APPENDIX B

WHEN COUPLES HAVE FEWER THAN TWO

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Our long-term demographic goal is to stabilize the population at a certain number sometime in the first half of the 21st century. To attain this goal, two conditions must be fulfilled.

The first is that we must reduce our fertility to the replacement level, or the two-child family level; the other is to maintain it at this level indefinitely.

The first condition was accomplished in 1975 when our fertility was reduced to the two-child family level. But we were not able to realise the second condition in that fertility continued to fall below this level to reach the low point of 1.5-child family level in 1985.

The continuous decline of our fertility below that two-child family level can be attributed to our comprehensive population control programme as well as to many economic, social and cultural factors favouring a small family size among our general population.

To elaborate on the above points, I have prepared three alternative population projections based on three different fertility assumptions.

In the first projection, it is assumed that our fertility will move back from the 1.5-child family level in 1985 to the replacement level of the two-child family in the year 2000, and will continue to be at this level indefinitely.

In the second projection, fertility is assumed to remain constant indefinitely at the 1.5-child family level.

In the third, it is assumed that fertility will continue to decline slightly from the 1.5-child family level in 1985 to the 1.3-child level in the year 2000.

If we succeed in moving fertility back to the two-child family level in the year 2000, the total population of Singapore will reach the peak of about 3.39 million in the year 2030 and will remain just slightly below this figure indefinitely. This means that zero population growth will be experienced from the year 2030 onwards, with births equalling deaths each year.

If our fertility is not pushed back to the two-child family level and is allowed to continue indefinitely at the 1.5-child level, our population will peak at about 3.02 million in the year 2015. After that, it will decline continuously until it reaches 2.46 million in the year 2050. During this period, deaths will progressively exceed births each year.

The position would be worse if we were to allow our fertility to drop further from the 1985 level to the 1.3-child family level in the year 2000. In this case, the population will reach the maximum of 2.9 million in the year 2010 and, after that, it will decline more rapidly to reach only 2.13 million in the year 2050 as negative growth sets in.

We will now examine the impact of the three paths of population trends on manpower supply and the ageing of the population.

With a two-child family level, the number of children under 15 years of age will rise from 624,000 in 1985 to 682,000 in the year 2000, and then remain slightly below this level during the rest of the period.

But the number will shrink continuously if fertility were not moved back to the two-child family level. With a 1.5-child family level, the number will be reduced from 624,000 in 1985 to 355,000 in the year 2050. The shrinkage is even more severe when the level is a 1.3-child family, the number will then go down to 252,000 in the year 2050.

With the exceptionally rapid decline in our fertility from the high level of about six-child family in the late 1950s to the two-child family level in 1975, ageing in our population has begun.

As for the process of ageing, according to the first projection, the proportion of our population aged 60 and over will increase from 7.8 per cent in 1985 to the peak of 24.5 per cent in the 2030, and fall slightly towards the end of the period in 2050.

According to the second projection, the proportion will increase from 7.8 per cent in 1985 to very near 29.3 in the year 2050.

The third projection sees the proportion increasing from 7.8 per cent in 1985 to 33.7 per cent in the year 2050.

The movement back to the two-child family in the year 2000 is, therefore, necessary not only to prevent our population from declining in the early 21st century, but also to avoid a worsening of our problems associated with our manpower shortage and aged population.

An accelerated ageing process of our population, accompanied by a severe shrinkage in manpower supply, will have dire consequences viewed in terms of many aspects of our society.

Taking into consideration the above scenario, it is advisable for us to make some changes to our population policies in order that our national demographic goal of stabilizing our population in the future can be successfully attained.

The aim of stabilizing our population at about 3.4 million in the future makes sense in view of our small country with limited land space and natural resources.

An ultimate population size of 3.4 million is what Singapore can afford. But with the current pattern of reproduction, the population will fall short of the ultimate size.

To prevent this from happening, we must raise our fertility to at least replacement level. Families which can afford to have at least two children should do so.

APPENDIX B.1
How Population Will Grow
(in thousands)

Year	2-child Family	1.5-child Family	1.3-child Family
1985	2,558	2,558	2,558
1990	2,703	2,691	2,686
1995	2,850	2,809	2,789
2000	2,987	2,900	2,858
2005	3,102	2,961	2,896
2010	3,191	3,000	2,911
2015	3,266	3,018	2,905
2020	3,328	3,014	2,873
2025	3,372	2,979	2,807
2030	3,391	2,912	2,708
2035	3,382	2,814	2,577
2040	3,358	2,698	2,429
2045	3,332	2,577	2,275
2050	3,317	2,460	2,125

APPENDIX B.2
Number of Children Under 15
(in thousands)

Year	2-child Family	1.5-child Family	1.3-child Family
1985	624	624	624
1990	621	609	604
1995	659	618	598
2000	682	595	553
2005	681	552	492
2010	660	509	440
2015	642	481	410
2020	643	468	393
2025	660	457	374
2030	671	438	346
2035	669	412	315
2040	659	387	288
2045	651	368	268
2050	654	355	252

APPENDIX B.3
Percentage of Old People Over 59

Year	2-child family	1.5-child family	1.3-child family
1985	7.8	7.8	7.8
1990	8.5	8.6	8.6
1995	9.3	9.5	9.5
2000	10.5	10.8	11.0
2005	11.5	12.0	12.3
2010	14.2	15.1	15.5
2015	17.4	18.8	19.6
2020	21.1	23.3	24.4
2025	23.8	26.9	28.5
2030	24.5	28.5	30.6
2035	24.4	29.3	32.0
2040	23.2	28.9	32.1
2045	22.4	28.9	32.7
2050	22.0	29.3	33.7