

Malawi: Population, Migration, and the impact of HIV/AIDS

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Malawi is a sub-Saharan African country with a total land area of 94,280 Km². While relatively stable, politically, it is a lower-income country relative to surrounding countries. Environmental factors and disease pose some of the greatest threats to its growing population. Factors that are of particular concern include drought-induced famine, seasonal hunger, and the HIV/AIDS pandemic.

This paper will analyze Malawi's population and migration profiles and the impact of HIV/AIDS. In surveying quantitative and qualitative data, it is clear that Malawi is a low-income country with a rapidly growing population ill-equipped to manage a pandemic. This is important, as Malawi looks to triple its population by the end of the 21st century. As Malawi's population grows, HIV/AIDS in sub-Saharan Africa will pose an increasing risk globally and locally.

Population Analysis and Migration Profile

Population

As of November 14, 2020, the population of Malawi is 19,322,442 (Worldometer, *Malawi Population*). With Malawi recording a growth rate of 2.69% in 2020 (World Population Review [WPR], *Malawi Population*), its population is projected to more than triple by 2099. Malawi is largely rural; 18.5% of the population live in urban clusters, and its physiologic population density is 203 people per km² (Worldometer, *Malawi Population*). Lilongwe is Malawi's capital city; the five most populous cities can be found in Appendix B. Malawi's urban/rural population split and population density are represented in Table A1 and Figure A1, respectively (Appendix A).

Based on 2018 data, Malawi's rate of natural increase (RNI) is 27.521 per thousand population, “[showing] how [Malawi's] population is changing without migration” (Fouberg et

al., 2020, pg. 38). Malawi's crude birth and death rates (CBR/CDR) and total fertility rate (TFR) are trending down. However, Malawi's TFR is more than double the 2.1 TFR needed "[to] stay at replacement levels and keep a population stable over time without immigration" (Fouberg et al., 2020, pg. 42). Malawi's TFR is 4.3, infant mortality rate (IMR) is 32.6 and its child mortality rate (CMR) is 43.7 (Worldometer, *Malawi Population, Malawi Demographics*). Malawi's RNI, CBR, CDR, TFR, IMR, and CMR are included in Appendix C. Table A2 (Appendix A) shows Malawi's population pyramid, a "graphic representation of the age and sex composition" (Fouberg et al., 2020, pg. 44).

Malawi's median age is 18.1 years, with a life expectancy of 65.62 years (Worldometer, *Malawi Population*). In 2019 Malawi had an old-age dependency ratio of 4.9027 and a child dependency ratio of 80.6629. Based on 2015 data, Malawians older than 15 have a literacy rate of 62.144 (The World Bank [IBRD/IDA], *Malawi, Literacy rate, adult total*). Calculations of old-age and child dependency ratios, youth literacy rate, and population are represented in Appendix C.

Population Analysis

Population data points are "often informed estimates rather than actual counts" (Fouberg et al., 2020, pg. 35); however, it is possible to analyze a population by examining trends, data related to averages, and subsequent implications. The demographic transition model "[suggests] that a country's birth and death rate change in predictable ways over stages of economic development" (Fouberg et al., 2020, pg. 46). In 2020, Malawi is in Stage 2 of the demographic transition, characterized by high population growth. Malawi's CBR, CDR, and TFR are trending down, signaling a shift to lower mortality and fertility rates. According to Fouberg et al., "[countries] in stage 2 today are much lower income countries with relatively high [CBRs and

RNIs]” (2020, pg. 47). Malawi is low-income in relation to the region, as its GNI per capita (in purchasing power parity) of \$1,070 is less than half that of East Africa’s average of \$2,457 (Population Reference Bureau [PRB], *Malawi*).

Migration Profile

Malawi borders Mozambique, Zambia, and Tanzania. Sub-Saharan Africa is one of three areas of dislocation “[generating] more than half of all refugees” (Fouberg et al., 2020, 85). In 2020, net migration in Malawi was -16,053 (Worlometer, *Malawi Population, Population of Malawi (2020 and historical)*); more individuals emigrated than immigrated. A primary pull factor, “what attracts a migrant” (Fouberg et al., 2020, pg. 78), is that “[Malawi] is used as a “transit” ground for irregular migrants destined for other Southern African countries” (Ndegwa, 2015, pg. 73). As “[the] largest refugee flows in sub-Saharan Africa now come out of Central and East Africa” (Fouberg et al., 2020, pg. 88), “[most] of the immigrants to Malawi originate from neighbouring countries” (Ndegwa, 2015, pg. 1). Malawi’s primary pull factor is its *political* stability relative to surrounding countries.

In terms of emigration, “Ndegwa (2015) found that Malawians “leave for destinations with specific historical and cultural ties” (pg. 49). Malawi’s emigration profile between 1998 and 2008 is represented in Appendix D. Malawi’s push factors, “the conditions and perceptions that help a migrant decide to leave a place” (Fouberg et al., pg. 78), are primarily environmental/economic and family shocks (Anglewicz & Myroniuk, 2018). Kendall & Anglewicz (2017) found that over 90% of respondents (from 2003 to 2008) experienced an environmental/economic shock and almost 66% of respondents experienced household shocks. Further representation of shocks can be found in Table E1 and Table E2 (Appendix E).

The HIV/AIDS Pandemic in Malawi

HIV/AIDS in Malawi

HIV/AIDS is an infectious disease continuing to spread worldwide, with its hearth in Africa (Fouberg et al., 2020). Unfortunately, “[the] impact of HIV/AIDS on sub-Saharan Africa is striking” (Fouberg et al., 2020, 54). The percentages of males and females with HIV/AIDS in Malawi are significantly higher than East African averages (PRB, *Malawi*). The National Statistical Office & ICF Macro (2011) found that Malawi’s HIV prevalence is 10.6% (cited in Kendall & Anglewicz, 2017). HIV/AIDS prevalence by region is represented in Table F2 (Appendix F). One important factor in the pervasiveness of HIV/AIDS is a famine that hit Malawi from 2001 to 2003. As Loevinsohn (2015) asserts, “the [2001-2003] famine’s consequences must be considered [. . .] in additional HIV infections and the illness and death [it] gave rise to” (pg. 15). The famine “had a rapid and substantial effect on both HIV prevalence and demography across rural and non-rural areas” (pg. 13). HIV/AIDS continues to be one of Malawi’s greatest challenges.

Migration and HIV/AIDS

Migration and HIV/AIDS are interrelated. Anglewicz et al. (2017) found that “there is a significant association between migration and HIV infection” (pg. 5), which is supported by “[migrants tending] to move to areas with a relatively higher HIV prevalence” (Anglewicz, 2011, pg. 239). HIV infection is one of the primary push factors for internal migration, which could be attributed in part to marriage. Anglewicz (2011) points out that “marriage-related processes influence migration and contribute to higher HIV rates among migrants” (241). HIV influences internal migration through divorce, re-marriage, and the likelihood of relocation due to an HIV diagnosis. A large Malawian majority is married (represented in Appendix G), and marriage is a

motivation for internal migration, both as a push and a pull factor. A push factor of marriage is one moving “away from a home shared with a spouse at the end of a marriage” (Anglewicz, 2011, pg. 242), and a pull factor of marriage is “to move in with a spouse at the beginning of marriage” (pg. 242). In Malawi, “HIV-positive individuals are more likely to migrate than those who are HIV negative” (Anglewicz, 2011, pg. 251), and “HIV-positive individuals are more likely to experience [marital dissolution]” (Anglewicz et al., 2017, pg. 9). HIV/AIDS and marriage are significant migration factors.

Discussion

Malawi’s primary population concern is its growth rate in relation to climate, socio-economic status, and development. Based on World Population Review’s projection that Malawi’s population will rise to “66.21 million by the end of the century” (*Malawi Population*), and considering Malawi’s total land area of 94,280 Km², Malawi physiologic population is projected to rise from 203 to 702 people per km² within eighty years. This is a concern, considering Malawi’s history of famine. An additional concern, as its population grows, is that Malawi’s GNI per capita of \$1,070 is low, even for the region.

Malawi’s population is growing despite net migration of -16,053. Its high TFR and RNI signify that the population will continue to grow; Malawi would need to halve its TFR to reach stable replacement levels. Malawi’s RNI, CBR, CDR, TFR, IMR, and CMR are lower than East African averages, yet its GNI per capita is lower and HIV/AIDS prevalence rates are higher. Until Malawi can curb the spread of HIV/AIDS, and develop its economy, it will not be able to support its growing population.

HIV/AIDS remains one of Malawi’s greatest challenges. As marriage is one of the primary push factors for internal migration, Malawi has the opportunity to curb the spread of

HIV infection through robust internal migration policies, focusing on social norms. In addition, Malawi can become a hub for immigration. To do so, it needs to develop policies that welcome refugees, asylum seekers, and migrants with investment influence in the region. In addition, Malawi needs to focus on population policies that lower its RNI, CBR, and TFR.

Word count: 1529

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Appendix A

Table A1

Malawi Urban vs. Rural Population from 1955 to 2020

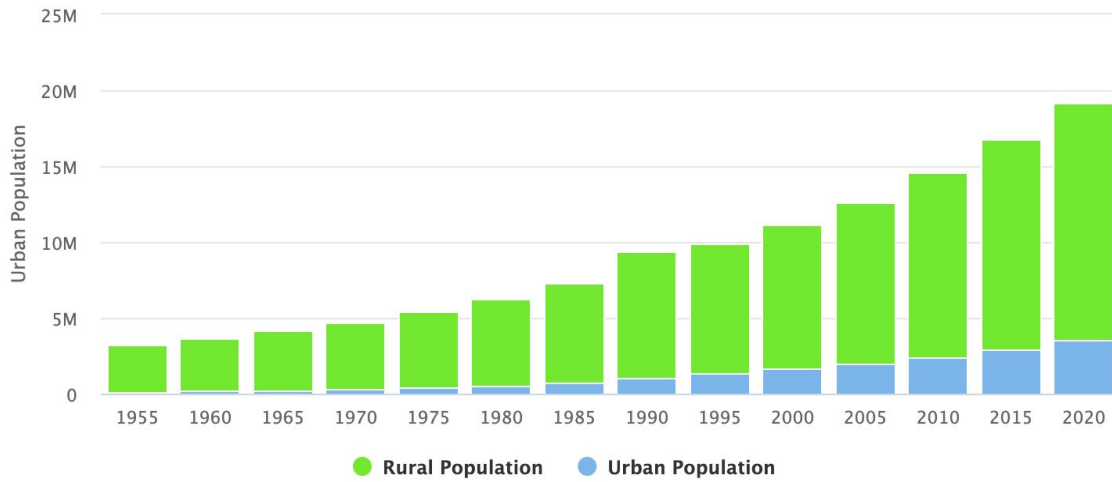


Table A1. Malawi Urban vs. Rural Population. From *Malawi Demographics*, Worldometer.

<https://www.worldometers.info/demographics/malawi-demographics/>

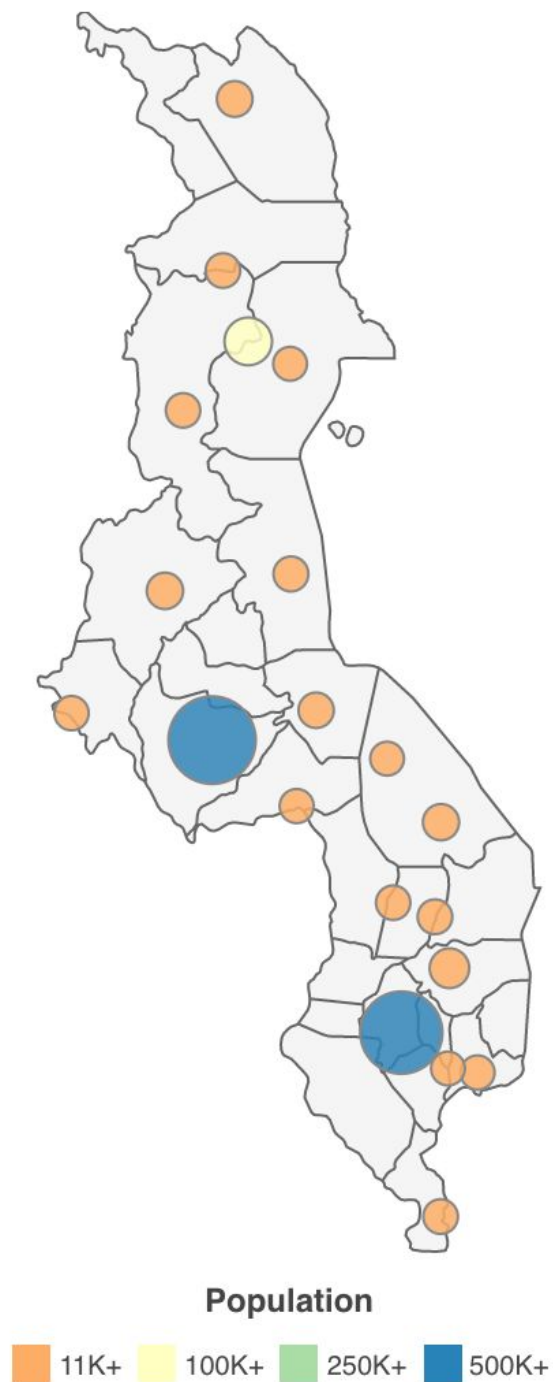
Figure A1*Malawi Population Density Map*

Figure A1. Population Density Map. From Malawi Population Density Map, World Population Review. <https://worldpopulationreview.com/countries/malawi-population>

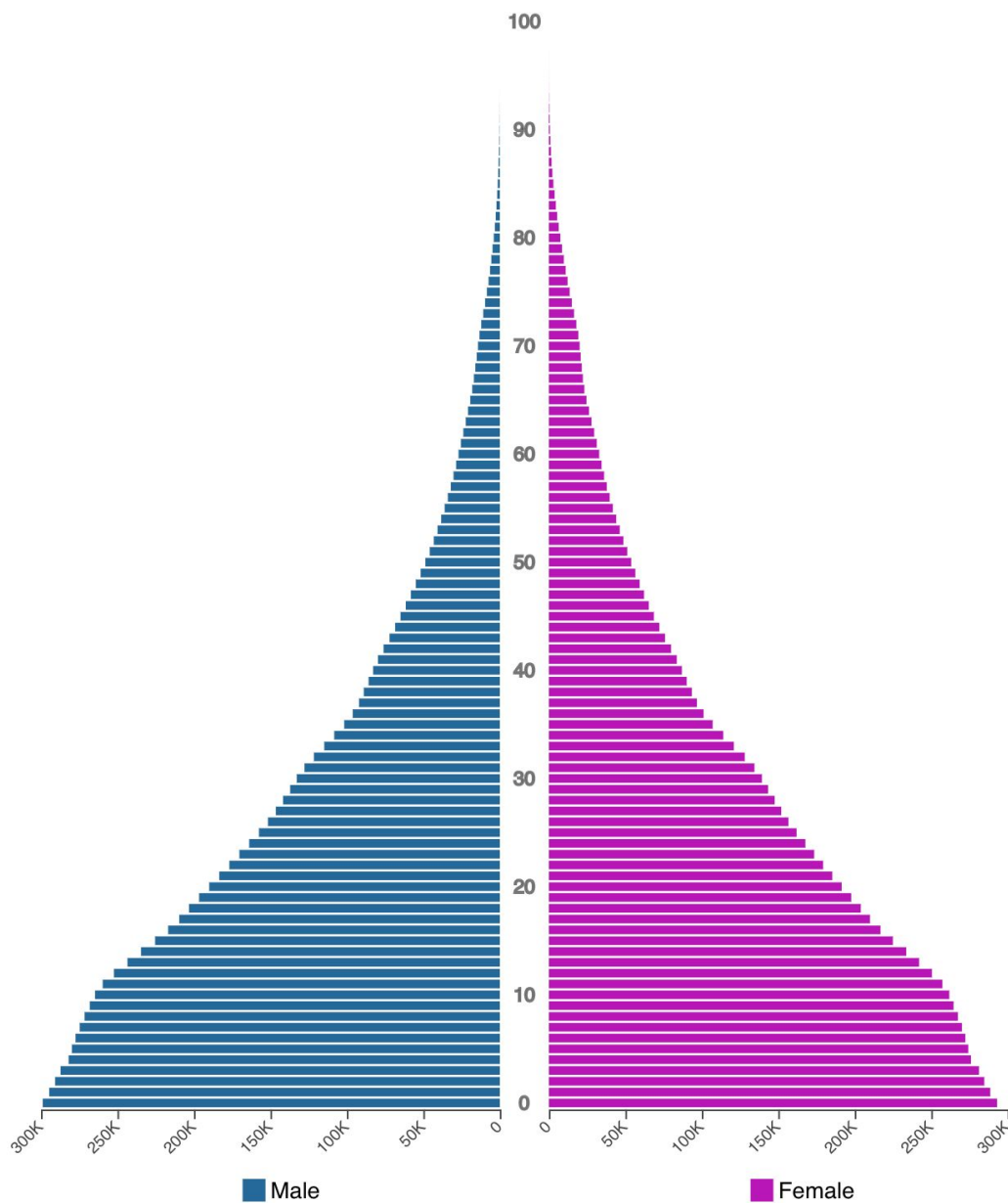
Table A2*Malawi Population Pyramid 2020*

Table A2. Malawi Population Pyramid 2020. From *Malawi Population Pyramid*, World Population Review. <https://worldpopulationreview.com/countries/malawi-population>

Note. The y-axis (0-100) in the population pyramid represents age, with the x-axis (0-300,000) representing sex and population.

Appendix B

Lilongwe is Malawi's most populous city with a population of 646,750 (Worldometer, *Malawi Population*). Malawi has three cities with populations of over 100,000 people, with Blantyre and Mzuzu having populations of 584,877 and 175,345, respectively. Zomba (80,932) and Kasungu (42,555) round out the top five most populous cities (Worldometer, *Malawi Population*). Malawi's five most populated cities are represented in Table B1.

Table B1

Malawi's five most populous cities

City	Population
Lilongwe	646,750
Blantyre	584,877
Mzuzu	175,345
Zomba	80,932
Kasungu	42,555

Note. Data collected from *Malawi Population*, Worldometer.

Appendix C

Malawi has a crude birth rate (CBR) of 34.118 per thousand population (IBRD/IDA, *Malawi, Birth rate, crude*) and a crude death rate (CDR) of 6.597 per thousand population (IBRD/IDA, *Malawi, Death rate, crude*). The RNI of a given population is calculated by subtracting the CDR from the CBR. As Malawi has a CBR of 34.118 and a CDR of 6.597, its RNI of 27.521 per 1000 population is calculated by subtracting 6.597 from 34.118.

Total fertility rate (TFR) is “the average number of children born to women of childbearing age” (Fouberg et al., 2020, pg. 42). Malawi has had a TFR of as high as 7.6 between 1980 and 1985 (Worldometer, *Malawi Population, Fertility in Malawi*), and its TFR of 4.3 remains high.

Infant mortality rate (IMR) is “the probability that a child will die before reaching the age of 1” (Fouberg et al., 2020, pg. 49). Child mortality rate (CMR) is “the probability a child will die before reaching the age of 5” (Fouberg et al., 2020, pg. 49).

Old-age dependency ratio is calculated by dividing the 65 and older population by the 15 to 64 population, and multiplying by 100. For Malawi, the math works out as: $(492,176/10,038,899)*100 = 4.9027$. Child dependency ratio is calculated by dividing the under-15 population by the 15 to 64 population, and multiplying by 100. For Malawi, the math works out as: $(8,097,672/10,038,899)*100 = 80.6629$. Table C1 outlines Malawi’s population distribution by age, as of 2019, and Table C2 compares Malawi’s population to Canada.

In Malawi, Individuals ages 15 to 24 have a literacy rate of 72.936 (IBRD/IDA, *Malawi, Literacy rate, youth total*), notably higher than the adult (ages 15 and above) literacy rate of 62.144.

Table C1*Malawi's population distribution by age (2019)*

Age range	Population
0-14	8,097,672*
15-64	10,038,899**
65+	492,176***

Note. Data collected from *Malawi*, The World Bank.

*From *Malawi, Population ages 0-14*, The World Bank.

**From *Malawi, Population ages 15-64*, The World Bank.

***From *Malawi, Population ages 65 and above*, The World Bank.

Table C2*Malawi's population compared to Canada*

	Malawi	Canada
Population	19,322,442 (2020)	37,742,154 (2020)*
Old-age dependency ratio	4.9027 (2019)	26.5357 (2019)**
Child dependency ratio	80.6629 (2019)	23.8262 (2019)***

Note. Data collected from The World Bank and Worldometer

*From *Population of Canada (2020)*, Worldometer.

<https://www.worldometers.info/demographics/canada-demographics/>

**From *Canada, Population ages 65 and above* and *Population ages 15-64*, The World Bank.

***From *Canada, Population ages 0-14* and *Population ages 15-64*, The World Bank.

Appendix D

Figure D1

Emigrants from Malawi by destination, 1998-2008

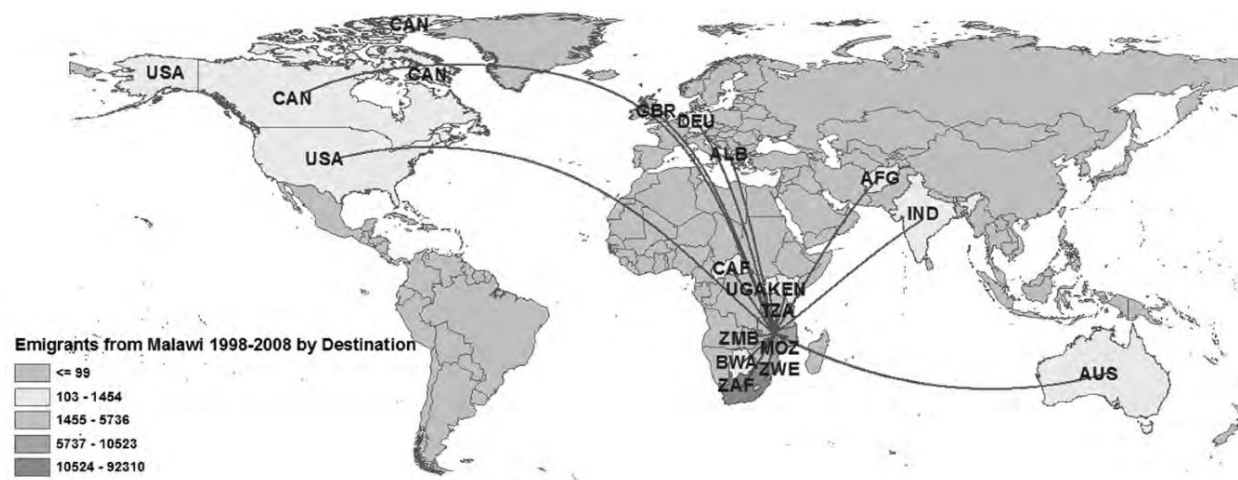


Figure D1. Emigrants from Malawi by destination, 1998-2008. From Ndegwa, 2015, pg. 50.

Table D1

Non-return emigrants from Malawi by region, 1998-2008

Region	Males		Female		Both sexes	
	Number	%	Number	%	Number	%
SADC region	98,934	93.2	17,946	79.5	116,880	90.8
Other African countries	946	0.9	306	1.4	1,252	1.0
Countries outside Africa	6,235	5.9	4,314	19.1	10,549	8.2
Total	106,115	100.0	22,566	100.0	128,681	100.0

Table D1. Non-return emigrants from Malawi by region, 1998-2008. From Population and Housing Census 2008, NSO (cited in Ndegwa, 2015, pg. 49).

Table D2

Distribution of emigrants from Malawi by age and sex, 1998-2008

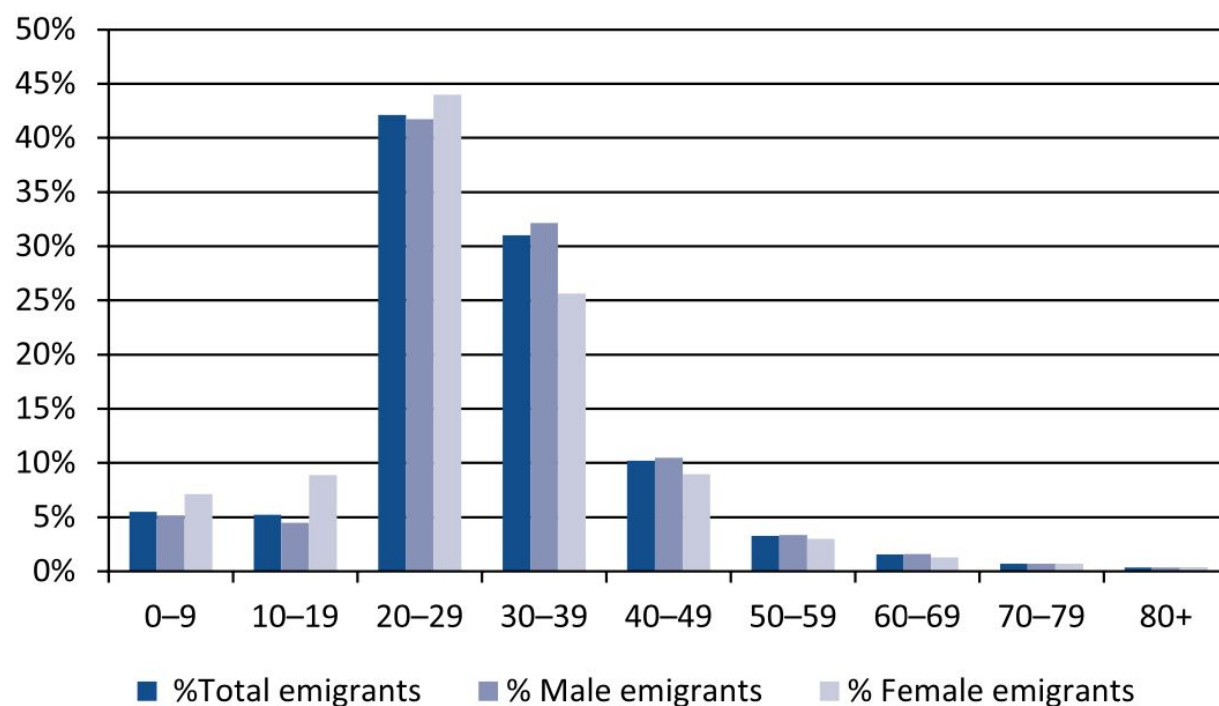


Table D2. Distribution of emigrants from Malawi by age and sex, 1998-2008. From *Population and Housing Census 2008*, NSO (cited in Ndegwa, 2015, pg. 49).

Appendix E

Table E1

Environmental/economic shocks from 2003-2008 (MLSFH respondents in 2008)

Shock	% of respondents
Poor crop yield	73.9%
Change in price of grain	66.2%
House damage	11.8%

Note. Data from Anglewicz & Myroniuk, 2018.

Table E2

Household shocks from 2003-2008 (MLSFH respondents in 2008)

Shock	% of respondents
Household death/illness	42.9%
Loss of income sources	34.8%
Household breakups	8.6%

Note. Data collected from Anglewicz & Myroniuk, 2018.

Appendix F

Table F1

Percentage of population with HIV/AIDS

Population	Malawi	East Africa
Males (15 and older)	7.3%	3.3%
Females (15 and older)	11.1%	5.4%

Note. Data collected from *Malawi*, Population Reference Bureau.

Table F2

HIV/AIDS prevalence in Malawi by region

Region	HIV/AIDS Prevalence
Southern region	14.5%
Central region	7.6%
Northern region	6.6%

Note. Data collected from National Statistical Office & ICF Macro, 2011 (cited in Kendall & Anglewicz, 2017).

Appendix G

Table G1

Marriage by age 30 in Malawi (2005)

	Men	Women
Have been married	97%	99%
Currently married	91%	79%

Note. In addition, the rate of remarriage in women within 10 years of divorce is around 90% (Anglewicz, 2011). Table data collected from NSO and ORC Macro 2005 (cited in Anglewicz, 2011, pg. 242).

Marriage and contraception in Malawi

Contraception is used far more in Malawi than East African averages, and yet Malawi's TFR and RNI is comparable to East African averages. The prevalence of marriage in Malawi could be causal to Malawi's TFR and RNI being closely aligned with East African averages.

Table G2

Contraception, fertility, and growth rates - Malawi comparison to East African average

		Malawi		East Africa Average
Percentage of married women (15-49) using contraception	All methods:	59%	All methods:	44%
	Modern methods:	58%	Modern methods:	39%
Total fertility rate		4.2		4.5
Rate of natural increase		2.7%		2.8%
Average household size		4.5		4.5

Note. Data collected from *Malawi*, Population Reference Bureau