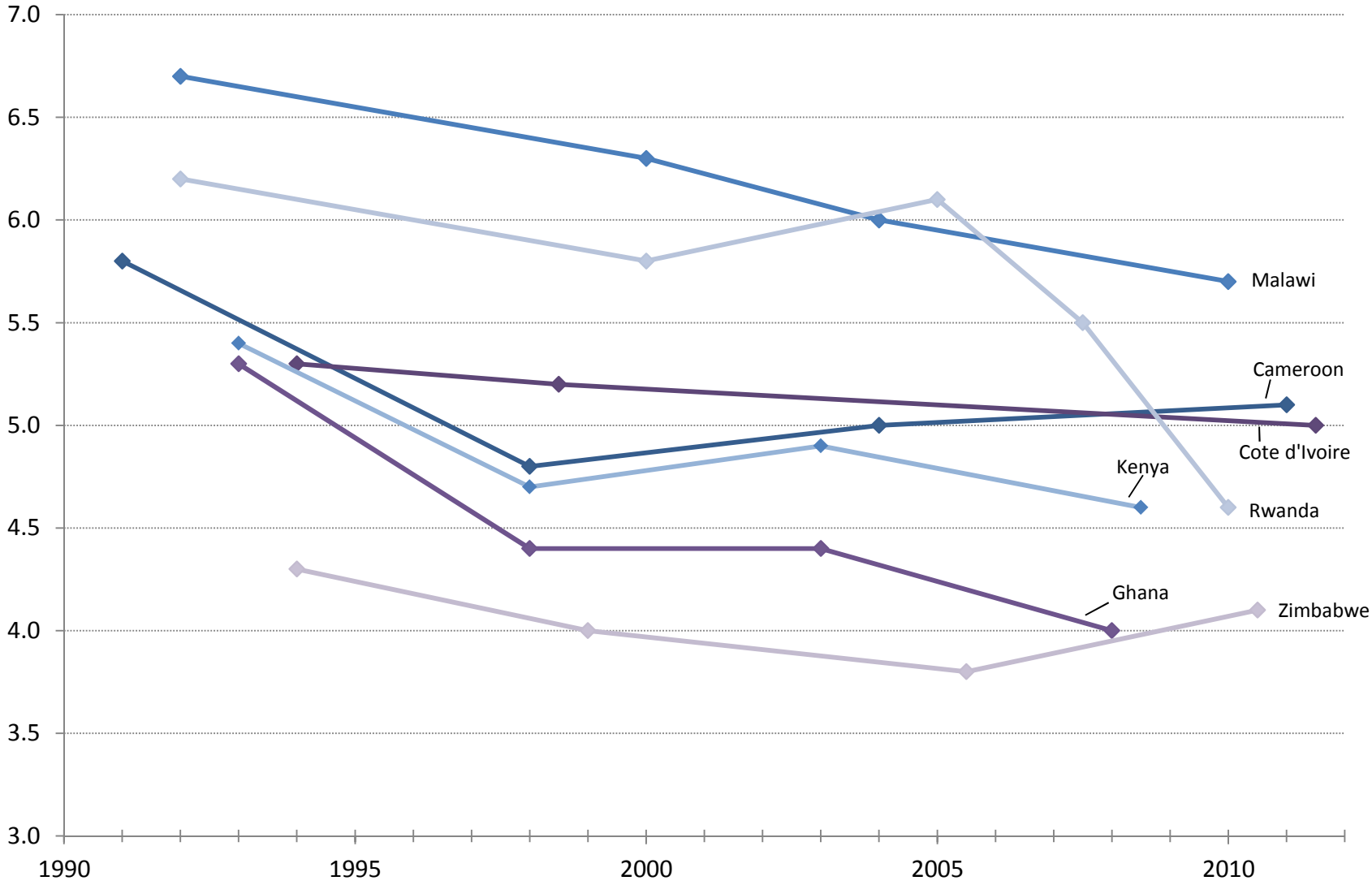
## Figure 1. Total Fertility Rate by year, focal countries



# Figure 2: Comparative Wealth Index by year, focal countries

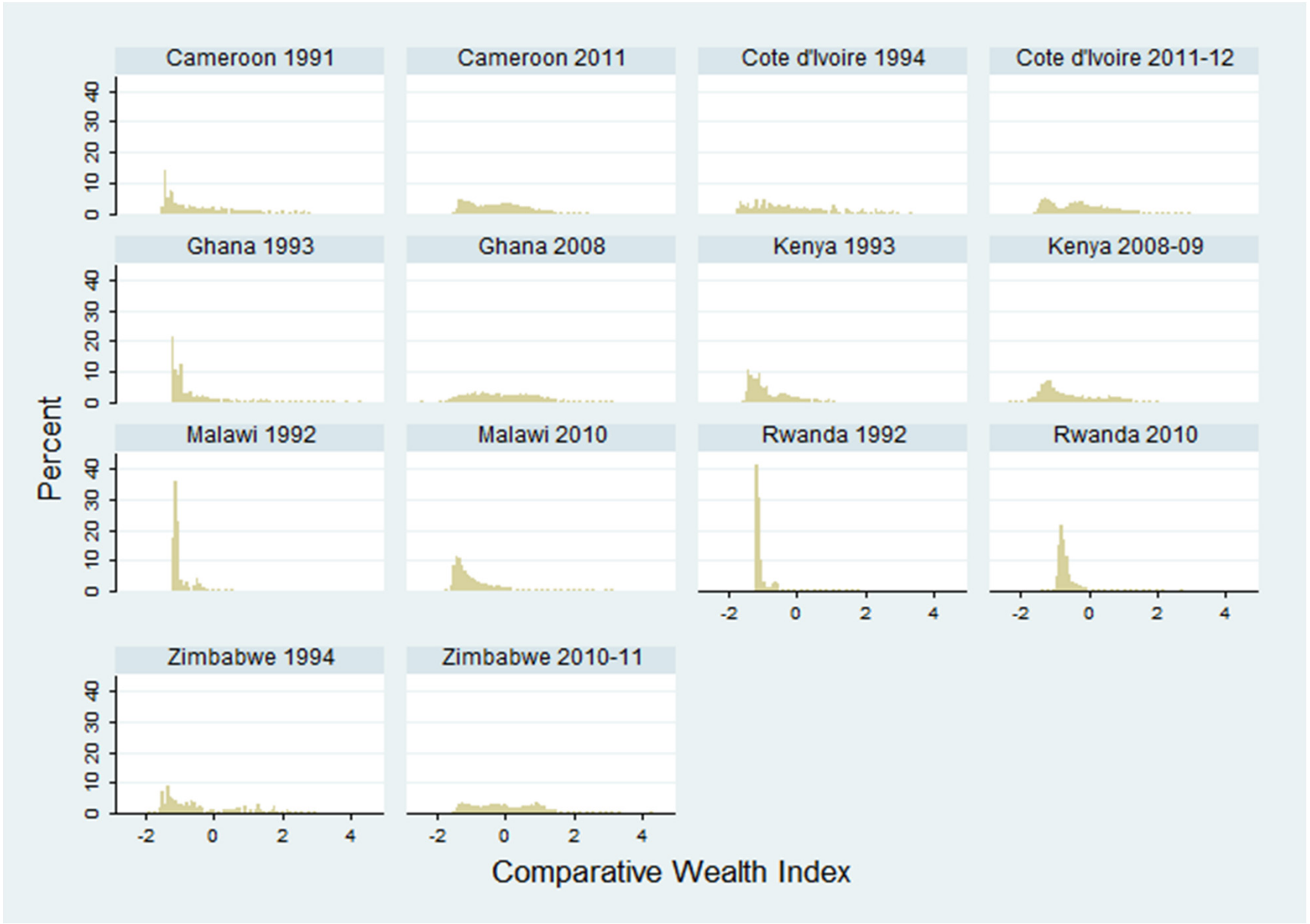


**Table 1. TFR by pooled CWI tercile, Cameroon 1991 and 2011**

| | 1991 | 2011 | Change |
|---|---|---|---|
| Lowest | 6.6 | 6.9 | *+5%* |
| Middle | 5.5 | 5.6 | *+2%* |
| Highest | 5.0 | 3.4 | *-31%* |
| **Total** | **5.8** | **5.1** | ***-13%*** |

**Table 2. Percent in pooled CWI tercile by year, Cameroon**

| | 1991 | 2011 | Point Difference |
|---|---|---|---|
| Lowest | 42.8 | 23.8 | *-19.0* |
| Middle | 27.9 | 38.8 | *10.9* |
| Highest | 29.2 | 37.4 | *8.2* |
| Total | 100.0 | 100.0 | |
| N | *3,866* | *15,426* | |

**Table 3. TFR by pooled CWI tercile, Cote d'Ivoire 1994 and 2011-12**

| | 1994 | 2011-12 | Change |
|---|---|---|---|
| Lowest | 6.3 | 6.4 | *+2%* |
| Middle | 5.5 | 5.1 | *-7%* |
| Highest | 4.1 | 3.2 | *-22%* |
| **Total** | **5.3** | **5.0** | ***-7%*** |

**Table 4. Percent in pooled CWI tercile by year, Cote d'Ivoire**

| | 1994 | 2011-12 | Point Difference |
|---|---|---|---|
| Lowest | 34.9 | 31.7 | *-3.2* |
| Middle | 29.2 | 37.4 | *8.2* |
| Highest | 35.8 | 30.8 | *-5.0* |
| Total | 100.0 | 100.0 | |
| N | *8,099* | *10,060* | |

**Table 5. TFR by pooled CWI tercile, Ghana 1993 and 2008**

| | 1993 | 2008 | Change |
|---|---|---|---|
| Lowest | 6.1 | 6.3 | *+4%* |
| Middle | 4.8 | 4.3 | *-11%* |
| Highest | 3.5 | 2.8 | *-18%* |
| **Total** | **5.2** | **4.0** | ***-22%*** |

**Table 6. Percent in pooled CWI tercile by year, Ghana**

| | 1993 | 2008 | Point Difference |
|---|---|---|---|
| Lowest | 47.5 | 19.2 | *-28.3* |
| Middle | 31.0 | 35.6 | *4.6* |
| Highest | 21.5 | 45.2 | *23.7* |
| Total | 100.0 | 100.0 | |
| N | *4,562* | *4,916* | |

**Table 7. TFR by pooled CWI tercile, Kenya 1993 and 2008-09**

| | 1993 | 2008-09 | Change |
|---|---|---|---|
| Lowest | 6.7 | 6.4 | *-4%* |
| Middle | 5.4 | 4.8 | *-12%* |
| Highest | 3.6 | 3.1 | *-12%* |
| **Total** | **5.4** | **4.6** | ***-16%*** |

**Table 8. Percent in pooled CWI tercile by year, Kenya**

| | 1993 | 2008-09 | Point Difference |
|---|---|---|---|
| Lowest | 37.1 | 29.7 | *-7.4* |
| Middle | 35.5 | 31.1 | *-4.4* |
| Highest | 27.4 | 39.2 | *11.8* |
| Total | 100.0 | 100.0 | |
| N | *7,540* | *8,444* | |

**Table 9. TFR by pooled CWI tercile, Malawi 1992 and 2010**

| | 1992 | 2010 | Change |
|---|---|---|---|
| Lowest | 7.1 | 6.8 | *-5%* |
| Middle | 6.9 | 6.0 | *-12%* |
| Highest | 6.0 | 4.4 | *-26%* |
| **Total** | **6.7** | **5.7** | ***-15%*** |

**Table 10. Percent in pooled CWI tercile by year, Malawi**

| | 1992 | 2010 | Point Difference |
|---|---|---|---|
| Lowest | 18.7 | 48.1 | *29.4* |
| Middle | 57.5 | 9.1 | *-48.4* |
| Highest | 23.8 | 42.8 | *19.0* |
| Total | 100.0 | 100.0 | |
| N | *4,849* | *23,020* | |

**Table 11. TFR by pooled CWI tercile, Rwanda 1992 and 2010**

| | 1992 | 2010 | Change |
|---|---|---|---|
| Lowest | 6.7 | 4.9 | *-26%* |
| Middle | 5.5 | 5.2 | *-5%* |
| Highest | 4.9 | 4.1 | *-17%* |
| **Total** | **6.2** | **4.6** | ***-27%*** |

**Table 12. Percent in pooled CWI tercile by year, Rwanda**

| | 1992 | 2010 | Point Difference |
|---|---|---|---|
| Lowest | 66.1 | 0.6 | *-65.5* |
| Middle | 22.7 | 43.9 | *21.2* |
| Highest | 11.2 | 55.5 | *44.3* |
| Total | 100.0 | 100.0 | |
| N | *6,551* | *13,671* | |

**Table 13. TFR by pooled CWI tercile, Zimbabwe 1994 and 2010-11**

| | 1994 | 2010-11 | Change |
|---|---|---|---|
| Lowest | 5.3 | 5.4 | *+1%* |
| Middle | 3.8 | 4.5 | *+20%* |
| Highest | 3.1 | 2.9 | *-8%* |
| **Total** | **4.3** | **4.1** | ***-4%*** |

**Table 14. Percent in pooled CWI tercile by year, Zimbabwe**

| | 1994 | 2010-11 | Point Difference |
|---|---|---|---|
| Lowest | 43.5 | 23.4 | *-20.1* |
| Middle | 27.6 | 39.0 | *11.4* |
| Highest | 28.9 | 37.7 | *8.8* |
| Total | 100.0 | 100.0 | |
| N | *6,128* | *9,171* | |

**Table 15. Poisson decomposition of births in the past 5 years, Cameroon 2001 versus 1992**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.1377 | 0.00 | -33.15 | 0.00 | -0.15 | -0.13 | **98.9** |
| C | -0.0015 | 0.02 | -0.09 | 0.93 | -0.03 | 0.03 | **1.1** |
| R | -0.1392 | 0.02 | -9.16 | 0.00 | -0.17 | -0.11 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0710 | 0.00 | -33.33 | 0.00 | -0.08 | -0.07 | **51.0** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0007 | 0.00 | 18.70 | 0.00 | 0.00 | 0.00 | **-0.5** |
| 25-29 | 0.0078 | 0.00 | 18.67 | 0.00 | 0.01 | -0.01 | **-5.6** |
| 30-34 | -0.0084 | 0.00 | -14.26 | 0.00 | -0.01 | -0.01 | **6.1** |
| 35-39 | 0.0002 | 0.00 | 5.49 | 0.00 | 0.00 | 0.00 | **-0.1** |
| 40-44 | 0.0005 | 0.00 | 2.44 | 0.02 | 0.00 | 0.00 | **-0.4** |
| 45-49 | -0.0101 | 0.00 | -12.67 | 0.00 | -0.01 | -0.01 | **7.2** |
| **edu:** none (ref) | | | | | | | |
| primary | 0.0000 | 0.00 | -0.52 | 0.60 | 0.00 | 0.00 | **0.0** |
| secondary | -0.0151 | 0.00 | -5.90 | 0.00 | -0.02 | -0.01 | **10.8** |
| higher | -0.0100 | 0.00 | -5.61 | 0.00 | -0.01 | -0.01 | **7.2** |
| **urban** | -0.0061 | 0.00 | -3.68 | 0.00 | -0.01 | 0.00 | **4.4** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0005 | 0.00 | -5.72 | 0.00 | 0.00 | 0.00 | **0.4** |
| 2 | -0.0002 | 0.00 | -3.67 | 0.00 | 0.00 | 0.00 | **0.1** |
| 3 | 0.0002 | 0.00 | 3.85 | 0.00 | 0.00 | 0.00 | **-0.1** |
| 4 | -0.0009 | 0.00 | -4.80 | 0.00 | 0.00 | 0.00 | **0.7** |
| 5+ | -0.0067 | 0.00 | -7.27 | 0.00 | -0.01 | 0.00 | **4.8** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0036 | 0.00 | -2.35 | 0.02 | -0.01 | 0.00 | **2.6** |
| Highest | -0.0144 | 0.00 | -8.43 | 0.00 | -0.02 | -0.01 | **10.4** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | 0.0050 | 0.05 | 0.10 | 0.92 | -0.10 | 0.11 | **-3.6** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | -0.0002 | 0.00 | -0.10 | 0.92 | 0.00 | 0.00 | **0.1** |
| 25-29 | 0.0007 | 0.01 | 0.10 | 0.92 | -0.01 | -0.01 | **-0.5** |
| 30-34 | 0.0009 | 0.01 | 0.10 | 0.92 | -0.02 | -0.02 | **-0.7** |
| 35-39 | 0.0006 | 0.01 | 0.10 | 0.92 | -0.01 | -0.01 | **-0.4** |
| 40-44 | 0.0006 | 0.01 | 0.10 | 0.92 | -0.01 | -0.01 | **-0.4** |
| 45-49 | 0.0000 | 0.00 | -0.06 | 0.95 | 0.00 | 0.00 | **0.0** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0007 | 0.01 | -0.10 | 0.92 | -0.01 | 0.01 | **0.5** |
| secondary | -0.0005 | 0.01 | -0.10 | 0.92 | -0.01 | 0.01 | **0.4** |
| higher | 0.0000 | 0.00 | 0.09 | 0.93 | 0.00 | 0.00 | **0.0** |
| **urban** | -0.0003 | 0.00 | -0.10 | 0.92 | -0.01 | 0.01 | **0.2** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0001 | 0.00 | -0.10 | 0.92 | 0.00 | 0.00 | **0.1** |
| 2 | -0.0005 | 0.01 | -0.10 | 0.92 | -0.01 | 0.01 | **0.4** |
| 3 | -0.0004 | 0.00 | -0.10 | 0.92 | -0.01 | 0.01 | **0.3** |
| 4 | -0.0006 | 0.01 | -0.10 | 0.92 | -0.01 | 0.01 | **0.4** |
| 5+ | -0.0019 | 0.02 | -0.10 | 0.92 | -0.04 | 0.04 | **1.4** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0001 | 0.00 | -0.10 | 0.92 | 0.00 | 0.00 | **0.1** |
| Highest | -0.0014 | 0.01 | -0.10 | 0.92 | -0.03 | 0.03 | **1.0** |
| **Constant** | -0.0027 | 0.03 | -0.09 | 0.93 | -0.06 | 0.05 | **1.9** |

**Table 16. Poisson decomposition of births in the past 5 years, Cote d'Ivoire 2011-12 versus 1994**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.0334 | 0.00 | -8.10 | 0.00 | -0.04 | -0.03 | **33.9** |
| C | -0.0652 | 0.01 | -5.04 | 0.00 | -0.09 | -0.04 | **66.1** |
| R | -0.0985 | 0.01 | -8.10 | 0.00 | -0.12 | -0.07 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0121 | 0.00 | -12.99 | 0.00 | -0.01 | -0.01 | **12.3** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0000 | 0.00 | 9.62 | 0.00 | 0.00 | 0.00 | |
| 25-29 | 0.0054 | 0.00 | 9.55 | 0.00 | 0.00 | -0.01 | **-5.5** |
| 30-34 | 0.0011 | 0.00 | 7.88 | 0.00 | 0.00 | 0.00 | **-1.1** |
| 35-39 | 0.0026 | 0.00 | 4.35 | 0.00 | 0.00 | 0.00 | **-2.6** |
| 40-44 | -0.0004 | 0.00 | -0.92 | 0.36 | 0.00 | 0.00 | **0.4** |
| 45-49 | -0.0035 | 0.00 | -7.67 | 0.00 | 0.00 | 0.00 | **3.5** |
| **edu:** none (ref) | | | | | | | |
| primary | 0.0000 | 0.00 | 0.38 | -0.70 | 0.00 | 0.00 | |
| secondary | -0.0107 | 0.00 | -7.92 | 0.00 | -0.01 | -0.01 | **10.8** |
| higher | -0.0085 | 0.00 | -5.75 | 0.00 | -0.01 | -0.01 | **8.6** |
| **urban** | -0.0074 | 0.00 | -3.92 | 0.00 | -0.01 | 0.00 | **7.5** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | 0.0011 | 0.00 | 3.06 | 0.00 | 0.00 | 0.00 | **-1.1** |
| 2 | 0.0003 | 0.00 | 2.92 | 0.00 | 0.00 | 0.00 | **-0.3** |
| 3 | -0.0003 | 0.00 | -3.06 | 0.00 | 0.00 | 0.00 | **0.3** |
| 4 | -0.0005 | 0.00 | -2.90 | 0.00 | 0.00 | 0.00 | **0.5** |
| 5+ | -0.0050 | 0.00 | -3.70 | 0.00 | -0.01 | 0.00 | **5.0** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0039 | 0.00 | -2.59 | 0.01 | -0.01 | 0.00 | **3.9** |
| Highest | 0.0083 | 0.00 | 5.53 | 0.00 | 0.01 | -0.01 | **-8.4** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | 0.0550 | 0.02 | 2.93 | 0.00 | 0.02 | -0.09 | **-55.8** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0003 | 0.01 | 0.04 | 0.97 | -0.02 | -0.02 | **-0.3** |
| 25-29 | 0.0087 | 0.01 | 1.10 | 0.27 | -0.01 | -0.02 | **-8.8** |
| 30-34 | 0.0091 | 0.01 | 1.30 | 0.19 | 0.00 | -0.02 | **-9.2** |
| 35-39 | 0.0038 | 0.01 | 0.72 | 0.47 | -0.01 | -0.01 | **-3.9** |
| 40-44 | 0.0046 | 0.00 | 0.97 | 0.33 | 0.00 | -0.01 | **-4.6** |
| 45-49 | 0.0059 | 0.01 | 0.99 | 0.32 | -0.01 | -0.02 | **-6.0** |
| **edu:** none (ref) | | | | | | | |
| primary | 0.0000 | 0.01 | 0.01 | 1.00 | -0.01 | 0.01 | |
| secondary | -0.0095 | 0.00 | -1.96 | 0.05 | -0.02 | 0.00 | **9.6** |
| higher | -0.0007 | 0.00 | -0.89 | 0.37 | 0.00 | 0.00 | **0.7** |
| **urban** | -0.0046 | 0.01 | -0.45 | 0.65 | -0.02 | 0.02 | **4.7** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0043 | 0.00 | -1.16 | 0.25 | -0.01 | 0.00 | **4.3** |
| 2 | -0.0044 | 0.00 | -1.36 | 0.17 | -0.01 | 0.00 | **4.5** |
| 3 | -0.0079 | 0.00 | -2.48 | 0.01 | -0.01 | 0.00 | **8.0** |
| 4 | -0.0074 | 0.00 | -2.46 | 0.01 | -0.01 | 0.00 | **7.5** |
| 5+ | -0.0301 | 0.01 | -3.45 | 0.00 | -0.05 | -0.01 | **30.6** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0057 | 0.01 | -0.93 | 0.35 | -0.02 | 0.01 | **5.8** |
| Highest | -0.0209 | 0.01 | -1.84 | 0.07 | -0.04 | 0.00 | **21.2** |
| **Constant** | -0.0570 | 0.04 | -1.50 | 0.13 | -0.13 | 0.02 | **57.9** |

**Table 17. Poisson decomposition of births in the past 5 years, Ghana 2008 versus 1993**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.2636 | 0.01 | -19.05 | 0.00 | -0.29 | -0.24 | **112.2** |
| C | 0.0285 | 0.02 | 1.37 | 0.17 | -0.01 | -0.07 | **-12.1** |
| R | -0.2350 | 0.01 | -16.71 | 0.00 | -0.26 | -0.21 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0947 | 0.00 | -18.97 | 0.00 | -0.10 | -0.08 | **40.3** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | -0.0019 | 0.00 | -8.96 | 0.00 | 0.00 | 0.00 | **0.8** |
| 25-29 | -0.0108 | 0.00 | -9.76 | 0.00 | -0.01 | -0.01 | **4.6** |
| 30-34 | -0.0189 | 0.00 | -8.00 | 0.00 | -0.02 | -0.01 | **8.0** |
| 35-39 | 0.0012 | 0.00 | 6.38 | 0.00 | 0.00 | 0.00 | **-0.5** |
| 40-44 | 0.0005 | 0.00 | 2.44 | 0.01 | 0.00 | 0.00 | **-0.2** |
| 45-49 | -0.0030 | 0.00 | -2.22 | 0.03 | -0.01 | 0.00 | **1.3** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0007 | 0.01 | -0.08 | 0.93 | -0.02 | 0.02 | **0.3** |
| secondary | -0.0595 | 0.01 | -4.89 | 0.00 | -0.08 | -0.04 | **25.3** |
| higher | -0.0059 | 0.00 | -3.07 | 0.00 | -0.01 | 0.00 | **2.5** |
| **urban** | 0.0039 | 0.00 | 1.35 | 0.18 | 0.00 | -0.01 | **-1.6** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0001 | 0.00 | -0.61 | 0.54 | 0.00 | 0.00 | **0.0** |
| 2 | 0.0001 | 0.00 | 0.27 | 0.79 | 0.00 | 0.00 | |
| 3 | 0.0002 | 0.00 | 0.49 | 0.63 | 0.00 | 0.00 | **-0.1** |
| 4 | 0.0000 | 0.00 | -0.27 | 0.79 | 0.00 | 0.00 | **0.0** |
| 5+ | -0.0014 | 0.00 | -0.70 | 0.48 | -0.01 | 0.00 | **0.6** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0051 | 0.00 | -4.42 | 0.00 | -0.01 | 0.00 | **2.2** |
| Highest | -0.0674 | 0.01 | -7.91 | 0.00 | -0.08 | -0.05 | **28.7** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.1310 | 0.16 | -0.82 | 0.41 | -0.44 | 0.18 | **55.7** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | -0.0056 | 0.01 | -0.41 | 0.68 | -0.03 | 0.02 | **2.4** |
| 25-29 | -0.0083 | 0.02 | -0.53 | 0.60 | -0.04 | 0.02 | **3.5** |
| 30-34 | -0.0009 | 0.01 | -0.08 | 0.94 | -0.02 | 0.02 | **0.4** |
| 35-39 | -0.0049 | 0.01 | -0.43 | 0.67 | -0.03 | 0.02 | **2.1** |
| 40-44 | 0.0051 | 0.01 | 0.48 | 0.63 | -0.02 | -0.03 | **-2.2** |
| 45-49 | 0.0038 | 0.01 | 0.43 | 0.67 | -0.01 | -0.02 | **-1.6** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0163 | 0.03 | -0.60 | 0.55 | -0.07 | 0.04 | **6.9** |
| secondary | -0.0056 | 0.01 | -0.74 | 0.46 | -0.02 | 0.01 | **2.4** |
| higher | 0.0005 | 0.00 | 0.28 | 0.78 | 0.00 | 0.00 | **-0.2** |
| **urban** | -0.0287 | 0.04 | -0.74 | 0.46 | -0.11 | 0.05 | **12.2** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | 0.0007 | 0.00 | 0.16 | 0.87 | -0.01 | -0.01 | **-0.3** |
| 2 | 0.0056 | 0.01 | 0.67 | 0.50 | -0.01 | -0.02 | **-2.4** |
| 3 | 0.0033 | 0.01 | 0.54 | 0.59 | -0.01 | -0.02 | **-1.4** |
| 4 | 0.0003 | 0.00 | 0.08 | 0.94 | -0.01 | -0.01 | **-0.1** |
| 5+ | 0.0091 | 0.01 | 0.63 | 0.53 | -0.02 | -0.04 | **-3.9** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | 0.0085 | 0.01 | 0.61 | 0.54 | -0.02 | -0.04 | **-3.6** |
| Highest | 0.0189 | 0.03 | 0.73 | 0.47 | -0.03 | -0.07 | **-8.1** |
| **Constant** | 0.1740 | 0.20 | 0.88 | 0.38 | -0.21 | -0.56 | **-74.0** |

**Table 18. Poisson decomposition of births in the past 5 years, Kenya 2008-09 versus 1993**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.0929 | 0.01 | -18.43 | 0.00 | -0.10 | -0.08 | **77.8** |
| C | -0.0266 | 0.02 | -1.77 | 0.08 | -0.06 | 0.00 | **22.2** |
| R | -0.1195 | 0.01 | -8.64 | 0.00 | -0.15 | -0.09 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0182 | 0.00 | -16.09 | 0.00 | -0.02 | -0.02 | **15.2** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | -0.0118 | 0.00 | -12.54 | 0.00 | -0.01 | -0.01 | **9.9** |
| 25-29 | 0.0090 | 0.00 | 12.40 | 0.00 | 0.01 | -0.01 | **-7.5** |
| 30-34 | -0.0009 | 0.00 | -10.65 | 0.00 | 0.00 | 0.00 | **0.8** |
| 35-39 | 0.0012 | 0.00 | 7.29 | 0.00 | 0.00 | 0.00 | **-1.0** |
| 40-44 | 0.0009 | 0.00 | 1.87 | -0.06 | 0.00 | 0.00 | **-0.8** |
| 45-49 | -0.0086 | 0.00 | -4.03 | 0.00 | -0.01 | 0.00 | **7.2** |
| **edu:** none (ref) | | | | | | | |
| primary | 0.0007 | 0.00 | 3.58 | 0.00 | 0.00 | 0.00 | **-0.6** |
| secondary | -0.0074 | 0.00 | -7.12 | 0.00 | -0.01 | -0.01 | **6.2** |
| higher | -0.0230 | 0.00 | -6.00 | 0.00 | -0.03 | -0.02 | **19.2** |
| **urban** | -0.0091 | 0.00 | -3.59 | 0.00 | -0.01 | 0.00 | **7.6** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | 0.0008 | 0.00 | 0.95 | 0.34 | 0.00 | 0.00 | **-0.6** |
| 2 | -0.0016 | 0.00 | -1.95 | 0.05 | 0.00 | 0.00 | **1.3** |
| 3 | -0.0012 | 0.00 | -2.18 | 0.03 | 0.00 | 0.00 | **1.0** |
| 4 | -0.0003 | 0.00 | -0.84 | 0.40 | 0.00 | 0.00 | **0.3** |
| 5+ | -0.0039 | 0.00 | -1.32 | 0.19 | -0.01 | 0.00 | **3.3** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | 0.0058 | 0.00 | 5.63 | 0.00 | 0.00 | -0.01 | **-4.9** |
| Highest | -0.0253 | 0.00 | -6.53 | 0.00 | -0.03 | -0.02 | **21.1** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | 0.0215 | 0.01 | 1.46 | 0.14 | -0.01 | 0.05 | **-18.0** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0050 | 0.01 | 0.77 | 0.44 | -0.01 | -0.02 | **-4.2** |
| 25-29 | 0.0028 | 0.01 | 0.53 | 0.60 | -0.01 | -0.01 | **-2.3** |
| 30-34 | 0.0046 | 0.01 | 0.90 | 0.37 | -0.01 | -0.01 | **-3.9** |
| 35-39 | 0.0032 | 0.00 | 0.76 | 0.45 | -0.01 | 0.01 | **-2.6** |
| 40-44 | -0.0017 | 0.00 | -0.43 | 0.67 | -0.01 | 0.01 | **1.4** |
| 45-49 | -0.0068 | 0.00 | -1.48 | 0.14 | -0.02 | 0.00 | **5.7** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0288 | 0.01 | -2.09 | 0.04 | -0.06 | 0.00 | **24.1** |
| secondary | -0.0209 | 0.01 | -2.23 | 0.03 | -0.04 | 0.00 | **17.5** |
| higher | -0.0006 | 0.00 | -1.38 | 0.17 | 0.00 | 0.00 | **0.5** |
| **urban** | -0.0006 | 0.00 | -0.16 | 0.87 | -0.01 | 0.01 | **0.5** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0034 | 0.00 | -1.73 | 0.08 | -0.01 | 0.00 | **2.9** |
| 2 | -0.0047 | 0.00 | -1.82 | 0.07 | -0.01 | 0.00 | **3.9** |
| 3 | -0.0047 | 0.00 | -1.83 | 0.07 | -0.01 | 0.00 | **3.9** |
| 4 | -0.0028 | 0.00 | -1.32 | 0.19 | -0.01 | 0.00 | **2.4** |
| 5+ | -0.0087 | 0.01 | -1.25 | 0.21 | -0.02 | 0.00 | **7.3** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0113 | 0.01 | -1.77 | 0.08 | -0.02 | 0.00 | **9.5** |
| Highest | -0.0027 | 0.00 | -0.54 | 0.59 | -0.01 | 0.01 | **2.2** |
| **Constant** | 0.0340 | 0.03 | 0.99 | 0.32 | -0.03 | -0.10 | **-28.5** |

**Table 19. Poisson decomposition of births in the past 5 years, Malawi 2010 versus 1992**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.0516 | 0.01 | -4.26 | 0.00 | -0.08 | -0.03 | **59.7** |
| C | -0.0349 | 0.02 | -1.80 | 0.07 | -0.07 | 0.00 | **40.3** |
| R | -0.0865 | 0.01 | -5.82 | 0.00 | -0.12 | -0.06 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0207 | 0.00 | -11.26 | 0.00 | -0.02 | -0.02 | **24.0** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0031 | 0.00 | 11.43 | 0.00 | 0.00 | 0.00 | **-3.6** |
| 25-29 | 0.0269 | 0.00 | 11.31 | 0.00 | 0.02 | -0.03 | **-31.1** |
| 30-34 | 0.0043 | 0.00 | 10.97 | 0.00 | 0.00 | -0.01 | **-5.0** |
| 35-39 | -0.0009 | 0.00 | -10.44 | 0.00 | 0.00 | 0.00 | **1.1** |
| 40-44 | -0.0117 | 0.00 | -7.95 | 0.00 | -0.01 | -0.01 | **13.6** |
| 45-49 | 0.0005 | 0.00 | 2.41 | 0.02 | 0.00 | 0.00 | **-0.5** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0081 | 0.00 | -3.34 | 0.00 | -0.01 | 0.00 | **9.3** |
| secondary | -0.0241 | 0.00 | -6.34 | 0.00 | -0.03 | -0.02 | **27.8** |
| higher | -0.0089 | 0.00 | -6.73 | 0.00 | -0.01 | -0.01 | **10.3** |
| **urban** | -0.0045 | 0.00 | -3.73 | 0.00 | -0.01 | 0.00 | **5.2** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | 0.0002 | 0.00 | 0.84 | 0.40 | 0.00 | 0.00 | **-0.2** |
| 2 | -0.0004 | 0.00 | -1.28 | 0.20 | 0.00 | 0.00 | **0.5** |
| 3 | -0.0005 | 0.00 | -1.99 | 0.05 | -.0010067 - | 0.00 | **0.6** |
| 4 | -0.0004 | 0.00 | -1.68 | 0.09 | 0.00 | 0.00 | **0.4** |
| 5+ | 0.0016 | 0.00 | 1.17 | 0.24 | 0.00 | 0.00 | **-1.9** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | 0.0179 | 0.01 | 3.11 | 0.00 | 0.01 | -0.03 | **-20.7** |
| Highest | -0.0259 | 0.00 | -9.56 | 0.00 | -0.03 | -0.02 | **30.0** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | 0.0179 | 0.02 | 1.17 | 0.24 | -0.01 | -0.05 | **-20.7** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0233 | 0.01 | 2.41 | 0.02 | 0.00 | -0.04 | **-26.9** |
| 25-29 | 0.0207 | 0.01 | 2.42 | 0.02 | 0.00 | -0.04 | **-24.0** |
| 30-34 | 0.0209 | 0.01 | 2.46 | 0.01 | 0.00 | -0.04 | **-24.1** |
| 35-39 | 0.0197 | 0.01 | 2.51 | 0.01 | 0.00 | 0.04 | **-22.8** |
| 40-44 | 0.0146 | 0.01 | 2.30 | 0.02 | 0.00 | -0.03 | **-16.9** |
| 45-49 | 0.0030 | 0.00 | 0.83 | 0.41 | 0.00 | -0.01 | **-3.5** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0088 | 0.01 | -1.51 | 0.13 | -0.02 | 0.00 | **10.2** |
| secondary | -0.0008 | 0.00 | -0.68 | 0.50 | 0.00 | 0.00 | **0.9** |
| higher | -0.0003 | 0.00 | -1.63 | 0.10 | 0.00 | 0.00 | **0.3** |
| **urban** | -0.0029 | 0.00 | -1.41 | 0.16 | -0.01 | 0.00 | **3.4** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0071 | 0.00 | -2.23 | 0.03 | -0.01 | 0.00 | **8.2** |
| 2 | -0.0063 | 0.00 | -2.13 | 0.03 | -0.01 | 0.00 | **7.3** |
| 3 | -0.0088 | 0.00 | -2.37 | 0.02 | -0.02 | 0.00 | **10.2** |
| 4 | -0.0089 | 0.00 | -2.44 | 0.02 | -0.02 | 0.00 | **10.3** |
| 5+ | -0.0384 | 0.02 | -2.54 | 0.01 | -0.07 | -0.01 | **44.4** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0038 | 0.01 | -0.44 | 0.66 | -0.02 | 0.01 | **4.4** |
| Highest | -0.0081 | 0.01 | -1.56 | 0.12 | -0.02 | 0.00 | **9.4** |
| **Constant** | -0.0608 | 0.04 | -1.72 | 0.09 | -0.13 | 0.01 | **70.3** |

**Table 20. Poisson decomposition of births in the past 5 years, Rwanda 2010 versus 1992**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.1848 | 0.06 | -3.30 | 0.00 | -0.29 | -0.08 | **94.7** |
| C | -0.0103 | 0.06 | -0.18 | 0.86 | -0.12 | 0.10 | **5.3** |
| R | -0.1951 | 0.01 | -19.10 | 0.00 | -0.22 | -0.18 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0612 | 0.01 | -11.86 | 0.00 | -0.07 | -0.05 | **31.4** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0073 | 0.00 | 10.19 | 0.00 | 0.01 | -0.01 | **-3.7** |
| 25-29 | 0.0320 | 0.00 | 10.67 | 0.00 | 0.03 | -0.04 | **-16.4** |
| 30-34 | -0.0342 | 0.00 | -10.59 | 0.00 | -0.04 | -0.03 | **17.5** |
| 35-39 | -0.0103 | 0.00 | -10.28 | 0.00 | -0.01 | -0.01 | **5.3** |
| 40-44 | -0.0094 | 0.00 | -9.63 | 0.00 | -0.01 | -0.01 | **4.8** |
| 45-49 | 0.0109 | 0.00 | 5.96 | 0.00 | 0.01 | -0.01 | **-5.6** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0061 | 0.00 | -2.73 | 0.01 | -0.01 | 0.00 | **3.2** |
| secondary | -0.0129 | 0.00 | -6.07 | 0.00 | -0.02 | -0.01 | **6.6** |
| higher | -0.0057 | 0.00 | -6.15 | 0.00 | -0.01 | 0.00 | **2.9** |
| **urban** | -0.0055 | 0.00 | -2.96 | 0.00 | -0.01 | 0.00 | **2.8** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | 0.0006 | 0.00 | 5.71 | 0.00 | 0.00 | 0.00 | **-0.3** |
| 2 | 0.0002 | 0.00 | 2.61 | 0.01 | 0.00 | 0.00 | |
| 3 | 0.0000 | 0.00 | 0.44 | -0.66 | 0.00 | 0.00 | |
| 4 | 0.0000 | 0.00 | 0.14 | -0.89 | 0.00 | 0.00 | |
| 5+ | -0.0020 | 0.00 | -1.24 | 0.22 | -0.01 | 0.00 | **1.0** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0149 | 0.01 | -1.03 | 0.30 | -0.04 | 0.01 | **7.7** |
| Highest | -0.0734 | 0.03 | -2.19 | 0.03 | -0.14 | -0.01 | **37.6** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | 0.0040 | 0.02 | 0.20 | 0.84 | -0.03 | -0.04 | **-2.1** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | 0.0089 | 0.04 | 0.21 | 0.84 | -0.07 | -0.09 | **-4.5** |
| 25-29 | 0.0074 | 0.04 | 0.21 | 0.84 | -0.06 | -0.08 | **-3.8** |
| 30-34 | 0.0087 | 0.04 | 0.21 | 0.84 | -0.07 | -0.09 | **-4.4** |
| 35-39 | 0.0060 | 0.03 | 0.21 | 0.84 | -0.05 | -0.06 | **-3.1** |
| 40-44 | 0.0050 | 0.02 | 0.21 | 0.84 | -0.04 | -0.05 | **-2.5** |
| 45-49 | 0.0032 | 0.02 | 0.21 | 0.84 | -0.03 | -0.03 | **-1.6** |
| **edu:** none (ref) | | | | | | | |
| primary | 0.0044 | 0.02 | 0.21 | 0.84 | -0.04 | -0.05 | **-2.2** |
| secondary | -0.0002 | 0.00 | -0.18 | 0.86 | 0.00 | 0.00 | **0.1** |
| higher | -0.0001 | 0.00 | -0.21 | 0.84 | 0.00 | 0.00 | **0.1** |
| **urban** | -0.0004 | 0.00 | -0.21 | 0.83 | 0.00 | 0.00 | **0.2** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0004 | 0.00 | -0.20 | 0.84 | 0.00 | 0.00 | **0.2** |
| 2 | -0.0014 | 0.01 | -0.21 | 0.84 | -0.01 | 0.01 | **0.7** |
| 3 | -0.0021 | 0.01 | -0.21 | 0.84 | -0.02 | 0.02 | **1.1** |
| 4 | -0.0017 | 0.01 | -0.21 | 0.84 | -0.02 | 0.01 | **0.9** |
| 5+ | -0.0053 | 0.03 | -0.21 | 0.84 | -0.06 | 0.04 | **2.7** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0001 | 0.00 | -0.06 | 0.95 | 0.00 | 0.00 | **0.1** |
| Highest | -0.0014 | 0.01 | -0.25 | 0.80 | -0.01 | 0.01 | **0.7** |
| **Constant** | -0.0446 | 0.23 | -0.20 | 0.84 | -0.49 | 0.40 | **22.9** |

**Table 21. Poisson decomposition of births in the past 5 years, Zimbabwe 2010-11 versus 1994**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| E | -0.0212 | 0.01 | -2.67 | 0.01 | -0.04 | -0.01 | **53.5** |
| C | -0.0185 | 0.01 | -1.36 | 0.18 | -0.05 | 0.01 | **46.5** |
| R | -0.0397 | 0.01 | -3.64 | 0.00 | -0.06 | -0.02 | |

**Due to Difference in Characteristics (E)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | 0.0016 | 0.00 | 6.98 | 0.00 | 0.00 | 0.00 | **-4.1** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | -0.0031 | 0.00 | -6.22 | 0.00 | 0.00 | 0.00 | **7.7** |
| 25-29 | 0.0174 | 0.00 | 6.31 | 0.00 | 0.01 | -0.02 | **-43.8** |
| 30-34 | -0.0004 | 0.00 | -5.99 | 0.00 | 0.00 | 0.00 | **0.9** |
| 35-39 | 0.0021 | 0.00 | 5.53 | 0.00 | 0.00 | 0.00 | **-5.3** |
| 40-44 | -0.0002 | 0.00 | -0.49 | 0.63 | 0.00 | 0.00 | **0.4** |
| 45-49 | -0.0006 | 0.00 | -5.03 | 0.00 | 0.00 | 0.00 | **1.4** |
| **edu:** none (ref) | | | | | | | |
| primary | -0.0050 | 0.01 | -0.68 | 0.50 | -0.02 | 0.01 | **12.6** |
| secondary | -0.0048 | 0.01 | -0.45 | 0.65 | -0.03 | 0.02 | **12.2** |
| higher | -0.0037 | 0.00 | -1.94 | 0.05 | -0.01 | 0.00 | **9.4** |
| **urban** | -0.0025 | 0.00 | -2.12 | 0.03 | 0.00 | 0.00 | **6.3** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0010 | 0.00 | -1.78 | 0.07 | 0.00 | 0.00 | **2.6** |
| 2 | -0.0047 | 0.00 | -4.06 | 0.00 | -0.01 | 0.00 | **11.8** |
| 3 | -0.0015 | 0.00 | -2.94 | 0.00 | 0.00 | 0.00 | **3.7** |
| 4 | 0.0008 | 0.00 | 2.93 | 0.00 | 0.00 | 0.00 | **-2.0** |
| 5+ | 0.0034 | 0.00 | 1.03 | 0.30 | 0.00 | -0.01 | **-8.5** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | -0.0054 | 0.00 | -3.21 | 0.00 | -0.01 | 0.00 | **13.5** |
| Highest | -0.0137 | 0.00 | -5.20 | 0.00 | -0.02 | -0.01 | **34.5** |

**Due to Difference in Coefficients (C)**

| bpast5y | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] | Pct. |
|---|---|---|---|---|---|---|---|
| **ismarried** | -0.0130 | 0.03 | -0.39 | 0.70 | -0.08 | 0.05 | **32.9** |
| **age:** 15-19 (ref) | | | | | | | |
| 20-24 | -0.0180 | 0.02 | -0.83 | 0.41 | -0.06 | 0.02 | **45.4** |
| 25-29 | -0.0116 | 0.02 | -0.75 | 0.46 | -0.04 | 0.02 | **29.1** |
| 30-34 | -0.0093 | 0.01 | -0.63 | 0.53 | -0.04 | 0.02 | **23.4** |
| 35-39 | -0.0047 | 0.01 | -0.45 | 0.65 | -0.03 | 0.02 | **11.9** |
| 40-44 | -0.0221 | 0.02 | -1.16 | 0.25 | -0.06 | 0.02 | **55.6** |
| 45-49 | -0.0242 | 0.02 | -1.40 | 0.16 | -0.06 | 0.01 | **60.9** |
| **edu:** none (ref) | | | | | | | |
| primary | 0.0117 | 0.03 | 0.35 | 0.72 | -0.05 | -0.08 | **-29.6** |
| secondary | 0.0193 | 0.03 | 0.62 | 0.54 | -0.04 | -0.08 | **-48.7** |
| higher | 0.0006 | 0.00 | 0.31 | 0.75 | 0.00 | 0.00 | **-1.5** |
| **urban** | -0.0075 | 0.02 | -0.46 | 0.65 | -0.04 | 0.02 | **18.9** |
| **Parity:** 0 (ref) | | | | | | | |
| 1 | -0.0027 | 0.00 | -0.60 | 0.55 | -0.01 | 0.01 | **6.8** |
| 2 | -0.0105 | 0.01 | -1.27 | 0.21 | -0.03 | 0.01 | **26.5** |
| 3 | -0.0074 | 0.01 | -1.10 | 0.27 | -0.02 | 0.01 | **18.7** |
| 4 | -0.0106 | 0.01 | -1.20 | 0.23 | -0.03 | 0.01 | **26.6** |
| 5+ | -0.0279 | 0.02 | -1.20 | 0.23 | -0.07 | 0.02 | **70.4** |
| **CWI tercile:** | | | | | | | |
| Lowest (ref) | | | | | | | |
| Middle | 0.0159 | 0.01 | 1.16 | 0.25 | -0.01 | -0.04 | **-40.1** |
| Highest | -0.0165 | 0.02 | -0.84 | 0.40 | -0.05 | 0.02 | **41.5** |
| **Constant** | 0.1199 | 0.15 | 0.82 | 0.41 | -0.17 | -0.41 | **-302.0** |