



# Comparative Study of Fertility between Migrant and Nonmigrant Populations

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## Abstract

Fertility refers to the actual reproductive outcomes of a woman or a group of women. This demographic characteristic is influenced by various factors, including migration, income, education, age at first marriage, and the use of contraceptives. This study aims to explore the differences in fertility patterns between migrant and non-migrant populations across different regions and to identify the factors influencing these patterns. Utilizing a literature review approach, the study adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology. Relevant literature was gathered from electronic databases such as Google Scholar, ScienceDirect, and Scopus using keywords like "fertility, migration, migrant population, and non-migrant population". The selection process, based on inclusion and exclusion criteria, yielded 17 articles for detailed review. The review of these articles revealed that fertility patterns among migrant and non-migrant populations do not follow a specific or consistent trend. In some regions, migrants exhibit higher fertility rates than non-migrants, while in other areas, the reverse is true. This variability suggests that fertility is a complex phenomenon influenced by multiple interacting factors. Key determinants identified include cultural practices, economic conditions, educational levels, political environments, and demographic characteristics. For instance, migrants from regions with high fertility norms may continue to exhibit high fertility in their new locations, while economic opportunities and educational advancements in the host country might lead to lower fertility rates among some migrant groups. Understanding these nuanced patterns is crucial for policymakers and public health officials as they design interventions and programs aimed at managing population growth and supporting reproductive health. By recognizing the diverse factors that influence fertility, more effective and culturally sensitive strategies can be developed to address the unique needs of both migrant and non-migrant populations.

**Keywords:** Fertility, Migration, Migrant population, Non-migrant population

## Introduction

Population is a group of people who are administratively registered as occupying an area. As time goes by, the population continues to increase, it is even feared that the increase will exceed the required food supply. This is in accordance with Malthus's theory, which states that "The rate of population growth is like a geometric series, while the rate of food growth is like an arithmetic series", meaning that the rate of population growth is faster than the rate of food growth. If the rate of population growth is not suppressed, then in the long term, humans will experience a crisis of natural resources and

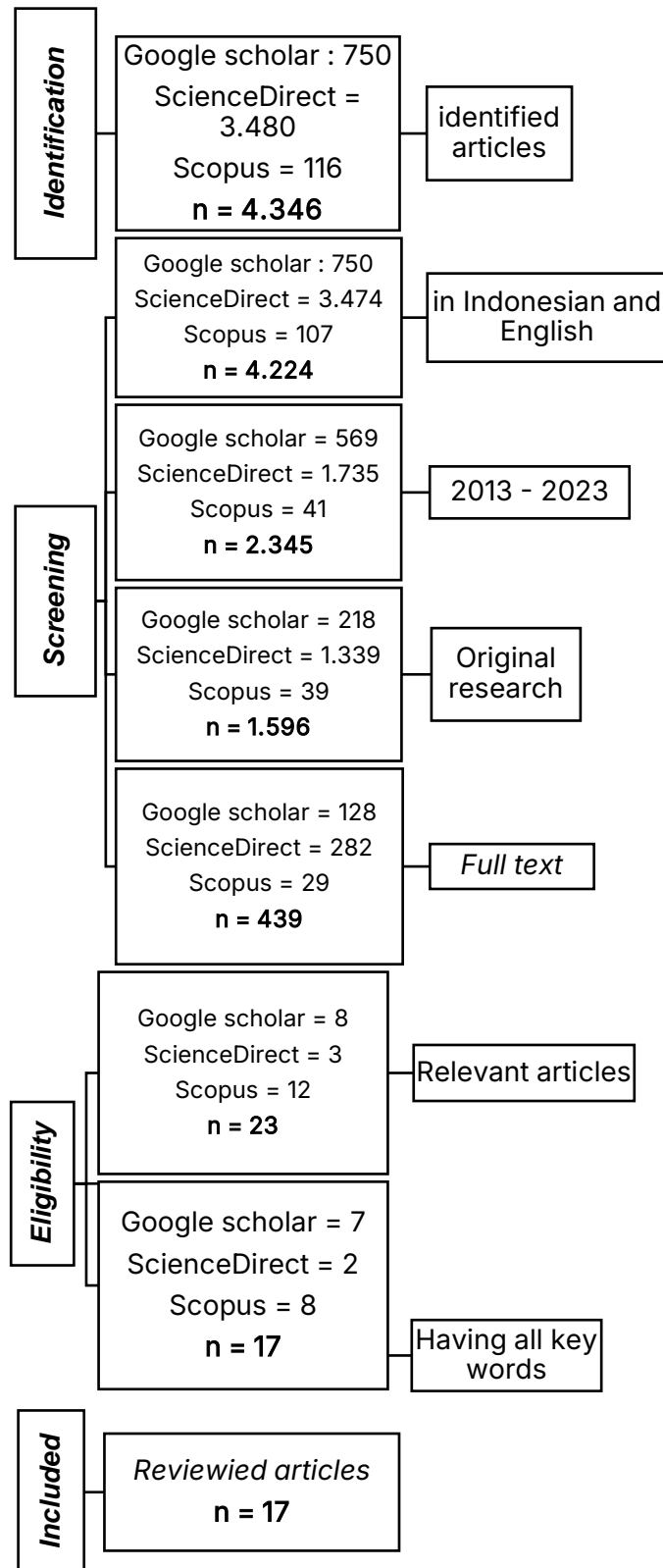
will compete with each other to get them (Suartha, 2016).

Rapid population growth, without being accompanied by good quality, will be a burden on national development (Ramadani, 2022). The high rate of population growth in a country will have a complex impact because it can influence various aspects, starting from economic, social, cultural, political, educational and health aspects. In fact, the impact can cross national borders because in this era of globalization, people can easily migrate from one country to another (Suartha, 2016).

The rate of population growth in a region is influenced by three components, namely fertility, mortality and migration. Fertility increases

the rate of population growth, while mortality decreases the rate of population growth. Meanwhile, migration has two effects, namely that it can increase the rate of population growth if in-migration is greater than out-migration, and

it can reduce the rate of population growth if out-migration is more than in-migration. This shows that the components of fertility and migration both play an important role in increasing the rate of population growth (Sudibia et al., 2013).



**Figure 1** Literature Collection Stage using the PRISMA Method

Fertility is the actual reproductive result of a person or group of women. Fertility levels can be measured by the Total Fertility Rate (TFR). Total Fertility Rate (TFR) is the average number of children a woman gives birth to during her reproductive period. One of the factors that influences fertility is migration, in addition to other factors, such as income, education, age at first marriage, and use of contraception. (Mahendra, 2017).

Migration is the movement of people from one place to another across political/state boundaries or administrative boundaries within a country, with the aim of settling (Dewi et al., 2019). The factors that influence migration are pull factors from the destination and push factors from the place of origin. Pull factors, such as the rapid development of industry and education as well as the desire to foster sustainable extended family relationships at the destination. Meanwhile, push factors, such as the desire to escape from restrictive social and cultural rules, disasters, and economic constraints from the place of origin (Suartha, 2016).

Migration status can affect fertility. The relationship between migration and fertility can be explained by several hypotheses, namely the socialization hypothesis, adaptation hypothesis, selection hypothesis, and disruption hypothesis. The socialization hypothesis shows that migrant fertility is reflected in the dominant fertility during childhood, so that migrant fertility will match fertility in the region of origin and will begin to adjust to fertility in the destination region in the next generation. The adaptation hypothesis suggests that migrant fertility will

resemble destination fertility over time. Selection hypothesis suggests that a certain group's fertility preferences are more similar to fertility at the destination than at the origin. Meanwhile, the disruption hypothesis shows that after migration, migrant fertility will decrease or be low due to disturbing factors (Ekawati et al., 2017).

Based on the description of the problem above, it is necessary to carry out a literature review, in the form of a fertility comparison study between migrant and non-migrant populations to determine the differences in fertility patterns between migrant and non-migrant populations from various regions and the factors that influence them.

## Methodology

This research uses a literature review method that refers to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) method. Literature collection was sourced from the electronic databases Google Scholar, ScienceDirect, and Scopus by including the keywords "Fertility, Migration, Migrants and Non-Migrants". The literature searched was in the form of scientific articles which were analyzed and adjusted to the inclusion criteria and exclusion criteria. Article inclusion criteria are scientific articles published in 2013–2023, using Indonesian-English, in the form of original articles, open access, and available in full text. Meanwhile, article exclusion criteria are articles that are not related to the theme of fertility in migrant and non-migrant populations and do not include all keywords. Based on the inclusion and exclusion criteria, 17 articles were obtained for analysis.

## Results and discussion

**Table 1** Literature Review.

No	Title, year	Research method	Result
1.	Comparative Study of Population Fertility between Migrants and Non-migrants in Bali Province, 2013	Research was conducted qualitatively and quantitatively through structured interviews and observations.	It was found that the average plenary parity (age group for women 45-49 years) for migrants was 2.50 and for non-migrants it was 2.32. The average height of migrants' plenary parity is compared Non-migrants are determined by a lower age at first marriage, shorter duration of breastfeeding, lower participation in family planning programs, lower education level, and a lower proportion of those working. The use

No	Title, year	Research method	Result
			of stable contraceptives among migrants is lower than non-migrants. The ideal number of children among migrants is between 1-6 children, while for non-migrants it is between 1-5 children (Sudibia et al., 2013).
2.	Fertility and Migration: Population Policy for Migrants in Sleman Regency, 2015	Survey research with a quantitative approach.	The fertility rate of migrants in Sleman Regency is greater than the fertility rate of non-migrants. This also means that the increase in TFR in Sleman Regency was contributed more by the migrant PUS group than the non-migrant PUS group because the value was higher. (Arif et al., 2015).
3.	The Influence of Urbanization, Education and Income on Fertility Levels in five Cities of Aceh Province, 2016	The model used is a panel model with an OLS (Ordinary Least Square) approach with the Fixed Effect Model analysis method.	Based on the results of research that has been conducted, it can be concluded that urbanization (URB) has a positive and significant effect on fertility levels in five cities in Aceh, because residents living in urban areas in Aceh have a mindset that is not much different from village residents and villagers who have moved. to the city are rural residents who are poor and have low education so that behavior in the city still has village characteristics, this results in fertility in urban areas continuing to increase along with increasing urbanization (Arialdi & Muhammad, 2016).
4.	Fertilitas Migran dan Faktor yang Memengaruhi Fertilitas di Jawa Barat, 2017	This study uses a quantitative approach, namely secondary data analysis, while the data source used is the 2015 Susenas.	The research results show that there is a tendency for migrants to have higher fertility compared to non-migrants. Meanwhile, socio-economic factors that influence fertility are education, age at first marriage, use of contraception, and main activity (work).(Ekawati et al., 2017).
5.	The Effect of Culture on the Fertility Decisions of Immigrant Women in the United States, 2018	Cultural identification uses data on immigrant women by exploiting variations in the average number of children born by country of origin, age, education level, and employment status.	The results show that the average number of children born in the country of origin is positively related to the number of children born to immigrants living in the US, indicating that culture matters (Marcén et al., 2018).

No	Title, year	Research method	Result
6.	The Fertility of Internal Migrants to Kinshasa, 2017	Identify migrant characteristics that may explain fertility differences between migrants and non-migrants in terms of fertility and other fertility-related characteristics. In addition, to find information about fertility based on duration of residence, number of lifetime moves, and age at first migration	Migrants have significantly higher fertility rates than permanent residents of Kinshasa (non-migrants), but the differences are relatively small. This higher fertility is partly due to patterns of contraceptive use among migrants (Anglewicz et al., 2017).
7.	A Comparative Study of Fertility Preferences of Nigerian Female Migrants and Non-migrants in Benin City, Nigeria. 2018	Data were collected from 760 migrants and non-migrants through stratified sampling techniques and analyzed using descriptive statistics, Chi-square, correlation, and ordinal regression.	The fertility preferences of non-migrants are lower (average 3.89 children) compared to migrants (4.14). Migrants who stay abroad longer are 1.06 times more likely to choose a larger family size compared to those who stay for a shorter period of time (Peter & David, 2018).
8.	Comparing the Fertility of Ghanaian Migrants in Europe with Nonmigrants in Ghana, 2018	Researchers used 2 stages to identify the problem, the first was to identify discrete time hazard model estimates of first births to evaluate whether the timing of first births was influenced by migration, the second was to apply Poisson regression techniques to test differences in complete fertility.	It was found that Ghanaian migrants delayed first birth compared with nonmigrants. The largest differences occur at ages 20 to 24 years for women and 20 to 29 years for men. Findings regarding complete fertility show that migrants have fewer children compared to non-migrants and this difference reduces significantly if we take into account their educational level (Wolf & Mulder, 2019).
9.	Impact of internal migration on fertility in Cotonou, Benin Republic, 2018	This study used data from the 2012 Benin Republic Demographic and Health Survey and focused on married women aged 15-49 years and living in	The results show that migrants adapt gradually to the fertility patterns of non-migrants. This gradual adaptation is compounded by the relative selectivity of migrants who have similar fertility preferences to non-migrants. Finally, migrants who recently moved for work or school reasons had the



No	Title, year	Research method	Result
		Cotonou (n=722). Tobit regression was used for multivariate level analysis.	lowest number of births over the past five years, supporting the disruption hypothesis (Banounin et al., 2018).
10.	Comparative Study of Migrant and Non-migrant Fertility in Singaraja City, 2017	This research was conducted qualitatively and quantitatively. The sample for this study was 10% migrant PUS (62 people) and 10% non-migrant PUS (61 people) taken using proportional random sampling. Differences between migrant and non-migrant fertility were analyzed using independent sample t-tests.	There is a significant difference between the fertility of migrants and non-migrants in Singaraja City (t-test=4.236, at a significance level of 0.05%). The differences in these characteristics lie in the number of children and the birth distance between children. The number of children owned by migrant PUS is higher than that of non-migrant PUS. The majority of children in PUS are migrant, namely 3-4 children, while in PUS non-migrant, namely 1-2 children. The birth interval between children in migrant PUS is irregular, while the birth interval between children in non-migrant PUS is regular, namely 4-6 years. These two things are because knowledge and awareness of family planning among non-migrant PUS is still low, and vice versa (Haribaik et al., 2017).
11.	The Influence of Socio-Economics and Demography on Fertility Levels in West Denpasar, 2021	This research was carried out quantitatively with path analysis.	The number of children of migrant residents is less than the number of children of non-migrant residents because migrant residents tend to use long-term contraceptives due to low socio-economic factors (difficulty getting work and the high cost of living in urban areas) (Pranata & Sudibia, 2021).
12.	The Influence of Migration Status, Employment, Education, and Economic Background on UKP and Fertility of Women of Childbearing Age, 2022	This research was carried out quantitatively with data analysis, in the form of descriptive statistics and inferential statistics, consisting of path analysis and Sobel test. The sample size was 123 WUS with purposive sampling and accidental sampling techniques.	Migrant WUS have higher fertility, amounting to 0.310 people compared to non-migrant WUS. Migrant WUS have a lower age at first marriage, amounting to 1.092 times compared to non-migrant WUS. Low marriage age is influenced by low education level, informal employment status, and high economic background (Jayakusuma & Sudibia, 2022).
13.	Increased Number of Live Births by Migrant Mothers Shows Areal	This research was conducted qualitatively by	Over the last 3 decades (1990-2020), the number of live births to migrant residents increased from 16,154 (1.31%) in 1990 to

No	Title, year	Research method	Result
	Inequality in Japan: A Descriptive Study, 2023	describing live birth data for Japanese mothers and migrant mothers. This research uses vital statistics data from the Ministry of Health, Labor and Welfare (MHLW) data from Japan, and foreign population statistics data from the Immigration Services Agency (ISA) of Japan.	26,517 (3.08%) in 2020, while the number of live births to native Japanese residents decreased drastically from 1,212 ,890 in 1990 to 83,115 in 2020. The increase in the number of live births was contributed by an increase in the number of live births to migrant mothers whose husbands were not Japanese, which increased from 46.2% in 1990 to 70.9% in 2020. Births living by migrant mothers, concentrated in four prefectures, namely Tokyo, Aichi, Kanagawa and Osaka. The increase in the number of live births is due to high income levels and local communities that can help with the language and cultural barriers of migrant mothers in the process of pregnancy and delivery (Nishino et al., 2023).
14.	Ethnic Fertility Behavior and Internal Migration in Nigeria: Revisiting the Migrant Fertility Hypotheses, 2020	This research was carried out quantitatively with data analysis using the chi-square test and Poisson regression.	The majority of migrants have a lower Children Ever Born (CEB) than non-migrants in the migration destination area. This is because migrants bring aspects of cultural and social values from their area of origin. Low CEB is influenced by high levels of education and wealth status (Odimegwu & Adewoyin, 2020).
15.	Migrants' Fertility in Italy: A Comparison Between Origin and Destination, 2020	This research was conducted quantitatively with data analysis using the Kaplan–Meier method	The socialization hypothesis applies to migrant WUS from Morocco because the fertility rate remains the same as the country of origin over time. The fertility of migrants is higher than the fertility of non-migrants in Italy. This is because they adhere to a patriarchal culture. Meanwhile, the adaptation hypothesis applies to migrant WUS from Albania, because over time, their fertility rate decreases, until it resembles the fertility of the Italian non-migrant population. This is because they uphold gender equality. Meanwhile, WUS migrants from Ukraine experienced disruption because since migrating to Italy, their fertility has continued to decline. This is because the majority of migrants are more than 30 years old (Impicciatore et al., 2020).
16.	Fertility Differences between Migrants and Stayers in a Polygamous	This research was carried out quantitatively with data analysis	External migrant women and men to Europe have fewer children than non-migrants in Senegal, Africa during their reproductive years. This is because prolonged separation

No	Title, year	Research method	Result
	Context: Evidence from Senegal, 2020	using Poisson regression.	of a couple makes fertility recovery difficult or even impossible. Polygamous migrant men have more children than monogamous migrant men. However, polygamous migrant men have fewer children than polygamous non-migrant men because of difficulties in restoring their fertility (Kraus & González-Ferrer, 2023).
17.	Does Emancipation Matter? Fertility of Chinese International Migrants to the United States and Nonmigrants during China's One-child Policy Period, 2021	This research was conducted quantitatively with data analysis using logistic regression.	Chinese WUS who migrate to the USA have higher fertility than non-migrant WUS in China. This is because China implements the one child policy for population control. The chance of migrant WUS experiencing a second birth is 3.4 times higher than migrant WUS. Apart from that, fertility rates also increase with increasing time of residence in the USA, where migrant WUS are 14 times more likely to give birth again after 3 years of residence than non-migrant WUS (Nie & Baizan, 2021).

#### *Model of the Relationship between Migration and Fertility*

Fertility among migrant and non-migrant populations does not form a particular pattern. In some areas, the fertility of migrants is higher than that of non-migrants, and vice versa. Higher fertility among migrants occurs in migrants in Bali (migrant parity 2.5; non-migrants 2.32), Sleman, West Java, Aceh, Japan, the United States, Italian immigrants from Morocco, and immigrants from Kinshasa, Congo. Meanwhile, lower fertility among migrants occurred among migrants in Benin City, Nigeria (migrant parity 3.89; non-migrants 4.14), Ghana, West Denpasar, Bali, Italian immigrants from Ukraine, and immigrants from Cotonou, Benin Republic. In fact, there are migrants' fertility that reflects the fertility of their destination, such as United States immigrants from China, Italian immigrants from Albania, and immigrants from Cotonou, Benin Republic.

The high and low levels of fertility among migrants and non-migrants in a region refer to three models of the relationship between migration and fertility, namely the socialization model, adaptation model and disruption model.

##### 1. Socialization Model

This model shows that migrants' fertility preferences correspond to fertility in their place of origin (Ekawati et al., 2017). This is influenced by the culture brought from the place of origin and influenced by the characteristics of the educational level and economic conditions of migrants.

This model is experienced by many migrants, both national and international migrants. National migrants who experience this model are migrants who urbanize in five cities in Aceh Province. Fertility among migrants is higher than non-migrants because they still carry the culture from the village in their mindset to have children. Apart from that, the high fertility of migrants is also influenced by their low level of education and economy (Arialdi & Muhammad, 2016).

International migrants who experience this model include United States immigrants, Italian immigrants from Morocco, Japanese immigrants, Nigerian immigrants, and immigrants from Kinshasa, Congo. Preferences for fertility levels among migrants in these countries are influenced by culture. Moreover, Italian immigrants from Morocco still adhere to the patriarchal culture of their region of origin, so that fertility levels remain similar to their region of origin, and



are higher than their destination region, namely Italy (Impicciatore et al., 2020). Similar to Italian immigrants from Morocco, Japanese immigrants also have the same preferences as their region of origin, where fertility preferences are higher than in Japan. This is because cultural factors from the area of origin are still strongly attached, as evidenced by the formation of a community of fellow migrants who help each other with cultural and language barriers during pregnancy and childbirth in Japan. (Nishino et al., 2023). Apart from being caused by cultural factors, as well as the socialization model of national migrants, the fertility rate of Nigerian immigrants is lower than non-migrants, due to high education and economics (Odimegwu & Adewoyin, 2020).

### 2. Adaptation Model

This model shows that migrants' fertility preferences will tend to adjust to the fertility of their destination over time (Ekawati et al., 2017). Migrants who experience this adaptation model are United States immigrants from China, Italian immigrants from Albania, and immigrants from Cotonou, Benin Republic. Migrants in this country experience a model of adaptation because they do not bring the culture of their region of origin. Moreover, for US immigrants from China, they do not bring their culture of origin, so their fertility level preferences adjust to their destination, namely the United States. They tend to have more children than non-migrants (Chinese residents), because they have escaped the one child policy of their home country (Nie & Baizan, 2021).

### 3. Disruption Model

This model shows that post-migration migrants' fertility rate preferences will decrease or be low due to disturbing factors (Ekawati et al., 2017). This is influenced by age structure, education and employment. This model is experienced by immigrants from Cotonou, Benin Republic. Meanwhile for immigrants from Cotonou, Benin Republic, the fertility rate decreased in the first 5 years after migration because the migrants had the aim of focusing on education and work first (Banougnin et al., 2018).

### *Factors Influencing Higher Fertility Rates in Migrants*

#### 1. Cultural Model

Higher fertility in Italian immigrants from Morocco, urbanization migrants in Aceh, and immigrants in Japan, is caused by cultural factors. They brought culture from their place of

origin. The culture possessed by Italian immigrants from Morocco is a patriarchal culture. Patriarchal culture is a social structure in society that prioritizes men over women in various aspects, including education, so that it is more difficult for women to gain access to self-development, and can even end in early marriage. This early marriage has the potential to increase fertility because couples of childbearing age have a longer reproductive period to utilize (Fushshilat & Nurwati, 2021).

In addition, this patriarchal culture will inhibit participation in family planning programs by couples of childbearing age because of the view of the importance of having a son. This will increase fertility and tend to lead to the formation of large families, because they will continuously increase their birth rate, until they have sons. (Herawati & Purnomo, 2015).

The culture brought by urbanization migrants in Aceh is the culture of their home villages, such as the culture of early marriage which is influenced by low educational and economic levels. This culture of early marriage is caused by family and community thoughts, such as parents' fear of their child if they become old maids and there is pride from parents if their child is immediately proposed to and immediately reduces the burden and responsibility of parents (Yuniarti & Setiowati, 2015).

Meanwhile, the culture inherent in immigrants in Japan is a culture of helping each other. In Japan, a community of immigrants has been formed to help each other during pregnancy and childbirth despite language and cultural barriers. This can increase their self-efficacy in the process of pregnancy and childbirth, without any fear. This high self-efficacy has a positive effect on migrant fertility. Meanwhile, the culture inherent in immigrants in Japan is a culture of helping each other. In Japan, a community of immigrants has been formed to help each other during pregnancy and childbirth despite language and cultural barriers. This can increase their self-efficacy in the process of pregnancy and childbirth, without any fear. This high self-efficacy has a positive effect on migrant fertility (Nishino et al., 2023).

#### 2. Sosio Economic Factors

Higher fertility among urbanization migrants in Aceh is due to low income. This is because income has an indirect negative effect

on fertility. The lower the income of a couple of childbearing age, the higher the fertility. This is influenced by education, cultural age at marriage, and low participation in family planning programs (Arialdi & Muhammad, 2016).

### 3. Education Factors

The higher fertility of migrants in Bali, West Java and Aceh is caused by lower education than non-migrants. Other research shows that there is a negative relationship directly or indirectly through age at first marriage on fertility. The higher the education of women of childbearing age, the longer it will take to complete that education. These risks delaying the age of first marriage, especially if after education they choose to focus on work. The higher the age at first marriage, the lower the fecundity of a woman's ability to give birth. Vice versa, so that low education risks increasing a woman's fertility (Sinaga et al., 2017).

### 4. Political Factors

The higher fertility of Chinese emigrants to the United States than non-migrants in China is because they have escaped the policy in their place of origin, namely the one child policy. In their destination, namely the United States, there is no policy to limit the number of children, either for the native population or the migrant population, so over time they adapt to the fertility preferences of the United States (Nie & Baizan, 2021).

The one child policy aims to reduce China's huge population. The implementation of this policy has succeeded in reducing the TFR of the Chinese population, from 2.63 births per woman in 1980 to 1.61 births per woman in 2009. However, this decrease in TFR was not only influenced by policy, but there were other factors that influences it, such as economic growth and high levels of education. The economic growth that occurred in China contributed to the decline in TFR. This economic growth is due to the population's culture of hard work which tends to pursue the family's economic prosperity in order to invest in the future of their children's education (Sinaga et al., 2017).

### 5. Demography Factors

Demographic factors that influence higher fertility rates among migrants, namely lower age at first marriage and low knowledge and participation in the Family Planning (KB) program. The age at first marriage is lower among migrant residents compared to non-migrants

in Bali and West Java, causing higher fertility among migrant residents. This is in accordance with research conducted by Sinaga et al. (2017), which shows that age at first marriage has a direct influence on fertility. The age at first marriage has a negative influence on fertility. If the age at first marriage is lower, then fertility will be higher. This is because couples of childbearing age who marry at a younger age will have a longer time to carry out the reproductive process, so they are at risk of having a higher birth rate (Sinaga et al., 2017).

Apart from the age at first marriage, the higher fertility among migrants in Bali, West Java, and Kinshasa, Congo, is due to low knowledge and participation in family planning so that they tend to reproduce without planning and control, including not using contraception during sexual intercourse. The results of other studies show a relationship between the use of contraceptives and fertility. Women who use contraception will limit the number of children born, resulting in low fertility. Vice versa, women who do not use contraception cannot limit the number of children born, so their fertility is high (Adiputra & Septiani, 2017).

### *Factors Influencing Lower Fertility Rates in Migrants*

#### 1. Economic Factors

The lower fertility rate of migrants in Denpasar, Bali is caused by indirect factors, in the form of low economic conditions. This low economy is because it is difficult for them to find work. The difficulty of getting a job is accompanied by the high cost of living in their destination, so they choose to control their fertility in order to survive and minimize the problems that will occur. (Wijayanti, 2022).

In contrast to migrants in Denpasar Bali, immigrants in Nigeria have lower fertility than non-migrants due to high economic conditions. This is influenced by other factors, such as a high level of education and decent work, so that the use of their reproductive period tends to decrease due to the process of completing their studies and focusing on their career. (Odimegwu & Adewoyin, 2020).

#### 2. Education Factors

Lower fertility rates among immigrants in Nigeria, due to higher education. This causes the opportunity to utilize their reproductive period to be reduced, resulting in low fecundity of WUS

(Odimegwu & Adewoyin, 2020). A similar thing was experienced by immigrants in Cotonou, Benin Republic. These immigrants have lower fertility than non-migrants due to disruption factors in the first five years of migration, namely the process of completing education (Banounin et al., 2018). This focus on completing higher education aims to have a decent job with a high income. Like the population in developed countries, the higher the level of education and income, the lower the fertility, because they tend to choose the quality of children compared to the quantity of children (Arialdi & Muhammad, 2016).

### 3. Demography Factors

Demographic factors that influenced lower fertility for migrants in Denpasar, Bali, are the high use of Long-Term Contraceptive Methods (LTMs). The reason is because of low economic conditions caused by difficulties of finding a job, so LTMs were chosen as a solution to minimize additional expenses if they have another children (Wijayanti, 2022).

## Conclusions and Recommendation

Fertility among migrant and non-migrant populations does not have a specific pattern. The high and low levels of fertility among migrant populations in a region refer to the socialization model, adaptation model, and disruption model. Factors that influence higher fertility in migrant populations are culture, economics, education, politics, and demographics. Meanwhile, the factors that influence lower fertility in migrant populations are economics, education and demographics. Factors that have a direct influence on the high and low levels of fertility among migrants are demographic factors, especially age at first marriage and participation in family planning programs.

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