## The demographic revolution in developing countries and Africa with special regards to Zimbabwe

## **Abstract**

This dissertation aimed to examine the demographic revolution in developing countries, Africa and Zimbabwe. The decline of mortality and fertility everywhere in the world demonstrates the importance of the demographic revolution as a global process. While this universality was central to classic revolution theory, for many decades, it was questioned by demographers because fertility and mortality in Africa did not seem to follow the expected pathway. In sub–Saharan Africa the demographic revolution has been characterised by lagging, discontinuation and is occurring at a faster pace against low levels of socioeconomic development than observed in Europe, which has consequences for population dynamics. Questions have emerged if Africa is indeed different and a homogenous continent regarding demographic processes? However, empirical studies that have explored the unique demographic revolution starting from developing countries, Africa and Zimbabwe are lacking.

The first part of the thesis on developing countries showed variations in the reaction of fertility to mortality decrease with historically small gaps and extended gaps in more recent revolutions, plus the much faster decrease in vital rates in many developing countries pose a major challenge to the explanation of the processes. The specific features of the latest revolutions have resulted in much longer periods of high population growth and to potentially give way to much faster population ageing. The second part of the study examined spatial differentiation in the levels and trends of (1) fertility from (1960-2015) and (2) population development in Africa from (2000-2030). A secondary data set was derived from World Population Prospects 2017. Non-hierarchical cluster analysis enabled the identification of countries in Africa with the same fertility and population development characteristics for three periods, respectively. The findings revealed three fertility clusters with high, medium and low fertility. The number of countries with low and medium fertility was increasing while the number of countries with high fertility was simultaneously decreasing. Three clusters with high, medium and low population development were revealed. Additionally, countries reduced their fertility and mortality, while simultaneously increasing their percentages of the elderly in the population. Northern and Southern African countries constantly formed a relatively homogeneous spatial unit with the highest ageing. The clusters suggest that countries are at different stages of demographic revolution and consequently population development. Each cluster forms a spatial unit in which appropriate demographic policy measures can be implemented. Thus, this would allow those regions with the

homogeneity in fertility and population development levels to share their knowledge and experiences as outlined in the Agenda 2030 for Sustainable Goal Development (SDG).

The third part of the thesis investigated the proximate determinants of fertility in Zimbabwe using 6 consecutive Zimbabwe Demographic and Health Surveys (ZDHS) from 1988, 1994, 1999, 2005, 2010 and 2015. The results revealed that fertility (TFR) declined from 5.4 (1988) to 3.8 (1999) and then stalled at about 4.0 until 2015. Contraceptive was the most significant proximate determinant of fertility level decline and its effect increases with time, while breastfeeding and marriage decreased with time. Therefore in order to foster further fertility decline to replacement level, policies should promote further contraceptive adoption and use extended breastfeeding periods and delay entry into marriages. Furthermore, women empowerment, especially the promotion of female education to higher education and female employment, could be useful tools to further fertility decline. Lastly, the thesis examined at the predictors of under-five mortality in Zimbabwe. Previous studies have used Zimbabwe Demographic and Health Survey none have used census data. Thus, this study utilises the 2012 Census data. Descriptive statistics and binary logistic regression analyses were used to test the hypotheses. The results revealed that all of the following: provincial location, mother's education level, mother's age at birth, marital status of the mother, and sanitation variables were significant predictors of under-five mortality. Public health interventions on under-five mortality should ideally include improvements in maternal education and sanitation.

**Keywords:** demographic transition, demographic revolution, Africa, Zimbabwe, fertility, mortality, determinants, regional differentiation