



Vulnerability and Resilience: Determinants of Under-Five Mortality Changes in Zambia

MICHEL GARENNE
IRD & Institut Pasteur, Paris, France

and

ALBERT ENÉAS GAKUSI *
African Development Bank, Tunis, Tunisia

Summary. — In Zambia, under-five mortality declined from 1958 to 1975, rose from 1975 to 1992, before resuming its decline from 1992 to 2001. The study investigates the economic, political, and epidemiologic determinants of these changes. The rise in mortality could be explained by an economic downturn (declining income *per capita*, resulting from lower copper prices on international markets and decreasing production, and its numerous consequences), and to a lesser extent by emerging diseases (increasing mortality from HIV/AIDS and resistant malaria). However, mortality decline could resume as a result of building social and health capital, in particular health personnel, and favorable health policies.

© 2006 Elsevier Ltd. All rights reserved.

Key words — under-five mortality, economic crisis, economic policies, health policies, sub-Saharan Africa, Zambia

1. INTRODUCTION

Mortality changes in the second half of the 20th century were dramatic throughout the world and occurred in the context of the development of public health and of major economic and social changes. In many countries, mortality declines occurred at times of increasing income *per capita*, rapid urbanization, and industrialization, and were associated with increased food availability, better nutritional status, and increasing levels of education. Some of the latter changes were primarily the product of social policies (health, education, and housing, in particular), while others were more the product of market forces, increasing economic activity, and internal as well as international trade. In the most advanced countries, economic and social changes took place together during the same period of time, and were very pronounced, such as in Western Europe, Northern America, and some countries of the Far East and Southern Pacific. Other countries under-

* The authors acknowledge the support of the “Health Consequences of Population Change Panel” of the Wellcome Trust, London, who provided a grant to conduct this study [Grant # 062885/Z/00Z]. The authors would like to thank very warmly all those who welcomed Dr. Enéas Gakusi in Lusaka, and provided time, information, documents, and the data necessary for the analysis, in particular: Ms. Efreda Chulu, acting director of the CSO, Mr. Chimfwembe, director of Planning and Development at MoH, Ms. Chivundu Leo, EPI officer at MoH, Ms. Jenny Meya Nyirenda, Child Health Specialist, Central Board of Health, Ms. Catherine Mwape, International Trade Division at CSO, Mr. Edgar Musonda at CSO, Mr. William Mayaka, Deputy Director at CSO, Mr. James Lungushi, Director of Planning at the Ministry of Finance, Dr. Edward Maganu, Director of WHO regional office in Lusaka, Dr. Eddie Limbambala at the WHO office in Lusaka, and Ms. Liseli Simasiku-Sikota at the World Bank office in Lusaka. They also thank warmly Dr. Theophilus Fadayomi for his useful comments. Final revision accepted: February 27, 2006.

went rapid health transitions without much change in income *per capita*, such as some of the former Socialist countries, while others, such as many oil exporting countries, witnessed rapid economic growth without much modernization initially, although rising income almost always had social implications eventually.

The situation in sub-Saharan Africa since 1950 appears as contrasted as elsewhere (Gwatkin, 1983). For instance, countries such as Kenya underwent slow but sustained economic growth, low level of urbanization, a large mortality decline until 1990, and major improvements in education, whereas Senegal underwent a major mortality decline without any significant change in income and minor improvements in the level of education. In contrast, a country such as Botswana witnessed fast and sustained economic growth, rapid urbanization, a strong increase in level of education, and fast mortality decline, until HIV/AIDS hit the country in the late 1980s.

Differences between the African countries demographic dynamics could be due to a variety of economic, epidemiologic, political, and social factors. Economic opportunities could develop, such as a high demand for available natural resources, as well as misfortunes, such as a series of natural disasters or a change in the demand for a major export good. Above all, the capacity to take advantage of opportunities and to respond to shocks seems to be determined to a large extent by the level of development of the state, its management capacity, and its stability. Countries devastated by civil war (like Mozambique) or simply poorly managed (like Madagascar) had no chance of economic development and often did poorly on social indicators, whereas countries that were more stable and better managed (like Botswana or Gabon) could enjoy economic growth and social development. Case studies of efficient or deleterious state management are useful for revealing the crucial determinants of demographic changes.

The situation of Zambia appears atypical, and has drawn the attention of scholars on many grounds since it is a case of declining income *per capita* and rising under-five mortality for many years, both trends are opposite to expectations. This paper is an attempt to analyze systematically the under-five mortality trends in Zambia, and to study the broad economic, epidemiologic, political, and social contexts that explain the mortality increases and subsequent declines. The approach adopted

focuses on long term trends over the 1958–2001 period. In order to do so, we gathered all available information, primarily quantitative but also qualitative, about trends in economic, demographic, and social indicators and tried to place this information in a broad context of economic, political, and social changes. The links between the variables were also investigated using a variety of econometric models. The authors had access to numerous published and unpublished material (Republic of Zambia, 1984–2003; World Bank, 1984–2001), and one of them (EG) actually visited Zambia, where he had talks with a number of persons knowledgeable in local statistics and about the country situation. This study is part of a larger program aiming at documenting and analyzing reversals in mortality trends in Africa conducted by the same authors.

2. PREVIOUS WORK ON THE ZAMBIA CRISIS

The increase in under-five mortality became visible in the first Demographic and Health Survey (DHS) report of 1992, and was confirmed by the following DHS surveys in 1996 and 2001. This phenomenon occurred long before HIV/AIDS became an important cause of death. Nsemukila (1994) analyzed extensively the trends in mortality, morbidity and their determinants over the 1965–92 period, using survey data and data from the health information system. He identified the 1970s as the turning point in mortality trends, and argued that mortality increase was concentrated in urbanized areas (Copperbelt, Lusaka), and among working women, and women with some education. He also pointed to the possible deterioration of the nutritional status of children. He attributed the rising trends in mortality to the worsening economic conditions, especially among urban dwellers, who were the prime beneficiaries of earlier public policies. Simms, Milimo, and Bloom (1998) and Simms (2000) studied the reasons for the rise in childhood mortality in Zambia. They denied the rise in morbidity and the deterioration in nutritional status, and attributed the mortality increase primarily to decreasing income and its major consequences, such as the lower government health expenditures, especially in rural areas. Freund (1986a, 1986b) analyzed extensively the deterioration of the health system during the early years of the economic crisis (1974–84). He

Download English Version:

<https://daneshyari.com/en/article/989903>

Download Persian Version:

<https://daneshyari.com/article/989903>

[Daneshyari.com](https://daneshyari.com)