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Lecture Note

Gender Economics (EE364)

Chapter 3: Theories of Family Formation



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3.3 An economic analysis of fertility

An economic analysis of fertility (Becker, 1960) - Factors that determine the birth rate (or the determinants of fertility). A household will decide whether to have children or not and then the number of children they want. Becker (1960) mentioned that "Children" are the output of the household production function. In the light of the demand for children, married couples will consider both the benefit (utility) and the opportunity cost of having children (or income lost from parenting time), as well as overall household income. The main idea is to decide on family size or the number of children to get maximum satisfaction under the budget and time constraints of the household. Becker also proposed a trade-off between the number and quality of children.

The concept of supply and demand in family planning (Easterlin, 1975) – Easterlin (1975) proposed the idea of motivation and cost in family planning to determine the demand for having children. Three factors affect the decision to have children:

1) The number of children you want (or expect) is determined by socioeconomic factors, including income, costs, values, and beliefs (that affect the family size and quality of children).

2) The number of children one can have (without contraception) is determined by age at marriage, woman's age, number of children a woman has, and child's survival from birth to adulthood.

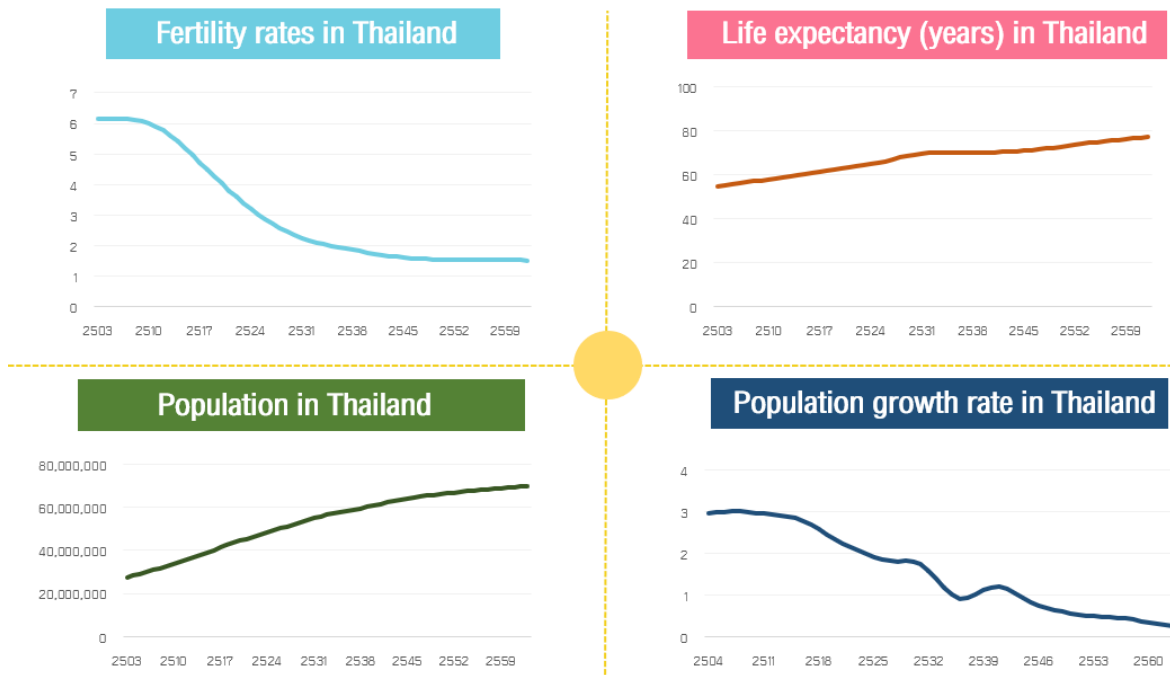
3) Cost in terms of monetary and non-monetary (belief and culture, social condition) aspects (or contraceptive costs). Couples are motivated to use contraceptives when the cost is low.

Blau and Winkler (2017) proposed the concept of economic opportunities for spouses to have children. For example, women with higher education have higher opportunity costs of having children (Becker 1985).

Paweenawat and Liao (2019) - Research in developed and developing countries found that women get higher education, women have fewer children. Therefore, the opportunity cost of not participating in the labor market is high. Therefore, highly educated women tend to have fewer children. The number of children per woman, especially those with a bachelor's degree or higher, declined. They found the relationship between years of schooling and the number of women's children. Increased year of education reduces the number of children women. Specifically, an additional year of schooling reduced the number of children the woman had by about 0.1, with the highly educated group more likely to have fewer children. This evidence is

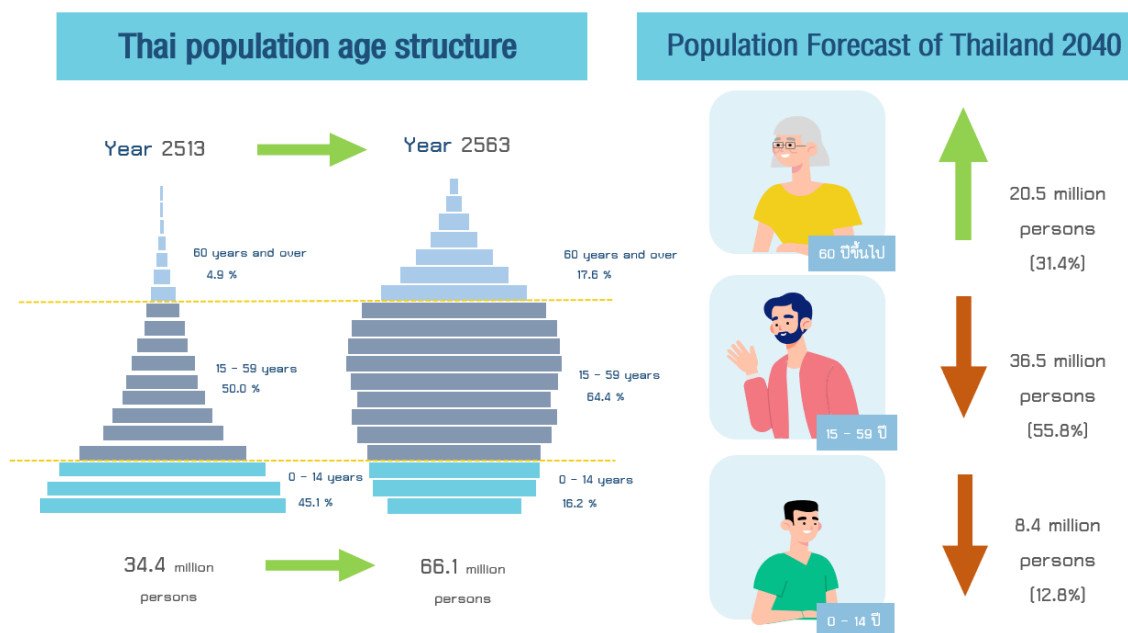
consistent with findings in the UK and some European countries Fort et al. (2016) (approximately 0.15).

Figure 3.5 – Population Growth in Thailand



Source: World Development Indicators (WDI).

Figure 3.6 – Thai population age structure



Source – National Statistical Office, National Economic and Social Development Council

Paweenawat and Liao (2019) also studied the factors affecting the decision to marry and have children in Thailand. Higher education affects the choice of women as they are less likely to find a partner who matches them in terms of income level and education. Even though an increase in education allows women to enter the labor market, it also increases the opportunity cost of women's maternity and childcare leave. This causes a delay in marriage and a decrease in the number of children. Although increased education contributes to an increase in income, the effect of income may be weakened. If there is a need for high-quality children, it requires a high per capita investment in children. Therefore, the number of children needed is decreased.

Furthermore, the cost of raising children in Thailand makes married couples more likely to delay having children (or decide not to have children). There is a change in attitudes of highly educated young people towards marriage and having children. For example, the new generation (Gen Y) contributes the larger share of the Thai population (Figure 3.7), prioritizing career advancement and personal independence. Furthermore, the lack of government assistance in raising children disincentivizes Thai women from having more children (Figure 3.8).

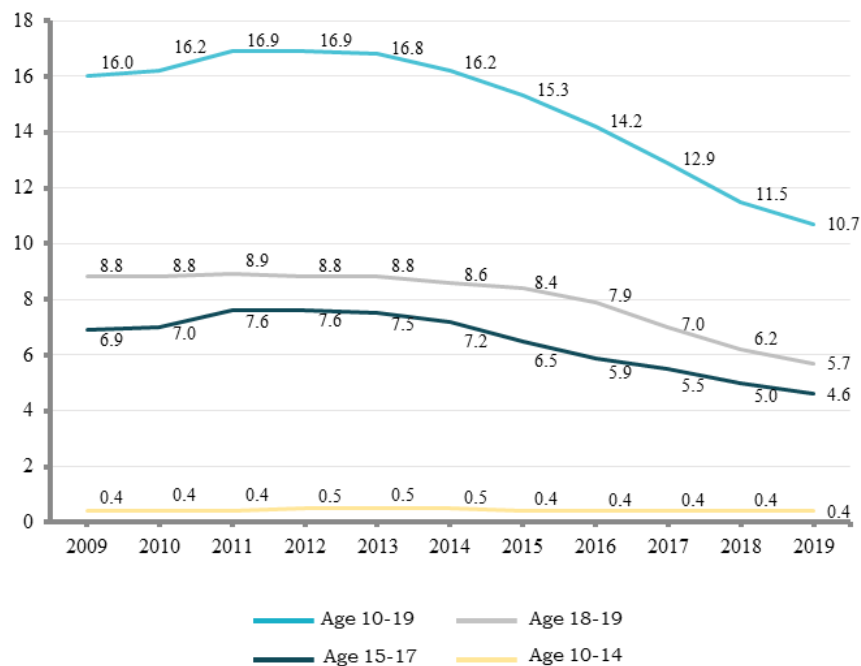
Figure 3.7 – The proportion of people in each generation in Thailand in 2020



Source – World Population Prospect 2019.

Figure 3.8 – Lack of government assistance in raising children

While Thailand has a low fertility rate overall, the country's problem is teenage pregnancy. Teen pregnancy—and being unprepared for pregnancy—is a big problem needing solution in Thailand. There is a decreasing trend of teen pregnancy in Thailand (2009-2019). The rate in Thailand is still higher than the world standards (more than 10%) (Figure 3.9).

Figure 3.9 – The share of adolescent pregnancy in Thailand (2009-2019)

Source: Ministry of Public Health (2019).

Exercise

- 1) In economic theory, marriage and divorce decisions are based on analysis of the benefits and costs of staying married (X) and staying married to this person (Y). Applying this concept, explain the theoretical costs and benefits of divorce using examples of accompanying events.

- 2) A study in Thailand by Paweenawat and Liao (2018) found an increase in marriages across educational levels (educational hypergamy), especially among wives with less education than their husbands (hypergamy). Examine assortative mating based on education level and the country in which wives are more educated than husbands (hypogamy) and discuss factors affecting such matches. Furthermore, what kind of matches do they have? Does this relationship affect the country's economic condition or society? How?

- 3) A study by Paweenawat and Liao (2019) found that in Thailand, level of education affects women's chances of marriage, but it does not greatly affect a man's chances of marriage. Studies from around the world on the issue have not yet reached definitive conclusions. Please give examples of research studies on this issue in other countries that support or contradict the results of the Paweenawat and Liao (2019) study.

- 4) Discuss the interconnection of Gary Becker's concept of having children (1960), Richard Easterlin's concept of household planning (1975), and economic opportunities. How are they connected to affect the decision to have children and family planning? Provide your discussion with examples?

- 5) Expenses or the cost of raising children today make married couples more likely to not have children or reduce the number of children they want. This belief also affects Thailand's population structure. Please provide examples of research on the current cost of raising children in Thailand. Does this cost affect the current decision to have children in Thailand? If the student is a policy maker, what solution do you suggest to this problem?

6) The lack of government assistance in raising children and lack of adequate parental welfare make the decision to have children in Thailand more difficult, and thus lowering the birth rate in the country. Please provide an example of a country that provides parents with welfare. Is there a relationship between welfare and the birth rate in the country? Is there any country worldwide where even though the welfare of parents is low, the birth rate is still high? Why? Discuss this issue.

7) Currently, the government in Thailand has many policies to encourage people to marry and have children. Please provide an example of such a policy. In addition, is the policy sufficient to motivate a spouse? What policies do you propose? How can they help solve this problem?

8) Explain the difference between the Motherhood Wage Penalty and the Fatherhood Wage Bonus. Describe the factors contributing to this situation Give examples of countries and discuss this issue.

9) The issue of teenage pregnancy in Thailand is one of the main problems the government wants to solve. Please provide an example of countries experiencing this problem and study what policies can help solve it. Can these policies be applied in Thailand? If so, how?

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