

Demographic Research a free, expedited, online journal of peer-reviewed research and commentary in the population sciences published by the Max Planck Institute for Demographic Research Konrad-Zuse Str. 1, D-18057 Rostock · GERMANY www.demographic-research.org

### DEMOGRAPHIC RESEARCH

# VOLUME 19, ARTICLE 33, PAGES 1249-1280 PUBLISHED 18 JULY 2008

http://www.demographic-research.org/Volumes/Vol19/33/DOI: 10.4054/DemRes.2008.19.33

Descriptive Findings

Fertility of Turkish and Moroccan women in the Netherlands: Adjustment to native level within one generation

Joop Garssen

Han Nicolaas

© 2008 Garssen & Nicolaas.

This open-access work is published under the terms of the Creative Commons Attribution NonCommercial License 2.0 Germany, which permits use, reproduction & distribution in any medium for non-commercial purposes, provided the original author(s) and source are given credit.

See http://creativecommons.org/licenses/by-nc/2.0/de/

# **Table of Contents**

1	Introduction	1250
2	Results of earlier studies and research questions	1253
3	Method and data	1254
4 4.1 4.2 4.3	Trends in fertility by origin Native Dutch women Turkish women Moroccan women	1256 1256 1261 1270
5	Summary and conclusions	1274
	References	1278

# Demographic Research: Volume 19, Article 33 descriptive findings

# Fertility of Turkish and Moroccan women in the Netherlands: Adjustment to native level within one generation

Joop Garssen<sup>1</sup> Han Nicolaas<sup>2</sup>

#### **Abstract**

Cohort data by generation for Turkish and Moroccan women in the Netherlands indicate that the first generation adjust their fertility levels only slowly to that of native Dutch women. These women show even higher rates than presently reported by the countries of origin, and few signs of assimilation in (fertility) behaviour. The second generation, on the other hand, are much closer to native women in this respect than to their mothers. Adjustment to the native Dutch fertility pattern is caused by intergenerational differences, rather than by cultural assimilation of the first generation.

<sup>&</sup>lt;sup>1</sup> Statistics Netherlands, P.O.Box 4000, 2270JM Voorburg, The Netherlands. E-mail: jgsn@cbs.nl.

<sup>&</sup>lt;sup>2</sup> Statistics Netherlands, The Netherlands. E-mail: hncs@cbs.nl.

### 1. Introduction

The fact that non-western migrants reduce the number of their children is often seen as proof of their integration into western society. In a speech in Düsseldorf, Germany, the Dutch junior minister of Social Affairs and Employment said: "In the Netherlands we see that immigrants quickly adapt to their new surroundings as far as children are concerned. The average number of children that migrants have, has quickly fallen to the level that is current among the native Dutch population" (Ministry of Social Affairs and Employment 2000).

The fertility of Moroccan and Turkish women in the Netherlands has indeed fallen sharply in the past few decades, although their (period) fertility rates are not even close to that of native women. Statistics Netherlands do not expect such a low figure, also not in the long run (Alders 2005). Moreover, the convergence between non-native and native Dutch fertility seems to have lost its earlier momentum. Among Turkish and Moroccan women of the first generation the fertility rates have virtually stagnated since 1995 (Figure 1).

The fertility of the second generation is generally well below that of the first generation. This lower fertility, especially among the youngest women, and the rising age at which women marry is often interpreted as a sign that non-native women follow 'the example' of the native Dutch (Garssen et al. 2005). One would, however, jump to a conclusion by ascribing the decrease in the difference in fertility to closer social contacts between the non-native and native populations or to greater assimilation (Coleman 1994). It is, after all, not clear that native women set the example in this respect, as fertility has also decreased in the countries of origin (Huisman and Van Wissen 1997, Schoenmaeckers et al. 1998, Eltigani 2001, Council of Europe 2005). Data of the World Resources Institute indicates that over the last twenty years the total fertility rate (TFR) in Morocco fell from 5.40 to 2.38, and in Turkey from 4.15 to 2.14. Recent fertility is below the replacement level everywhere in Turkey, except south and east Anatolia (Koç and Özdemir 2004). Fertility would even be substantially lower if unwanted pregnancies could be prevented (Ünalan et al. 2004).

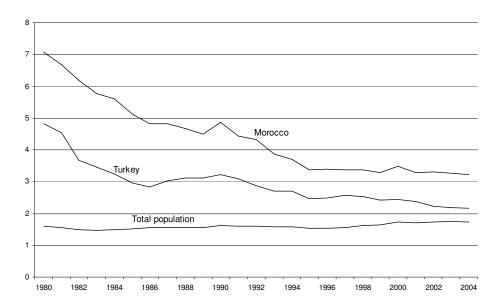
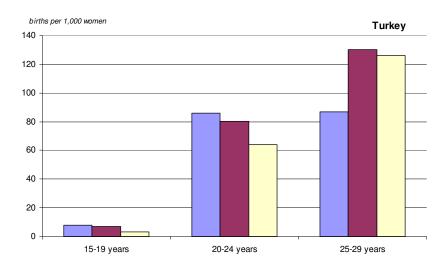


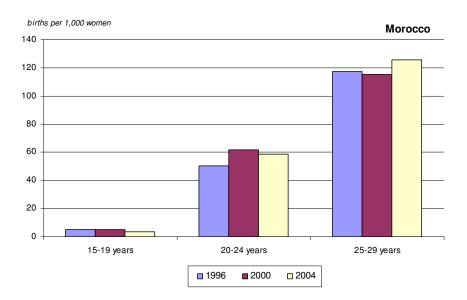
Figure 1: Total age-specific fertility rates by ethnicity, first generation

According to period data, the decrease in fertility of second generation Turkish and Moroccan women no longer seems to occur, or at least not to have continued at the expected rate (Figure 2). The stagnation in the fertility decrease of first generation Moroccan women, shown in Figure 1, is also visible for the second generation. This is remarkable, given the observation of several years ago that Moroccan women, in particular, postpone their first child (Alders 2000a). Among the Turkish second generation there is a decrease up to the age of about 25.

These figures show fertility in a given year but are insufficiently reliable to calculate a TFR at the higher ages, due to the relatively small numbers per group. This period measure moreover has the serious drawback that postponed fertility leads to lower figures, but do not allow conclusions about fertility trends. A cohort approach can provide more insight, but is hampered by the still relatively small birth cohorts of the second generation, especially as far as the slightly older women are concerned. The birth cohort of non-western women aged 35-39 on 1 January 1999, the time of the last cohort study by Alders (2000a), refers to only 1.7 thousand women. Subdividing this total into ethnic groups leads to very small numbers in the age categories of interest. There were, for example, only 13 second generation Turkish women aged 35-39 on 1 January 1999. Obviously, no reliable fertility rate could be calculated for this group.

Figure 2: Age-specific fertility rates, by five year age groups and ethnicity, second generation, 1996, 2000 and 2004





Since 1999 the non-western second generation has strongly increased in size. Their numbers roughly doubled in the age group 20-39. The increase was even greater among the Turks and Moroccans. In five years time the number of second generation 35-39 year old Turkish women rose from 13 to 294. This increase enables fairly reliable cohort estimates for the slightly older women within the fertile age category. This cohort study refers to the number of women by age and ethnicity according to the enumeration from the municipal population registers on 1 January 2005.

# 2. Results of earlier studies and research questions

Various studies have shown that women with a non-western background are gradually having fewer children. More than two decades ago the fertility of Turkish women started to decline rapidly (Schoorl 1984). This also applies to Moroccan women (Schoorl 1988, 1990) and non-western resident women in general (Schoorl 1995, Huisman and Van Wissen 1997, Sprangers 1998, Alders 2000a, Alders and Schapendonk-Maas 2001, De Valk et al. 2001, De Jong 2003).

The most recent major cohort study on the fertility of first generation women, based on data up to 1999, concluded that fertility levels were converging with that of native Dutch women (Alders 2000a). There were a few exceptions and major differences by ethnicity. Turkish women were youngest at first childbirth. No delay of the first child was observed: women born between 1965 and 1970 became mothers at the same young ages as those born between 1945 and 1950. The share of childless Turkish women was also stable. The decrease in the average number of children among Turks was entirely due to the decrease in average family size. The fertility of Moroccan women also turned out to have fallen sharply. They did have the largest number of children, but had started to postpone their first child. The number of third and further children had fallen sharply.

The differences in postponement turned out to increase the differences between generations. The still very small second generation clearly has a different fertility behaviour than their mothers. Turkish and Moroccan women, in particular, seemed to have taken a position between the first generation and native Dutch women. Second generation Moroccan women had children at a much earlier age than native Dutch women, yet did not have more children by the time they were thirty. It was assumed that they would end up with roughly the same number of children as native Dutch women.

The differences in levels and trends between the various groups have remained substantial according to the period data from 1999 onwards. For example, the TFR of Moroccan women in 2004 was about twice the native rate. A meaningful description of

the developments among women with a non-western background requires a separate consideration of the ethnic groups. We restrict our description to the two large ethnic groups that are also strongly represented in other European countries. The largest non-western group in the Netherlands, the Surinamese, differs strongly in migration history and its level of cultural integration, and is hardly represented elsewhere in Europe. Its fertility behaviour is discussed in Garssen and Nicolaas (2006).

In this article we will deal with the following issues, not yet (fully) addressed in previous studies:

- Which trends are visible by birth cohort among Turkish and Moroccan women? Is there still convergence of the fertility levels to the level of native Dutch women?
- Which role does postponing and not having children have in the decreasing fertility figures? Does the observed fact that Moroccan women postpone their first child lead to an increase in their eventual childlessness, as assumed by Alders (2000a)? Are almost all Turkish women still becoming mothers, and are they still much younger than women of other ethnic groups?
- What role does the smaller average family size play, if any? Can the earlier decrease among Turks also be observed among the other groups?
- Is the stagnation of the fertility among the second generation Moroccan women, as suggested by the period data in Figure 2, also visible in the cohort data? Do second generation Turkish and Moroccan women, in terms of fertility, still take up a middle position between the first generation and native Dutch women, as observed by Alders (2000a)?

#### 3. Method and data

Cohort fertility rates for a given calendar year are derived from the Dutch municipal population register data. Demographic stock and flow data from this decentralised registration system are adjusted and aggregated by Statistics Netherlands, the central bureau of statistics. Here we use data from the register-based enumeration on 1 January 2005. This enumeration contains various demographic variables for female inhabitants, such as date of birth, date of arrival in the Netherlands, country of birth, country of birth of parents and birth dates of children. The cohort fertility rate of women currently living in the Netherlands and born in a particular year is determined by dividing the number of live-born children of these women into the total number of women concerned. Women who emigrated or died are excluded. The figures on fertility can be distinguished by

country of birth, generation, age at childbirth, birth order and date of arrival in the Netherlands.

Unlike period total fertility rates, a single summary figure does not suffice in the description of cohort fertility. The cohort rates however allow a better insight in the time trends of the cumulative fertility of a real cohort of women. The main drawback of this cohort approach is that the fertility behaviour of younger women, who are particularly important for analyses and forecasts, cannot be fully described as they haven't yet ended their fertile period. Moreover, a larger number of data is required. Because the numbers of women with non-western backgrounds are strongly increasing and their fertility rates rapidly changing, the analyses presented here are mainly based on cohort data, broken down by generation where possible. Period data are used to highlight general trends.

Major differences between period and cohort rates may occur in case of selective migration, for instance if childless women would be more inclined to emigrate than women with children. On the other hand, the annual birth statistics exclude children born to migrant women before arrival in the Netherlands. With respect to women born after 1945 the differences between the two fertility measures are minimal. For women born before 1945 the cohort fertility is much underestimated if register data are used. The reason of this is the fact that, at the introduction of an automated population register, it was decided that children should be included in the personal files of both father and mother. For practical reasons this was only consistently implemented for children born after 1965. Children born before 1966 may therefore be included in the personal file of the father, but not in that of the mother. This bias plays only a minor role in the analysis presented here, and is restricted to those women in the oldest birth cohort (1945-1949) who were teenagers at the time of childbirth.

In this article we compare the fertility of native Dutch women with those of first and second generation women with a Turkish or Moroccan background. The first generation consists of women born in the country of origin. The second generation is born in the Netherlands, with at least one parent born in the country concerned. If mother and father of a second generation migrant are born in different countries outside the Netherlands, the country of birth of the mother is leading in the classification. Native Dutch women are defined as women with both parents born in the Netherlands. This category therefore excludes second generation migrants.

# 4. Trends in fertility by origin

#### 4.1. Native Dutch women

In recent years the number of native Dutch women in the fertile age group (15-49) has declined sharply. The decrease is expected to last until 2025, and is due to a dip in fertility in the early seventies. Between 1996 – the first year on which we have detailed data on origin – and 2005 the number of native Dutch women fell by over a quarter of a million (table 1). During this period their share in the total number of women aged 15-49 fell from 82.7 to 77.8 percent.

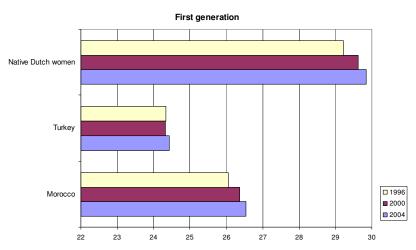
Table 1: Number of women aged 15-49 years, by ethnicity and generation, 1 January

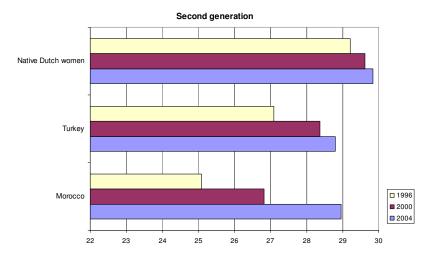
-	Total		of which:			
			first generation		second generation	
	1996	2005	1996	2005	1996	2005
	x 1,000					
Native Dutch	3332.4	3062.2				
Western foreigners Non-western	368.8	372.3	150.0	170.0	218.8	202.3
foreigners	326.4	499.3	279.2	377.3	47.2	121.9
of whom:						
Surinamese	88.6	104.9	73.2	70.4	15.4	34.5
Turkish	72.5	102.6	61.9	72.5	10.7	30.2
Moroccan	54.6	85.8	47.8	61.5	6.8	24.3
Antillean/Aruban	26.3	39.4	21.0	29.1	5.3	10.3
Other non-western	84.4	166.6	75.3	143.8	9.0	22.6
Total	4027.6	3933.8	429.2	547.3	266.0	324.3

For many years, mothers in the Netherlands, particularly native Dutch mothers, have been among the oldest in the world (Coleman and Garssen 2002). However, they are approaching the limits of late motherhood, as shown by both period and cohort data (Figures 3 and 4). In 2004 native Dutch women were on average 29.8 years old when their first child was born, 0.2 years older than in 2000. The younger birth cohorts are obviously having children later than the older cohorts. Women born in the period 1965-

1969 became first time mothers at an average age of 28.5, almost 4 years year later than women born twenty years earlier. The average age of the youngest birth cohort will still increase somewhat, as some women without children in this group will have a child in the next few years.

Figure 3: Mean  $age^{1}$  of the mother at first birth, by ethnicity and generation

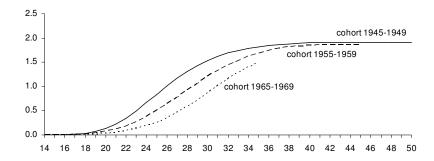




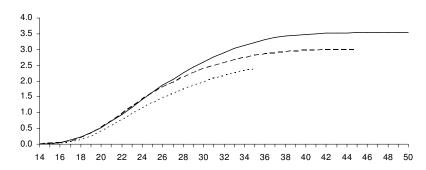
<sup>1)</sup> Standardized, using native Dutch female population as standard

Figure 4: Cohort fertility of first generation mothers, by age, ethnicity and year of birth of the mother, 1 January 2005

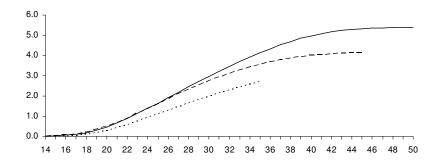
#### **Native Dutch women**



# **Turkey**



#### Morocco



One in eight native Dutch women born in 1945-1949 remained childless (Table 2). This is about twice as often as Turkish and Moroccan women. Childlessness among native Dutch women is clearly on the up, a development that is partly due to postponing motherhood. Of the women born in 1955-1959 – 45 years old at the time of observation – 69.9 percent had had a second child, as opposed to 73.3 percent of the cohort that was ten years older (Figure 5). There seem to be more third and fourth children for the younger cohort: 25.0 percent of the women born in 1955-1959 had three children, and 6.0 percent had four. Of the cohort that is ten years older 21.8 percent had three children and 5.2 percent had four. This increase has also been observed in the 1998 Fertility and Family Survey of Statistics Netherlands (De Beer and De Graaf 1998).

Table 2: Childlessness of women by year of birth and ethnicity, first generation, 1 January 2005

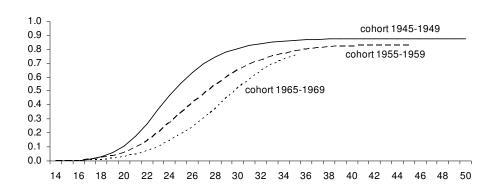
Year of birth	Age at	Turkey	Morocco	Native Dutch
of the mother observation				
		%		
1945-1949	55 years	5.2	6.2	12.2
1950-1954	50 years	5.4	6.6	15.2
1955-1959	45 years	5.8	8.5	17.1
1960-1964	40 years	5.2	9.2	18.4
1965-1969	35 years	7.0	11.5	24.5
1970-1974	30 years	12.8	20.7	50.7

Teenage mothers are now quite rare among native Dutch women, in contrast to the 1960s. About 3 in a thousand native Dutch girls aged 15-19 had a child in 2007. Given the size of the group of native Dutch girls, teenage motherhood is not an 'immigrant problem' however: about six in ten teenage mothers are native Dutch (Garssen 2008).

The decrease in the number of native Dutch women of fertile age in the past decade is largely compensated by an increase in the number of non-western women. The number of western women has remained virtually unchanged. The total group of non-western women aged 15-49 increased from 326 thousand in 1996 to 499 thousand in 2005. Currently they make up 13.5 percent of all women aged 15-49 in the Netherlands, and are gaining influence on the Dutch fertility figures due to their number.

Figure 5: Cohort fertility of native Dutch women by age of the mother, birth order and year of birth of the mother, 1 January 2005

### First child



### Second child

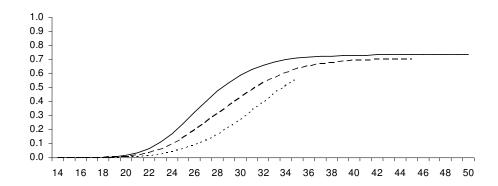
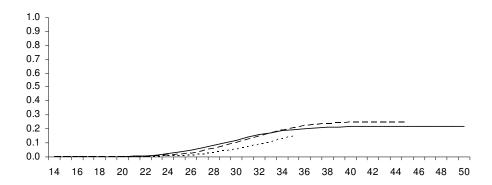
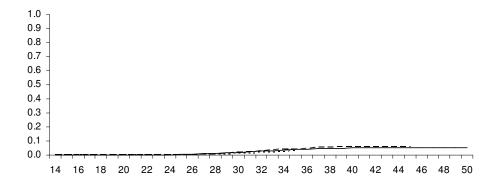


Figure 5: (continued)

#### Third child



### Fourth child



#### 4.2. Turkish women

The 103 thousand Turkish women aged 15-49 on 1 January 2005 are the second largest non-western migrant group in the Netherlands, after the Surinamese. Both their first and second generation have recently increased in size. This increase has been particularly

strong in the second generation, from 10.7 thousand women aged 15-49 in 1996 to 30.2 thousand in 2005.

The TFR of Turkish women in the Netherlands was 2.49 in 1996 and has decreased slowly in recent years. In 1980 their TFR was still 4.8 (De Jong 2003). The TFR of the Turkish women approaches that of the native Dutch women, but one cannot simply ascribe this to assimilation: in the same twenty year period the TFR in Turkey has shown a similar decrease. In the last decade the decrease in the TFR in the Netherlands slowed down, so that the TFRs of women in Turkey and of Turkish women in the Netherlands now differ very little. Ten years ago the TFR of Turkish women in the Netherlands was still substantially lower than the TFR in their country of origin (Huisman and Van Wissen 1997).

An earlier study concluded that almost all Turkish women have children and at a relatively young age (Alders 2000a). The conclusion still stands for the first generation. The age at birth of the first child barely increased among the first generation (Figure 3), and younger cohorts differ only little from older cohorts (Table 3). Among the second generation, on the other hand, it increased by 1.7 years between 1996 and 2004. Taking the differences in age structure into account, Turkish women of the second generation differ very little from native Dutch women in this respect.

Table 3: Mean age at first birth of first generation and native mothers, by ethnicity and year of birth of the mother, 1 January 2005

Year of birth of the mother	Turkey	Morocco	Native Dutch	
1945-1949	22.0	22.7	24.7	
1950-1954	21.9	22.5	25.5	
1955-1959	22.2	23.2	26.9	
1960-1964	22.1	24.5	28.0	
1965-1969	22.6	24.6	28.5	

In the recent past, motherhood among Turkish teenagers of the first generation was much more common than among most other ethnic groups. The first generation Turkish rates have dropped very sharply though (from 65 per thousand in 2000 to 10 per thousand in 2007) and are now far below the rates for the Caribbean groups. This is more likely a reflection of stricter rules on immigration with respect to family formation than of a change in fertility behaviour. A huge majority of these teenage mothers is 19

years old and married when they give birth. Their children are normally raised in a traditional two-parent family (Garssen 2005). In 2007 fewer than 4 per thousand Turkish teenagers of the second generation had a child. The most recent data show that the teenage fertility gap between second generation Turkish women and native women has closed. Both groups now run the same (very low) risk to become a teenage mother. This risk is comparable to that of Swiss girls, who probably have the world's lowest rates (Garssen 2008).

Only 5 to 6 percent of all Turkish women of the first generation had no children at all (Table 2). The completed fertility by age of the younger birth cohorts of the first generation shows a pattern that differs little from that of the older cohorts. About nine in ten Turkish women have a second child. Here too the difference between the birth cohorts is minimal. Turkish women do have a third and fourth child more often than any of the other migrant groups, except Moroccan women. The share of women with a third or fourth child is diminishing among the younger birth cohorts, however. This preference for smaller families was also observed in Belgium (Schoenmaeckers et al. 1998). About 60 percent of the 35 year old women of the 1955-1959 birth cohort had a third child, compared to 45 percent of the birth cohort 1965-1969 (Figure 6). For the fourth child the shares were 29 and 13 percent respectively.

Figure 6: Cohort fertility of Turkish women by age of the mother, birth order and year of birth of the mother, 1 January 2005

#### First child

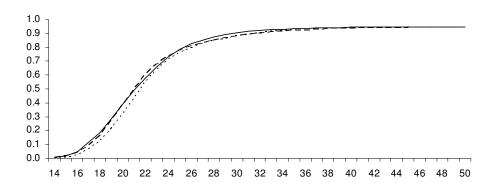
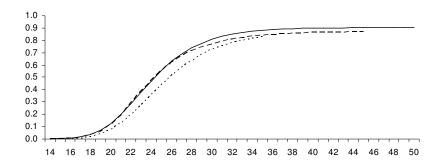
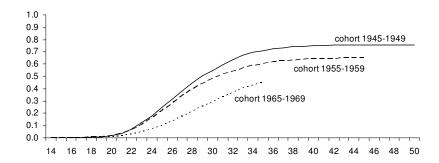


Figure 6: (continued)

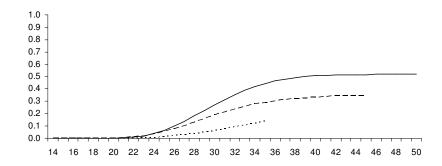
# Second child



#### Third child



# Fourth child

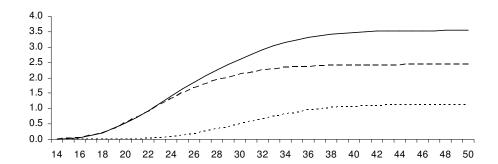


First generation women in the older birth cohorts realised a considerable part of their fertility in the country of origin. Over two thirds of the children of women from cohort 1945-1949 were born outside the Netherlands (Figure 7). This share is dropping fast. Women born a decade later realised less than a third of their fertility outside the Netherlands. These younger women spent more of their fertile years in the Netherlands. Possibly the changing motive of immigrants from Turkey, from family reunification to family formation, plays a role.

Figure 7: Cohort fertility by age, country of birth (child) and birth cohort (mother)

#### Women born in Turkey

#### Cohort 1945-49



#### Cohort 1955-59

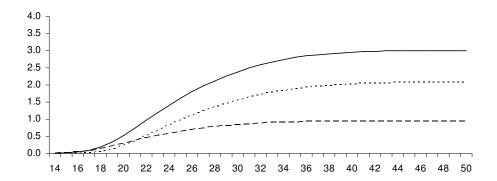
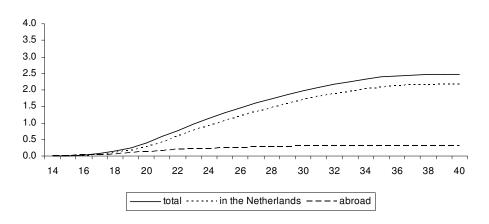


Figure 7: (continued)
Women born in Turkey

### Cohort 1965-69



# Women born in Morocco

## Cohort 1945-49

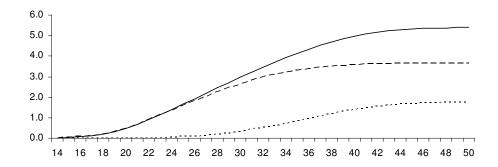
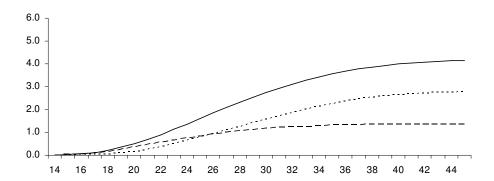
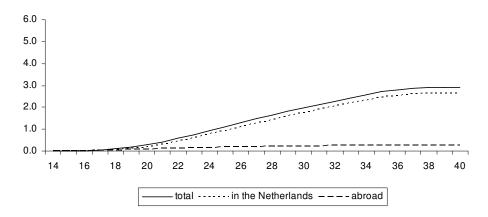


Figure 7: (continued)
Women born in Morocco

#### Cohort 1955-59



#### Cohort 1965-69



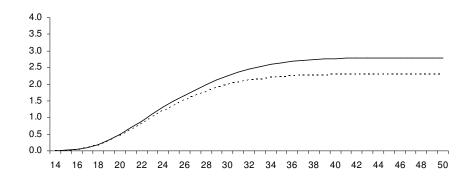
Recent immigrants are more often childless at the time of arrival in the Netherlands than immigrants in earlier decades. In the first half of the seventies, 45 percent of Turkish women (aged 15 or above) already had one or more children when they entered the country. In the first half of the present decade, this holds for only 21 percent of new arrivals. Among Moroccan women, the share decreased from 36 to 17

percent. It reflects the growing importance of family formation, rather than family reunification.

The difference in fertility by period of immigration is shown in Figure 8. Women who came to the Netherlands in the seventies have, at all ages, a higher cumulative fertility than women who came in recent years. The larger number of children of early migrants partly reflects the higher fertility in the areas of origin. These (relatively less developed) areas had higher fertility levels than, for example, the urban areas of Turkey and Morocco.

Figure 8: Cumulative fertility by cohort, age and year of arrival in the Netherlands

### Women born in Turkey



#### Women born in Morocco

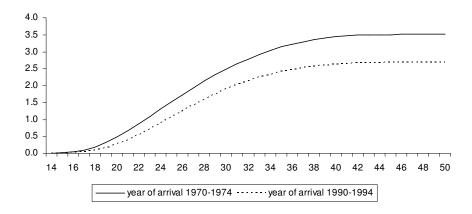


Figure 9 shows that the cumulative fertility of second generation Turkish women at age 30 is about halfway between that of the first generation and native women. As native women tend to catch up on their delayed fertility after age 30, the cumulative rates of the second generation will eventually be closer to those of native women than to those of the first generation. The completed fertility of the first generation is decreasing only slowly. The substantial family formation migration in the past decade, peaking in 2003, explains why the TFR of Turkish women has seen little change since the mid-1990s. Many Turkish wedding partners originate from regions in Turkey where fertility is above the national average, in particular Anatolia (Esveldt et al. 1995, Koç and Özdemir 2004). Currently the fertility in Turkey is below replacement level everywhere, except for South- and East-Anatolia. The fertility pattern of the first generation Turkish women in the Netherlands is therefore remarkably more traditional than that for Turkey as a whole. Given the sharp decline in family formation migration from Turkey and the growing share of the second generation, the TFR for the total group of Turkish women in the next few years will be falling again.

The second generation is much more often childless than the first generation (Table 4). The fertility pattern of Turkish women described earlier by Alders (2000a) still exists: almost all Turkish women become mothers and have their child at an early age. The drop in the Turkish fertility rates is mainly due to the smaller numbers of third and fourth births.

Table 4: Childlessness of women by year of birth and ethnicity, first and second generation, 1 January 2005

Year of birth of the mother	Age at observation	Turkey	Turkey Morocco			Native Dutch
		first	second	first	second	
		generation	generation	generation	generation	
		%				
1965-1969	35 years	7.0	26.7	11.5	28.5	24.5
1970-1974	30 years	12.8	29.5	20.7	40.3	50.7
1975-1979	25 years	30.8	55.4	46.1	69.0	85.5

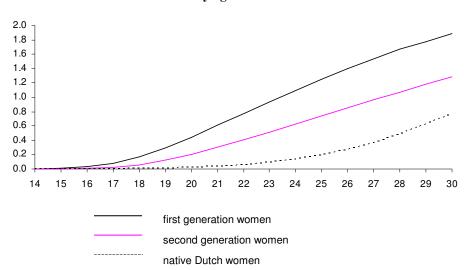


Figure 9: Cohort fertility of first and second generation Turkish women and native Dutch women by age cohort 1970-1974

#### 4.3. Moroccan women

The number of Moroccan women aged 15-49 increased in the period 1996-2005 from 54.6 thousand to 85.8 thousand (Table 1), with both the first and second generation increasing. The increase of the second generation was fastest again, almost fourfold. Even more strongly than among Turkish women, who realised only a slight decrease in their TFR since the mid-1990s, the impression is one of stagnation among first generation Moroccan women (Figure 1). The TFR for all Moroccans in the Netherlands was 3.22 in 2004, which is higher than that for Morocco, with 2.73 in 2005 (World Resources Institute). Although the estimates may not have been very accurate, the TFR of Moroccan women in the Netherlands in 1980 was 7.1 (De Jong 2003), considerably higher than that of women in Morocco itself (5.4 in 1980-1984). This is caused by a combination of factors. Not only does the purpose of migration (mainly family formation, peaking in 2002-2003) contribute to a high TFR, but also the fact that the majority of the Moroccan wedding partners come from regions with above-average fertility (the north and east of Morocco).

According to Eltigani (2001), women in Morocco increasingly postpone having children, while reducing their family size. The Moroccan birth control program is

highly successful, with a contraceptive use that is unparalleled in the Arab world. A possible explanation for this development, according to Eltigani, is the fact that young couples are forced to live with their parents because of the high costs of housing. More and more women in Morocco remain childless for a long time.

Childlessness among first generation Moroccan and, to a lesser extent, Turkish women is on the increase (Table 2). The share of women without children, however, is still considerably lower than among native Dutch women.

Just like in Morocco, Moroccans living in the Netherlands postpone the first child (Table 3), although it is unlikely that housing problems play a major role. Among first generation Turkish women, who are in a comparable socio-economic position, there is hardly any postponement. The same difference between Turkish and Moroccan women was found in Belgium (Schoenmaeckers et al. 1998). Correcting for the differences in age structures, Moroccan women of the first generation have their first child over 2 years later than Turkish women of the first generation (Figure 3; cohort data in Table 3). The number of Moroccan teenage mothers has also decreased very strongly. The fertility rate of the first generation Moroccan women aged 15-19 years was 10 per thousand in 2007, still more than double the native rate. The second generation differs very little from the native Dutch girls in this respect. The age at which the second generation become mothers for the first time also shifted well into the direction of native Dutch women.

Non-marital fertility among Moroccan and Turkish teenagers is no longer exceptional, yet remains rarer than among native Dutch girls. Two out of three Moroccan and Turkish teenage mothers are married at the time of childbirth, against only 15 percent of native teenage mothers (Garssen 2006). The normative patterns that influence non-marital fertility (of teenagers) are changing, but apparently not as quickly as among Turkish teenagers in Germany. Their non-marital fertility was found to have surpassed that of native German girls, a development that according to Carlson (1985) indicated that traditional patterns of reproduction are not monolithic systems of unchangeable beliefs.

The main change concerns the age at which Moroccan women have their second or next child (Figure 10). A large majority of Moroccan women have a second child, and an estimated 70 percent of the women now aged 35 years will eventually have a third child. The share of Moroccan women having a fourth child is expected to fall substantially. Over 60 percent of the birth cohort 1955-1959 have a fourth child. This will be substantially less for the younger cohorts. The decrease in high order births has already resulted in a rapid decline in the number of very large families. This decline has been strongest among non-western foreigners, in particular Moroccans (Garssen and Roovers 2008).

As is the case among Turkish women, the youngest birth cohorts have most of their children in the Netherlands. Two thirds of the fertility of cohort 1945-1949 was realised in Morocco, against less than a third for the cohort 1955-1959 (Figure 7).

Figure 11 shows the cumulative fertility of the first and second generation Moroccan women and native Dutch women for birth cohort 1970-1974. At age 30, first generation Moroccan women have about the same number of children as first generation Turkish women. The Moroccan curve is steeper however, as Moroccan women have relatively high fertility rates at ages beyond 30 years. Whether or not this will also be the case for the second generation cannot yet be determined. The curve, which is even closer to that of native women than the corresponding Turkish curve, suggests a greater similarity to the native pattern. Relatively many second generation Moroccan women in their thirties have no children (Table 4). Given the sharp increase of the second generation, these trends will have a strong downward effect on the Moroccan birth figures in the next few years.

Figure 10: Cohort fertility of Moroccan women by age of the mother, birth order and year of birth of the mother, 1 January 2005

#### First child

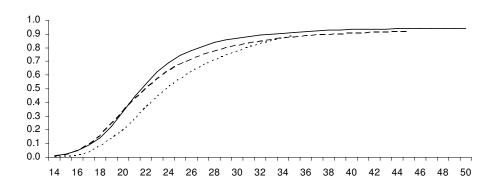
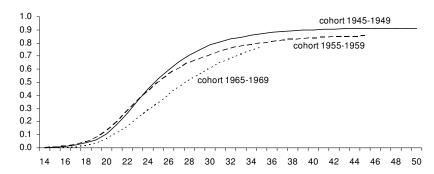
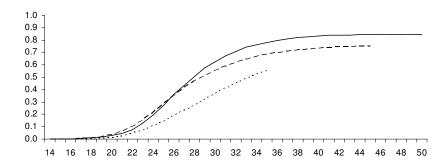


Figure 10: (continued)

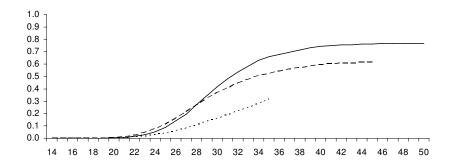
# Second child



# Third child



# Fourth child



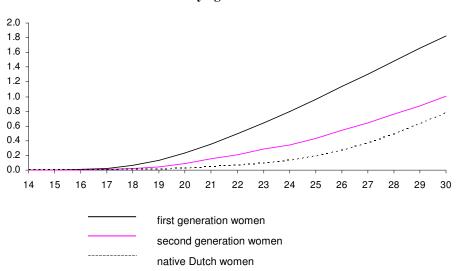


Figure 11: Cohort fertility of first and second generation Moroccan women and native Dutch women by age cohort 1970-1974

# 5. Summary and conclusions

In Dutch fertility trends an ever more important role is played by non-western women. Between 1996 and 2005 the number of native Dutch women in the fertile ages (15-49) fell by 270 thousand, whereas the number of non-western women in the same age group increased by 173 thousand. The group of Turkish women aged 15-49 is now only slightly smaller than that of Surinamese women, since very long the largest non-western group in the Netherlands. Numerically the third non-western group is formed by Moroccan women. The share of non-western women in the total number of women in the fertile age range increased from 8.1 to 12.7 percent in this period. Non-western women generally raise the Dutch birth rate due to their often higher fertility, an effect that is expected to get stronger with their growing number. Since 1973 the Dutch fertility rate has been below the replacement level, although it is still slightly higher than the EU average. This higher level is not just due to the presence of non-western women, but also to the relatively high fertility of native Dutch women.

Although period figures show that non-western and native Dutch fertility levels are converging, it seems that the convergence has been slowing down since the mid-1990s. In the case of Moroccan women there was even stagnation. We described the

developments in the completed fertility by birth cohort, ethnicity and generation to explain the developments with respect to the fertility of native Dutch women and Turkish and Moroccan women, two large groups that are also strongly represented elsewhere in Europe. The combination of period and cohort data used in this description yielded the following picture.

Native Dutch women born in the second half of the 1950s had on average 1.87 children by 2005. The fertility of younger native Dutch women will probably be only slightly lower, although it is difficult to estimate the eventual level, due to their fairly young ages and the frequent postponement of fertility. The period TFR of Turkish women decreased in the past decade, from 2.49 tot 2.17. This decrease was not as fast as in Turkey itself. Ten years ago Turkish women in the Netherlands still had a considerably lower TFR than women in Turkey, but currently the rates are at about the same level. The decrease in the period TFR of Moroccan women has been even slower, from 3.39 to 3.22, and is now higher than the Moroccan rate. This is due to the stagnating cohort fertility of first generation Moroccan women. The fertility of the second generation, on the other hand, is falling very rapidly. There is by now little difference between the fertility of second generation Moroccan and native Dutch women.

The mean age of native Dutch women at first birth (29.8 years in 2004) is still increasing somewhat, but not as fast as before. Native Dutch women appear to approach the limits of late motherhood. Turkish women of the first generation continue to have their first children at a very young age. In contrast, the age at first birth of the second generation is rising. The second generation now differs little from native Dutch women in this respect. A clear difference between the generations is also shown by Moroccan women: there is hardly any postponement of motherhood among the first generation, as opposed to a significant delay in the second generation. Such a delay is also visible in Morocco itself.

The young ages at which the first generations give birth for the first time have a relatively strong impact on the Dutch teenage fertility rates. These rates are, nonetheless, among the lowest in the world. In spite of a general trend to postpone births, particularly among Moroccan women, the non-western teenage fertility rates are still far above the native rates. The first generation Moroccan rate is about eight times the native Dutch rate. In contrast, the second generation differs little from native Dutch girls. Relatively many Turkish women of the first generation have their first child at age 19, raising the figure for teenage motherhood for this generation. Unlike the Dutch Caribbean group, most of these teenage mothers are married, and their children are normally raised in two parent families. Among the second generation, motherhood of Turkish teenage girls is again much rarer.

Approaching the limits of late motherhood is one of the reasons why childlessness and one child families are clearly on the rise. About one in eight native Dutch women of birth cohort 1945-1949 remained childless, as compared to about one in six of the birth cohort ten years younger. A consistently large majority (about 95 percent) of Turkish women of the first generation have children, whereas childlessness among Moroccan women of the first generation is slowly increasing. Second generation Moroccan women in their thirties relatively often have no children, just like native Dutch women.

The younger cohorts of Turkish women of the first generation show fertility patterns that closely resemble that of the older cohorts. There is only a difference in the number of women who have a third or next child. Moroccan women have a third child much more often than the other groups, but among the younger birth cohorts the share of women with a fourth child is rapidly falling. This is what causes the slight decrease in fertility, although the shares of Turkish and Moroccan women with a third or next child are higher than those among all other major ethnic groups. The fertility decline of first generation Moroccans in the Netherlands has stagnated since the mid-1990s, and their TFR is now at an even higher level than that of women in Morocco.

The substantial migration for the purpose of family formation in the past few decades explains why the TFRs of Turkish and Moroccan women have been falling only slowly. The first generation mainly came to the Netherlands for this purpose. The women (and men) concerned turn out to be more traditional, at least in terms of fertility behaviour, than the average person in the country of origin. Given the substantial recent dip in migration for family formation purposes and the changes in the ratio between the first and second generation, the TFR of the total group of Turkish and Moroccan women is expected to diminish further in the next few years. The second generation will play a major role in this decrease.

The fertility levels of non-western and native Dutch women still converge, but there are major differences within and between groups. The first generation of Turkish and Moroccan women maintain high fertility rates, even higher than those of the women in their countries of origin. The cohort figures only show a slowly decreasing fertility. The cumulative fertility of recently arrived women is lower than that of women who arrived a few decades ago. One might expect the opposite (reflecting a stronger assimilation of long-term residents), in the absence of a changing fertility behaviour in the countries of origin. The effects of fertility declines in Turkey and Morocco have however been strong, probably more than compensating the possible effect of cultural assimilation in the Netherlands.

In striking contrast to the first generations, the second generations have a completed fertility and mean age at first childbirth that hardly differ from those of native Dutch women. Turkish and Moroccan women in their early thirties have even

slightly fewer children than native Dutch women of the same age. The teenage fertility rates of second generation Turkish and Moroccans are likewise comparable to that of native Dutch girls. In terms of fertility, women of the second generation no longer take up a middle position between the first generation and native Dutch women, but resemble native Dutch women much more than their mothers.

Our data indicate that the age at first childbirth, childlessness and family size can change very strongly from one generation to the next. The prevailing western system of social norms and possibilities, for example with respect to female education and labour participation, may therefore have a much stronger effect than the traditional values held by the non-western first generation.

#### References

- Alders, M. (2000a). Allochtone moeders in Nederland. Ontwikkelingen in de longitudinale vruchtbaarheid van vrouwen uit Turkije, Marokko, Suriname en de Nederlandse Antillen en Aruba [Foreign mothers in the Netherlands. Trends in the longitudinal fertility of women from Turkey, Morocco, Suriname and the Netherlands Antilles and Aruba]. Maandstatistiek van de Bevolking 48(11): 12-21. Voorburg/Heerlen: Statistics Netherlands.
- Alders, M. (2005). Allochtonenprognose 2004-2050: belangrijkste uitkomsten [Forecast of the foreign population in the Netherlands 2004-2050: main results]. *Bevolkingstrends* 53(1): 32-41.
- Alders, M. and Schapendonk-Maas, H. (2001). Allochtonenprognose 2000-2050: veronderstellingen over het toekomstige kindertal van allochtone vrouwen [Forecast of the foreign population in the Netherlands 2000-2050: assumptions about the future number of children of foreign women]. *Maandstatistiek van de Bevolking* 49(3), pp. 23-30. Voorburg/Heerlen: Statistics Netherlands.
- Carlson, E. (1985). Increased nonmarital births among foreign women in Germany. *Sociology and Social Research* 70(1): 110-111.
- Coleman, D. (1994). Trends in fertility and intermarriage among immigrant populations in Western Europe as measures of integration. *Journal of Biosocial Science* 26: 107-136.
- Coleman, D. and Garssen, J. (2002). The Netherlands: Paradigm or exception in Western Europe's demography? *Demographic Research* 7(12): 433-468.
- Council of Europe (2005). Recent demographic developments in Europe. Straatsburg: Council of Europe Publishing.
- De Beer, J. and de Graaf, A. (1998). Meer vrouwen krijgen maar één kind [More women only get one child]. *Maandstatistiek van de Bevolking* 47(11): 8-11. Voorburg/Heerlen: Statistics Netherlands.
- De Jong, A. (2003). Demografie van vijf niet-westerse herkomstgroepen vanaf 1972 [Demography of five non-western groups of origin in the Netherlands since 1972]. *Bevolkingstrends* 51(3): 54-60.
- De Valk, H.A.G., Esveldt, I., Henkens, K., and Liefbroer, A.C. (2001). Oude en nieuwe allochtonen in Nederland. Een demografisch profiel [Old and new foreigners in the Netherlands. A demographic profile]. Werkdocument W123. The Hague: WRR.

- Eltigani, E.E. (2001). Childbearing in five Arab countries. *Studies in Family Planning* 32(1): 17-24.
- Esveldt, I., Kulu-Glasgow, I., Schoorl, J., and van Solinge, H. (1995). Migratiemotieven, migratienetwerken en partnerkeuze van Turken en Marokkanen in Nederland [Migration motives, migration networks and partner choice of Turks and Moroccans in the Netherlands]. Rapport no. 43. The Hague: NIDI.
- Garssen, J. (2005). Jonge moeders in statistisch perspectief. Historie, internationale aspecten, etnische achtergronden en toekomstverwachtingen [Young mothers in statistical perspective. History, international aspects, ethnic background and expectations]. In: Offerman, H. (eds.). Andere tijden, andere meiden...?, pp. 39-52. Amsterdam: Uitgeverij SWP.
- Garssen, J. (2006). Fewer teenage mothers with a foreign background. CBS-webmagazine, 4 September 2006. www.cbs.nl.
- Garssen, J. (2008). Fewer teenage mums with non-western background. CBS-webmagazine, 10 June 2008. www.cbs.nl.
- Garssen, J., Nicolaas, H., and Sprangers, A.H. (2005). Demografie van de allochtonen in Nederland [Demography of people with a foreign background in the Netherlands]. *Bevolkingstrends* 53(3): 96-117.
- Garssen, J. and Nicolaas, H. (2006). Recente trends in de vruchtbaarheid van nietwesterse allochtonen [Recent fertility trends among non-western foreigners]. *Bevolkingstrends* 54(1): 15-31.
- Garssen, J. and Roovers, H. (2008). Fewer very large families. CBS-webmagazine, 15 May 2008. www.cbs.nl.
- Huisman, C. and van Wissen, L. (1997). Allochtonen en kindertal [Foreigners and their number of children]. Demos, February 1997. The Hague: NIDI.
- Koç, I. and Özdemir, E. (2004). Fertility. In: Haceteppe University, Turkey. Demographic and Health Survey 2003. Ankara: Haceteppe University.
- Ministry of Social Affairs and Employment (2000). Press release SZW 00/225: speech of junior minister A.E. Verstand-Bogaerts at the congres Arbeitsmarktpolitik im Zentrum Europas ein Ländervergleich, 14 December 2000, Düsseldorf.
- Schoenmaeckers, R.C., Lodewijckx, E., and Gadeyne, S. (1998). Vruchtbaarheid bij Turkse en Marokkaanse vrouwen in België: resultaten van de volkstellingen [Fertility of Turkish and Moroccan women in Belgium: results of the population

- censuses]. In: Erf, R van der, A. Kuijsten, Raymakers, P., Schoenmaeckers, R.C. (eds.). Tussen twee culturen. Naturalisatie en integratie in Nederland en Vlaanderen. *Bevolking en Gezin* 27(3): 127-154.
- Schoorl, J.J. (1984). Fertility and age at marriage of Turkish women in the Netherlands. Nüfusbilim Dergisi. *Turkish Journal of Population Studies* 6: 27-47.
- Schoorl, J.J. (1988). Kindertal en geboorteregeling bij vrouwen uit Turkije en Marokko in Nederland: 'assimilatie'? [Number of children and family planning among women from Turkey and Morocco in the Netherlands: 'assimilation'?]. In: Heeren, H.J. (eds.), *Migranten en minderheden* (5): 32-47. The Hague: NIDI.
- Schoorl, J.J. (1990). Fertility adaptation of Turkish and Moroccan women in the Netherlands. *International Migration* 28(4): 477-95.
- Schoorl, J. (1995). Fertility trends of immigrant populations. In: Voets, S., Schoorl, J., and de Bruijn, B. (eds.). Demographic consequences of international migration, pp. 97-121. Rapport no. 44. The Hague: NIDI.
- Sprangers, A. (1998). Vruchtbaarheid van in het buitenland geboren vrouwen [Fertility of foreign born women in the Netherlands]. *Maandstatistiek van de Bevolking* 46(7): 8-10. Voorburg/Heerlen: Statistics Netherlands.
- Ünalan, T., Koç, I., and Tezcan, S. (2004). Family planning. In: Haceteppe University, Turkey. Demographic and Health Survey 2003. Ankara: Haceteppe University.
- World Resources Institue, Factsheet EarthTrends. http://www.earthtrends.wri.org.