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ARTICLES



Recent Fertility Change & Differentials among Kuwaitis Some Implications for Future Migration

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Abstract

Objectives: The main objective of the current paper is to analyze the trends and patterns of fertility from 2009-2017. Also, related objectives are to compare the annual number of births and Total Fertility Rates (TFRs) provided by the Ministry of Health and PACI. The second objective is to reflect on the implications of the above trends and patterns on the demand for domestic and other workers in future population growth and migration.

Method: Using the annual publications from the Ministry of Health and the Central Statistical Bureau fertility among Kuwaiti nationals was studied. PACI provided the mid-year counts for each year from 2009-2017 for all Kuwaiti women between 15-49 age group, in order to obtain the denominator for calculating age specific, and total fertility rates for each subgroup was calculated according to the governorate of residence was calculated.

Results: Consistent and linear decline in the TFR was noted in the last two decades by almost 2 children. During the last decade, the TFR declined further by 0.6 points, from 3.7 in 2009 to 3.1 in 2017. Thus, a fairly rapid fertility decline is occurring in the country. However, the TFR is still about one child higher than replacement level fertility. In age-specific fertility rates (ASFRs), the largest decline occurred

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at ages 20-29. A comparison of governorate-level ASFRs shows a clear gap among the governorates.

Conclusion: The trends in fertility differentials according to governorate are likely to have far-reaching implications on the relative composition of various subgroups in the country. Declining fertility may also affect future migration to Kuwait.

Keywords: Fertility differentials, Migration, Kuwait, Birth rates.

Introduction

Among the demographic transitions the world has experienced during the last six to seven decades, decline in fertility is a major one. Almost all countries have lower fertility today than they did at the end of the Second World War. Over the last three decades, fertility has declined in most of the developing countries. Asia was the continent that experienced the greatest decline of (-52) percent (Bongaarts, 2001). In line with the rest of the world, the Gulf Cooperation Council (GCC) countries are going through consistent and persistent declines in fertility. In the last two decades, Kuwait, Oman and Iran effected fertility declines which were more rapid than the tempo of all of the Pacific Rim societies & the BRIC economies (Eberstadt, 2012). However, Eberstadt's analysis relies on aggregated data for nationals and non-nationals in the case of Oman and Kuwait, the thing that tends to underestimate the level of fertility among the citizens. Recent analysis of the total fertility rates (TFRs) of Gulf nationals by Fargues and BelAir (2018) indicates that fertility of Saudi nationals, the largest GCC country, declined from more than 7 children per woman in 1985 to only 2.7 in 2016, according to Census estimates. The fertility of Gulf nationals in 2014-15 was 4 or fewer children in each of the six countries.

In Kuwait, during the 1970s the combined total fertility rate of Kuwaiti nationals and non-nationals was about 7.0, but by 1985 it had dropped to 4.4 (Kohli & AlOmair, 1993). When tabulated separately for the two groups, the total fertility rate for nationals declined from

7.5 in 1965 to 4.0 in 2006; the corresponding decline for non-Kuwaitis was from 7.3 to 1.2 for the same period (Shah, 2010). The marked difference in the decline for the two groups is explained largely by the changing nature of the non-Kuwaiti population in which unaccompanied male workers began to predominate in the mid-1970s, with only a few migrant families contributing to the fertility level of the country. Prior to this, the migrants comprised largely of families who bore their children in Kuwait. Furthermore, prior to the Iraqi Invasion of Kuwait in August 1991, the Jordanian/Palestinian subgroup and their families, formed the largest subgroup of non-nationals comprise 39% of the non-Kuwaiti population (Annual Statistical Abstract, 1980). After liberation, most of them left Kuwait with their families, leaving many government schools empty. Therefore, a disaggregated analysis of the two groups is essential to understand the dynamics that underlie fertility change, or its implications for future population growth or migration. While it is important to understand and chart the fertility change among both groups, a meaningful analysis of the level for the non-nationals is subject to several limitations, including the fact that even though a majority of the male as well as female migrants are married, they are frequently not accompanied by their families due to the restrictions by the government on such mobility. Hence, they typically bear their children in the country of origin, not in Kuwait. Thus, the level of non-Kuwaiti fertility is only partly reflective of the overall fertility level of this group. The present paper therefore focuses primarily on the fertility levels and differentials among Kuwaiti nationals.

Several factors have played a role in the declining fertility trend of Gulf nationals; a major one is the rising level of female education, which has in turn enabled and encouraged their participation in the workforce. The increase of Kuwaiti women, who comprise of 2/3 of University students, also led to a delay in marriage amongst the younger generation. In most of GCC countries, the percentage of illiterate women among nationals aged 15 and over had declined to less

than 10 % in the current decade; and more than half of the women in most countries had attained above high school education. In addition, the rates of labor force participation had increased in all the six countries but varied from low of about 18% in Saudi Arabia to high of 48% in Kuwait this decade (Shah et al., 2018).

Previous research from Kuwait showed that fertility was higher among Sunni Muslim women, those of Bedouin ethnicity, those in a consanguineous marriage, and those with higher educational level, occupation, age at marriage, and socioeconomic status (Al Kandari, 2007). Perceived costs and benefits of children were noted by Bulatao & Lee (1983) as significant determinants of fertility in different countries. Similarly, Shah and Nathanson (2004) found the perceived costs and benefits of children were important variables in fertility decision making by Kuwaiti parents. The latter authors reported that favoring large family values was the only significant predictor of (higher) desired and achieved fertility in Kuwait, and the need for children as a social and national capital was the most important driving force behind fertility behavior and desire. Khraif et al. (2017) in their study on university women in King Saud University, found that education, explained as the 'best contraceptive', played a vital role in fertility decline by raising the age at marriage, lowering the ideal family size and increasing contraceptive use. AlKazi (2011) found that though economic reasons have influenced the desired family size, amongst tribal origin respondents, children are also a social capital. In the UAE, Alnuaimi and Poston (2009) found that polygyny (i.e., marriage to more than one wife concurrently) was associated positively with fertility.

Though many studies on the causes of fertility level changes seek to link them directly to socioeconomic or cultural transitions, this study took the approach of Davis and Blake (1956) in *Social Structure and Fertility: An Analytical framework*. They discussed the different variables affecting fertility as 'General' and 'Intermediate' meaning that some variables like education (General) can also have intermediate influences such as delay in marriage or later entry into the labour force can influence family size. As Bongaarts, 'The level of education is a socioeconomic factory that is frequently negatively

related to fertility' (1978, p.105). In other words, the behavioral factors that are influenced by socioeconomic and cultural variables are called by Davis and Blake as 'Intermediate fertility variables'.

Method

Using the annual publications from the Ministry of Health and the Central Statistical Bureau fertility among Kuwaiti nationals was studied. PACI provided the mid-year counts for each year from 2009-2017 for all Kuwaiti women between 15-49 age group, in order to obtain the denominator for calculating age specific, and total fertility rates for each subgroup was calculated according to the governorate of residence.

Fertility Data in the Gulf, Especially Kuwait

An important factor that has hindered systematic fertility analysis in the region is the absence of routinely administered fertility surveys, and weak vital registration systems, until recently. An additional problem pertains to the unique population composition of the Gulf countries, consisting of exceptionally large proportions of non-nationals, ranging from about one-third in Saudi Arabia to almost 90% in the UAE and Qatar. As mentioned earlier, many of the non-nationals (i.e., expatriates) are in the Gulf temporarily and their spouses, barring any sizeable contribution to Gulf fertility levels, do not accompany the majority of these workers. Many international agencies and scholars, however, do not recognize the overwhelming impact of the skewed population composition on fertility rates and tend to use aggregated data for analyzing fertility of these nations, a highly erroneous and misleading practice indeed (Shah, 2017).

After gaining independence in 1961, Kuwait was among the first Gulf Cooperation Council (GCC) countries to establish routine systems of data collection on the population and vital events including births and deaths. An extensive network of hospitals and clinics was established and in a matter of few years, most births started taking place in such facilities, where they could be recorded easily. By 1987, almost 99% of all births occurred in a medical facility (Shah and Shah, 1990).

A birth notification form is filled, manually, at the place of birth for each

live and stillbirth. A regular and well-established system of birth notifications has enabled the country to reach a very high level of accuracy in capturing all the events that occur in a calendar year. A special study aimed at assessing the completeness of the birth recording, using two independent systems of data collection, showed that more than 99% of all births occurring in hospitals were recorded by the Ministry of Health (MOH) (Shah and Khalaf, 1996) thus allowing an accurate reconstruction of the transition in fertility levels during the last few decades.

Kuwait was chosen as the country to be studied due to the readily available data and the access given by the Public Authority of Civil Information (PACI). They also provided longitudinal data for the research. Being in Kuwait, the authors found it was the best choice not only to provide information for future research but also the lack of similar data in other GCC countries.

Fertility Data in The Population Register: Kuwait

During the 1980s, an electronic system designed to register all residents of Kuwait along with their major demographic and social characteristics was established, under the Public Authority for Civil Registration (PACI). Each Kuwaiti national and non-Kuwaiti (except those on visit visa) was obligated to procure a civil identification card, with a unique identification number, that soon became the most important document for all public transactions such as using a health facility, opening or operating a bank account, remitting money, or buying a car etc. As a part of the civil registration system, the PACI also established a database of all births for which a birth certificate is issued by the Ministry of Health.

The organizational set up of this system is as follows. The Ministry of Health has five regional departments that issue a birth certificate to the father of the baby who approaches it with a copy of the birth notification form issued by the hospital where the birth occurred. The PACI maintains a constant presence at each of the above departments. The father must produce his (as well as the mother's) civil ID card, issued by PACI, to obtain the birth certificate. The comprehensive database of the PACI has information on the

address and nationality information of the father as well as the mother. By matching the ID card of the father and mother with the existing information in its database, the PACI creates its database for all live births, instantaneously as the birth certificate is issued. PACI then tabulates and publishes selected information annually, in soft and hard copy. The routine tabulations from the PACI database include tables such as number of births by area of residence, sex and Nationality of birth; births by education of mother and education of father; births by nationality and religion, etc.

The main objective of the current paper, using the data from PACI, is to analyze the trends and patterns of Kuwaiti fertility from 2009-2017, according to the governorate of residence, as well as nationality of mother and father. A related objective is to compare the annual number of births and Total Fertility Rates (TFRs) provided by the Ministry of Health and PACI. The second main objective is to reflect briefly on the implications of the above trends and patterns on the demand for domestic and other workers in future.

Data for This Paper

PACI was requested to provide the authors with a soft copy of the tabulations of the annual number of live births in its database for the years 2009-2017, for all Kuwaiti births, cross tabulated by the region of residence and the mother and father's nationality status, in terms of being a Kuwaiti citizen or not.

PACI was also requested to provide the mid-year counts for each year from 2009-2017 for all Kuwaiti women age 15-49 according to each of the above characteristics, in order to obtain the denominator for calculating age specific, and total, fertility rates for each subgroup, by year.

It should be noted that a birth is defined by PACI, and other concerned agencies, as "Kuwaiti" if the father is a Kuwaiti national, regardless of the nationality of the mother. In case of women married to non-Kuwaiti men, the birth is counted as non-Kuwaiti, and categorized according to the nationality of the father. A woman with non-Kuwaiti nationality is eligible to become a Kuwaiti national, following certain rules and guidelines. For example, the couple should

have been married for a minimum number of years. If they have children, that may help speed up the process. If a Kuwaiti woman marries a non-Kuwaiti, however, the husband is not entitled to a Kuwaiti nationality. Furthermore, the children from such a marriage carry the nationality of the father, and the mother cannot pass on her Kuwaiti nationality to them.

The tabulations for each year received from the PACI suffered from some basic problems. The first one related to the presence of missing data. Each table had a number of missing cases where the characteristic in question was shown as 'not stated' a statistical adjustment for all missing data was made by re-allocating the missing cases to the various categories using the known distribution.

Another problem pertained to the use of Kuwaiti women in the denominator. As mentioned above, the nationality of a child is assigned based on the father's nationality, not the mothers. Thus, some children were borne by non-Kuwaiti mothers but for Kuwaiti fathers. Thus, a subset of the non-Kuwaiti women are potentially susceptible to giving a Kuwaiti birth and should therefore be included in the denominator. However, the composition of non-Kuwaiti women is far too diverse and does not provide a straightforward or reliable way of including non-Kuwaiti women with the relevant characteristics in the denominator. Therefore, the denominator used for calculating Kuwaiti fertility is imperfect.

After re-allocating the missing data, we calculated the age-specific and total fertility rates for each year from 2009-2017, according to the governorate of residence. Analysis was conducted according to the age specific and TFRs. The TFR is a measure of the number of births per woman in a population, and is calculated as follows (Yusuf, et al., 2014):

$$TFR = \sum_{i=15}^{49} f^{i,t-t+1}$$

$$\sum_{i=15} f^{i,t-t+1}$$

$f^{i,t-t+1}$ is the fertility rate for females aged i , during year t

Results

We compared the number of births that took place each year according to the PACI database with the numbers published annually by the Ministry of Health, as shown in Table 1. Ideally, it is expected that a birth certificate would be issued for each birth for which a notification form is filled at the hospital. Thus, the number of births captured by the MOH notification system, the birth certificate department of MOH, as well as the PACI birth database should be identical. We found that for the years 2009-2015, where we were able to compare the information from both the sources, the MOH data reported a higher number of births than the PACI database, for all the years except 2010. The deficit in the PACI database ranged from 71 births to almost 800 births during 2009-2015. Why is this so? A partial explanation for the above could be the occurrence of infant deaths, especially during the neonatal period, since such births are unlikely to have been registered in the PACI database. In 2015, the last year for which MOH data are publicly available, a total of 229 infant deaths occurred, 153 of them in the first 27 days after birth (MOH, 2015), and were probably not registered in the PACI database. Another possible explanation may be the delayed registration of births. Finally, errors in the MOH notifications or the PACI could result in the observed discrepancies. Despite the above discrepancies, however, the TFR differed only marginally, usually by about 0.1 or 0.2. Thus, one can make confident conclusions about the level of fertility in Kuwait. It is also noteworthy that both sources indicate a consistent and linear decline in the TFR.

Table 1

Trends of Total Fertility Rates (TFR) of Kuwaiti nationals from Ministry of Health (MOH), 1995-2015 and comparison with PACI Database (PACI), 2009-2017

| Year | # Live Births (MOH) | TFR (MOH) | # Live Births (PACI) | TFR (PACI) |
|------|---------------------|-----------|----------------------|------------|
| 1995 | | 5.3 | - | - |
| 2000 | | 4.3 | - | - |
| 2005 | | 4.1 | - | - |
| 2009 | 32,979 | 3.9 | 32,591 | 3.7 |

Cont. Table 1

Trends of Total Fertility Rates (TFR) of Kuwaiti nationals from Ministry of Health (MOH), 1995-2015 and comparison with PACI Database (PACI), 2009-2017

| Year | # Live Births (MOH) | TFR (MOH) | # Live Births (PACI) | TFR (PACI) |
|------|---------------------|-----------|----------------------|------------|
| 2010 | 33,687 | 3.7 | 33,851 | 3.7 |
| 2011 | 33,099 | 3.7 | 33,028 | 3.6 |
| 2012 | 33,993 | 3.6 | 33,263 | 3.5 |
| 2013 | 33,320 | 3.6 | 32,764 | 3.4 |
| 2014 | 34,659 | 3.5 | 33,861 | 3.4 |
| 2015 | 33,581 | 3.4 | 33,034 | 3.2 |
| 2016 | - | - | 33,004 | 3.2 |
| 2017 | - | - | 33,231 | 3.1 |

In the last two decades from 1995 to 2015, the TFR declined from 5.3 to 3.4; by almost 2 children, as shown by MOH data (Table 1). During the last decade, the TFR declined further by 0.6 points, from 3.7 in 2009 to 3.1 in 2017, according to PACI data. Thus, a fairly rapid fertility decline is occurring in the country. However, the TFR is still about one child higher than replacement level fertility.

Table 2 shows the relative percentages of births where the father or both parents were Kuwaiti nationals, during 2009-2017 (PACI). In about 85% of the cases, the mother as well as the father of the newborn were Kuwaiti nationals. However, about 13-15% of births occurred to women who were of some nationality other than Kuwaiti, but their husband was a Kuwaiti national. These births were therefore counted as Kuwaiti since the nationality status of the newborn is determined according to the nationality of the father, not the mother.

Table 2

Number of births where both parents are Kuwaiti nationals or mother is a non-Kuwaiti national, 2009-2017

| Year | Both father and mother are Kuwaiti nationals | Mother is non-Kuwaiti national | Total Kuwaiti Births (i.e., father is Kuwaiti national) | Percent of births where mother is non-Kuwaiti |
|------|--|--------------------------------|---|---|
| 2009 | 28,278 | 4,313 | 32,591 | 13.2 |
| 2010 | 29,015 | 4,836 | 33,851 | 14.2 |
| 2011 | 28,072 | 4,956 | 33,028 | 15.0 |
| 2012 | 28,102 | 5,161 | 33,263 | 15.5 |
| 2013 | 27,631 | 5,163 | 32,794 | 15.7 |
| 2014 | 28,629 | 5,232 | 33,861 | 15.5 |
| 2015 | 28,550 | 4,484 | 33,034 | 13.6 |
| 2016 | 28,433 | 4,571 | 33,004 | 13.8 |
| 2017 | 28,850 | 4,381 | 33,231 | 14.4 |

Governorate Level Differences

Kuwait is divided administratively into six subdivisions, or governorates. The TFR declined consistently and in an almost linear fashion in each of these governorates from 2009- 2017, as shown in Table 3. However, there are large and persistent differences in the TFR of various governorates. Capital and Hawally governorates had the lowest TFR in 2009 (about 3.0) while Al-Ahmadi and Al-Jahra had the highest (about 4.5); the two groups differing by about 1.5 children. While both sets of governorates experienced a steady and almost linear decline, the gap in the fertility level persisted. Thus, in 2017, Capital and Hawally had a TFR of about 2.4, while Al-Ahmadi and Al-Jahra had a TFR of about 3.8, a difference of 1.4 children. The fertility rates for the remaining two governorates, Al-Farwaniya and Mubarak Al-Kabeer, were at levels between the high and low extremes.

Table 3

Total fertility rates based on all births where father is Kuwaiti, 2009-2017 and those births where both parents were Kuwaiti, 2017

| All births where the father is Kuwaiti, by governorate | | | | | | | Total |
|--|---------|---------|-------------|----------|--------------------|----------------------|-------|
| Year | Capital | Hawally | Al-Ahmad-di | Al-Jahra | Al-Farwan- niya | Mubarak Al-Kabeer | |
| 2009 | 3.061 | 3.004 | 4.507 | 4.522 | 3.936 | 3.473 | 3.725 |
| 2010 | 2.971 | 3.102 | 4.594 | 4.766 | 3.935 | 3.506 | 3.779 |
| 2011 | 2.867 | 2.909 | 4.370 | 4.607 | 3.858 | 3.384 | 3.624 |
| 2012 | 2.775 | 2.845 | 4.263 | 4.603 | 3.784 | 3.366 | 3.558 |
| 2013 | 2.647 | 2.754 | 4.122 | 4.443 | 3.655 | 3.254 | 3.434 |
| 2014 | 2.687 | 2.680 | 4.190 | 4.340 | 3.574 | 3.340 | 3.428 |
| 2015 | 2.544 | 2.614 | 3.872 | 4.061 | 3.415 | 3.191 | 3.246 |
| 2016 | 2.491 | 2.518 | 3.853 | 3.924 | 3.381 | 3.121 | 3.183 |
| 2017 | 2.445 | 2.470 | 3.825 | 3.727 | 3.259 | 3.145 | 3.110 |
| All births where both the father and mother are Kuwaiti na- tionals, by governorate | | | | | | | Total |
| 2017 | 2.299 | 2.286 | 3.460 | 3.401 | 3.013 | 2.878 | 2.863 |

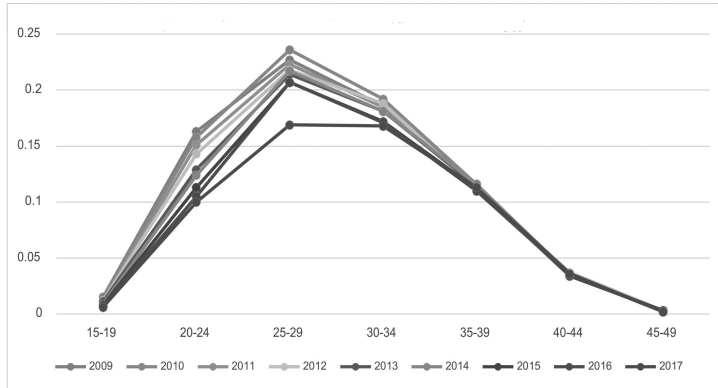
* There were a number of not stated individuals that was proportionally distributed for each governorate.

Age-specific Fertility Rates

Age-specific fertility rates (ASFRs) from 2009 to 2017 are shown in Figure 1. The level of fertility showed a consistent decline from ages 20-39. The largest decline occurred at ages 20-29. After age 35 the rates for each of the 9 years were almost constant. Thus, women in their prime reproductive ages were producing fewer children each year than the year before, translating into the linear decline in TFRs shown in Table 1.

Figure 1

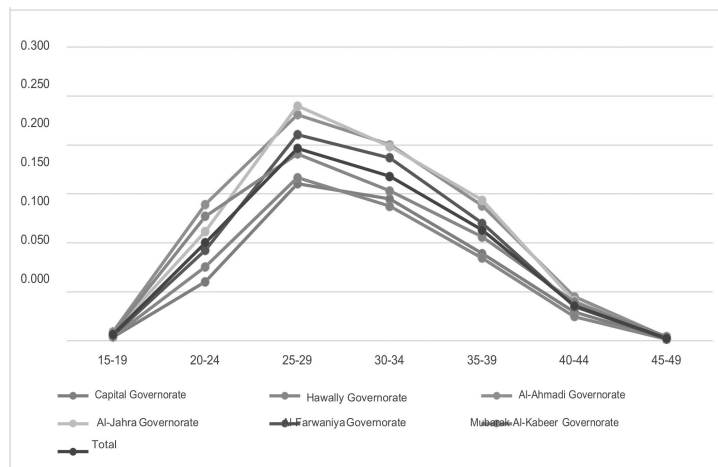
Age Specific Fertility Rates (TFR) for Kuwaitis, 2009-2017



A comparison of governorate-level ASFRs (Figure 2) shows a clear gap between the governorates, almost during the entire reproductive span from 20-44. Al Ahmadi and Al-Jahra had the highest ASFRs and Hawally and Capital had the lowest, while Al-Farwaniya and Mubarak Al-Kabeer were at the medium levels between these two extremes.

Figure 2

Age Specific Fertility Rates of Kuwaitis, According to Governorates, 2017



Discussion

A few observations may be made from the above analysis. First, there is a fairly close correspondence between the MOH published information and analysis provided by PACI data, with almost similar TFRs. Second, both sources indicate a consistent, almost linear, downward trend in the last decade, with a TFR of 3.1 per woman in 2017. Third, the six governorates present a clear and consistent picture of a relatively high fertility level in Al-Ahmadi and Al-Jahra, medium fertility level in Al-Farwaniya and Mubarak Al-Kabeer, and low fertility level in Capital and Hawally. Residents of Al-Ahmadi and Al-Jahra governorate are predominately of tribal origin. They marry earlier than the urban Kuwaitis and children are seen as an asset in later life. It gives them greater social recognition if family members are more in number. Women in high-fertility areas produce about 1.5 more children than the ones in low-fertility areas, and the gap between these groups has persisted over the years.

The decline in fertility level of the nationals is not surprising in view of the massive socioeconomic changes that the country has gone through during the last six decades. Government policies to enhance educational level and health status of the population has achieved wide-ranging and impressive outcomes. The entire population of nationals, numbering about 1.3 million, have been provided almost equal access to highly generous free- of-charge public services such as health, and education in government schools up to the university level and higher. Women have been given equitable and focused attention in terms of education and health, and almost all women in reproductive ages are now literate, while a majority have attained above high school education. About 45% of all women aged 15+ are in the labor force, and the percentage of employed women is about 83% during the peak reproductive ages 25-34 (PACI, 2017). Furthermore, contraceptive knowledge and use made rapid advancements; and about 52% of the currently married, non-pregnant women were using a contraceptive method in 1999 (Shah et al., 2001). All of the above factors are likely to have exerted downward impacts on the number of children desired by

parents which influenced their efforts to achieve the desired number through the exercise of contraception.

Despite the above policies that are known to exert negative impacts on fertility in many different countries, the government's view about procreation has remained generally pro-fertility. A major reason for this view is the fact that the government's goal is to achieve a more balanced population composition, considering that Kuwaiti nationals comprise only about 30% of the total population (PACI, 2017), the rest being constituted by non-Kuwaiti migrant workers and their families. Thus, in addition to a wide range of free or subsidized services provided to citizens, marriage allowance of 4.000 KD. [\$13.000] plus a monthly child allowance of about 170 US dollars per child for up to 7 children is as a subsidy. In spite of these subsidies, the number of unmarried Kuwaitis is increasing. In 2015, 38% of Kuwaiti males and 39% Kuwaiti females were unmarried (Essential features of the population, 2015). Future level of fertility is likely to be impacted by all of the above developments, as well as parental perceptions and desires for the number of children they consider optimal.

We found that around 13-15% of all births occurred to couples where the wife was not a Kuwaiti national. However, the child would be treated as a Kuwaiti national since he inherits the father's nationality and is eligible for all the generous welfare benefits afforded to Kuwaiti children. Data on births to Kuwaiti women married to non-Kuwaitis is, however, not available. The latter may represent a group with lower accessibility to social welfare benefits since the child is treated as a non-national. The discriminatory treatment of children born to Kuwaiti women married to non-Kuwait men has been the subject of some debate by women's groups and human rights agencies in the country. More transparency and information is required about the children who may be in the above situation in order to find ways to reduce or eliminate such disparity.

The trends in fertility differentials according to governorate are likely to have far-reaching social and political implications for the relative composition of various subgroups in the country. The highest

fertility areas (Al-Jahra and Al-Ahmadi) are inhabited primarily by those with relatively more traditional socio-cultural background, namely the Badu, while the lowest fertility areas (Capital and Hawally) are inhabited by those with less traditional socio-cultural background, namely the Hadar. Previous research by Shah and Nathanson (2004), based on a national survey of Kuwaiti women conducted in 1999, reported that Badu women had significantly higher desired as well as achieved fertility (6.3 and 4.5 children), compared with Hadar women (4.8 and 3.8 children). Thus, the distinction between the two groups seems to have persisted over time. AlKazi (2017) in her study of desired family size also found that there is a relationship between preferring to have 5-6 children and tribal roots. However, another variable that influenced the Badu sample is that a large proportion of them lived within the extended family before marriage or had a separate unit within the larger household.

The higher fertility of the Badu women may have several impacts on Kuwaiti society. In her discourse on how the Hadar perceive the fertility behavior of the Badu, Longva states that

“Having understood the advantages of the family allowance system, badu men supposedly practice polygamy and have scores of children as a way to increase their monthly income. Without education and professional skills, badu and their large family size are seen as a burden on the state....” (2006, p.172).

While revisiting some of the issues in the hadar-badu dichotomy raised by Longva asserted that the above dichotomy

“is an outcome of state-building strategies adopted in the early oil years, mainly linked to citizenship and housing policies, that contributed to fixing the hadar and badu not only as socially distinct but also geographically bounded groups” (2014, p.5).

Al-Nakib (2014) also claims that the badu were provided poorer and smaller houses than hadar, even though the former had larger family sizes on average.

While this paper contributes important new knowledge to the fertility trends and patterns in Kuwait, it has some limitations. First, the discrepancy between the MOH and PACI data suggests that the latter may be a slight, though negligible, underestimate of the TFR. Nevertheless, efforts must be strengthened to register all births that actually occur in the country. Second, information on educational level of the mother or the father of the newborn do not have an adequate level of accuracy, which needs to be improved. Despite these limitations, we can conclude with a high degree of confidence that fertility of Kuwaiti nationals is undergoing a distinct linear decline in all parts of the country, but the gap between the relatively more 'rural' and the most 'urban' areas is not shrinking, and may have far reaching social, economic and political impacts on the future.

Likely Impacts of Fertility Decline on Differentials in Population Growth and Future Migration

Population growth in a country is determined primarily by two demographic phenomena, fertility and mortality. Owing to its high level of socioeconomic development and effective health policies, a rapid decline in mortality accompanied by rising life expectancy have been achieved among Kuwaiti nationals. In 2016, for example, the level of infant mortality was about 7 per 1000 live births, and the life expectancy of Kuwaiti women was about 76 years (Health Kuwait, 2016), both of which are close to developed country levels. In view of the low mortality levels, the main source of population growth among the nationals will therefore be their fertility levels. Given the declining trend in fertility, future population growth of Kuwaiti nationals is likely to decline slowly. With the current level of about 3.1 children, however, the fertility rate still exceeds replacement level fertility (i.e., 2.1) by one child, and does not warrant an alarming response. The current rate implies that the Kuwaiti population will continue to grow in the near future. However, if the fertility rate continues to decline and reaches a level of about two children, or lower, per woman, that may be a source of concern for policy makers, with a need to reverse the declining trend. Experience of global fertility decline shows that most

developed countries have either reached replacement level fertility, or fallen below replacement level, resulting in declining population growth. The above situation has led them to launch pro-fertility programs that would increase the birth rate, and thus increase the population growth rate. While predicting the future is a risky business it is likely that the rate of fertility decline among Kuwaitis will slow down in the coming years and a level around three children may become the norm, as has been witnessed in some other Arab countries such as Egypt. An alternative scenario is that parents may decide to reduce the “quantity” of children to ensure their better “quality” of life in terms of access to educational and other socioeconomic facilities. It is important to monitor the level of fertility decline in order to come up with the policies considered most suitable for the country.

While fertility may witness a steady decline in future, this decline will not be uniform throughout the country. The high fertility areas, Al-Ahmadi and Al-Jahra, are likely to constitute a larger portion of the total population in the future compared with the Capital and Hawally governorates. The social, economic, and political dimensions of this differential level of growth in the various regions will require further study. Declining fertility may affect future migration to Kuwait in the following ways. First, it may not have any sizeable impact as evidenced by the almost constant proportion of non-nationals during the last three decades when fertility continued to decline. A sustained inflow of workers may continue, especially in areas where enough nationals are unable or unwilling to replace migrants. This will remain true in the case of low-skilled, private sector jobs that are not preferred by Kuwaiti nationals. The future inflow of this group of migrants will instead depend largely on market forces that result in the import of inexpensive foreign workers, rather than the employment of more expensive nationals, and may continue to determine employer choices that are beneficial for their businesses.

The second group for which a demand for migrants may be influenced by fertility decline is that of domestic workers. It was found in a national household survey held about 20 years ago that about 87%

of all Kuwaiti households had at least one domestic worker. Also, the percentage of households who employed at least one domestic worker had a larger number of children than ones who employed none. Similarly, households that employed two or more domestic workers had more children as well as older persons aged 60 or more (Shah et al., 2002). Thus, a marginal decline in the demand for domestic workers may be expected with further declines in fertility. However, such decline is likely to be quite small in view of the fact that a majority of all households employ at least one domestic worker, regardless of their composition. The joint or extended family structure has declined, and even tribal root younger generation are forming nuclear households. Thus, domestic workers may increase along with professionals for formal childcare facilities that are mushrooming in all areas. On the other hand, fertility decline will speed up the aging of the population, and may in fact exert a positive effect on the inflow of domestic workers to take care of the older population at home since institutional arrangements for the elderly are not culturally preferred. Home nursing is an evolving demand for the elderly. Increasing numbers of older persons and parents are living alone and employing nursing aides mainly from South East Asia and India.

Another group of migrants that may be affected by declining fertility of nationals is that of health personnel needed for providing health care services during pregnancy, delivery, postpartum care, and for pediatric needs. The demand for migrants currently involved in the above sectors may shrink. A related factor that may aid such shrinkage is the fact that the indigenous educational and training institutions are regularly producing national health care personnel that might replace foreign workers. This will be true for many sectors, except nursing, where the local institutions have not been successful in producing Kuwaiti graduates, and foreign nurses still comprise about 90% of all nurses in the country. In addition to the health care services, the demand for teachers and related education sector workers may decline with declining fertility and fewer children requiring such services

One sector that has already seen a large change is that of public service, favoured by most Kuwaiti nationals. Future generations of job seekers will fill increasingly more public sector jobs and are likely to replace expatriate workers, especially in professional, technical, and clerical work. The private sector will, however, continue to rely on foreign workers for the next few years, until the job market becomes more desirable for nationals, or other circumstances force such a change. Given the fact that about 81% of the entire labour force of the country is concentrated in the private sector (PACI, 2017, p.82), replacement of foreigners by citizens will take time. If the current composition of expatriates and nationals persists into the future, however, it is estimated that the population of Kuwait will increase to 5 million in 2020 and 6.6 million in 2030; with expatriate males and females comprising 3.38 and 1.37 million, or 70% of the total population (Gulseven, 2016).

Government policies have actively promoted the employment of nationals in the public as well as private sector by replacing foreign workers, with a fair degree of success. Declining fertility may in fact make the above task a bit easier since fewer jobs would be needed for nationals than would be required at higher fertility levels. Extraneous factors such as the declining price of oil, government plans and projects for development, as well as employer preferences will be major factors in determining the future demand for foreign workers, with fertility of nationals playing a relatively small role.

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التغيرات والتباينات الحديثة للخصوبة بين الكويتيين: بعض تداعيات الهجرة في المستقبل

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ملخص

الأهداف: الهدف الرئيسي من الدراسة هو تحليل اتجاهات الخصوبة وأنماطها من 2009-2017، ومن الأهداف ذات الصلة مقارنة العدد السنوي للمواليد، ومعدلات الخصوبة الإجمالية (TFRs)، التي تعدها وزارة الصحة والهيئة العامة للمعلومات المدنية، والهدف الثاني هو معرفة انعكاسات الاتجاهات والأنماط المذكورة على الطلب للعمالة المنزلية وغيرها من العمالة وتداعيات ذلك على النمو السكاني والهجرة في المستقبل.

المنهج: تم دراسة معدلات الخصوبة بين المواطنين الكويتيين باستخدام الإحصائيات السنوية الصادرة عن وزارة الصحة والإدارة المركزية للإحصاء والهيئة العامة للمعلومات المدنية. قدمت الهيئة إحصائيات منتصف العام لكل من الأعوام من 2009-2017 لجميع النساء الكويتيات من الفئة العمرية من 15-49 عاماً، وفقاً لكل من الخصائص؛ بُغية الحصول على معدلات الخصوبة العمرية والإجمالية لكل مجموعة فرعية سنوياً، واحتسبت معدل الخصوبة الكلي والعمرى لكل عام من 2009-2017 بحسب محافظة الإقامة.

النتائج: لوحظ انخفاض مستمر في معدل الخصوبة الإجمالي في العقدين الماضيين من عام 1995 إلى عام 2015، وكان الانخفاض بنسبة طفلين تقريباً بحسب بيانات وزارة الصحة خلال العقد الماضي،

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وانخفض معدل الخصوبة الإجمالي بمقدار 0.6 نقطة، من 3.7 في عام 2009 إلى 1.3 في عام 2017، وفقاً لبيانات الهيئة العامة للمعلومات المدنية؛ ومن ثم يحدث انخفاض سريع في الخصوبة في البلاد، ولكن معدل الخصوبة الإجمالي لا يزال أعلى من مستوى إحلال الخصوبة في معدلات الخصوبة الخاصة بالعمر (ASFRs)، بنحو طفل واحد، وأكبر انخفاض في سن 20-29، وتُظهر مقارنة التقارير الموحدة على مستوى المحافظات وجود فجوة واضحة بين المحافظات.

الخاتمة: من المتوقع أن يكون للاتجاهات في فروق الخصوبة، بحسب المحافظة، آثار بعيدة المدى على التكوين النسبي لمختلف المجموعات الفرعية في البلاد، وقد يؤثر انخفاض الخصوبة أيضاً على الهجرة المستقبلية للكويت.

الكلمات المفتاحية: تباين الخصوبة، الهجرة، الكويت، معدل الولادات.

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