



Chapter 3

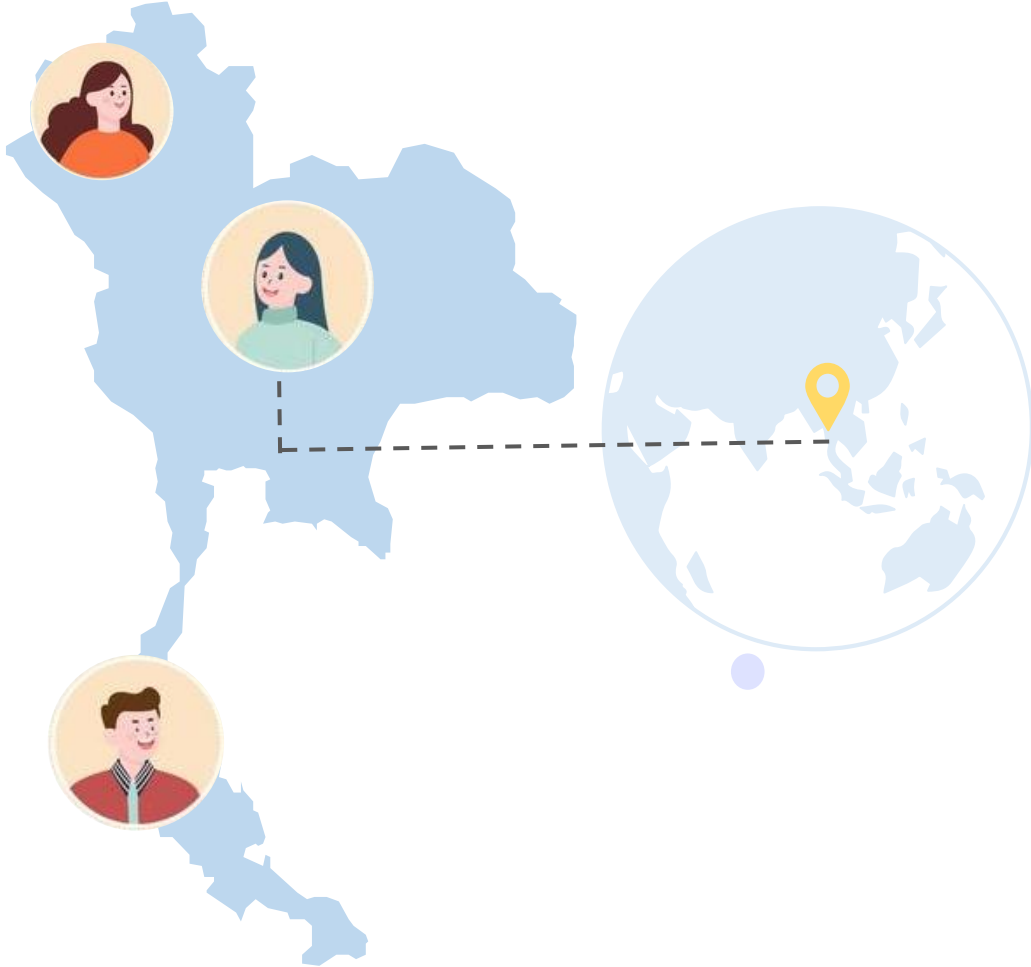
Theories of Family Formation

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Unit of the economy



- ⬡ When economists consider a country as a unit of the economy, that country's decision is a collective decision of its people.
- ⬡ However, a country's decisions are usually made by one government, namely the decision-makers who collectively decide.
- ⬡ Finally, one decision becomes one policy, and then later national policy.

The Household As an Economic Unit

In the case of households, one economic unit is a one-decision outcome.



Gary Becker applied basic principle of economics to explain household decisions.

- The decision to get married and form a family (or household) is not an individual one.
- This is a joint decision made by a household as a single decision-making unit.

Household Analysis

- 🏠 A household composed of many people is considered the second-smallest economic unit after an individual.
- 🏠 A household refers to two or more people living together in a non-institutional environment (e.g., student dormitory or military barracks).
- 🏠 Therefore, when we use the word “household,” we mean an economic unit made up of several people in a household (more than two people).

If there is only one person in a household, it is called an individual.

Household Analysis

Why are economists interested in studying household behavior?

- 🏠 The household is the labor supply unit and provides demand for goods in the economy.
 - Economists and policymakers are interested in how households interact with economy.
- 🏠 The household is a small economic unit.
 - The allocation of households is associated with a large economic system.
 - Households are responsible for allocating labor and making decisions on purchase of goods/services.

Household Analysis



⬡ The results of household allocation affect how households interact with the economy.

⬡ For example - education policy –

Encouraging boys to study while girls stay at home to do housework results in most workers in the future labor market being men.

Family Formation

Family Formation

- Marriage formation and dissolution
- Marriage and the reason for marriage?
- Assortative mating

Why don't you want to get married?

Why do you want to have children?

Motherhood Wage Penalty



Search and matching theory



Search and Matching Theory - Peter Diamond, Dale Mortensen and Christopher Pissarides



2010 Nobel Prize in Economics for “fundamental contributions to search and matching theory”.

- Difficulty in managing and matching supply to demand in the labor market
- How do employers and employees meet?, and if they meet and match, will there be equilibrium in the market? If not, unemployment occurs.

Search and matching theory

- Applied to assortative mating in marriage market – Search and matching has difficulties.
 - Imperfect information makes it impossible to find a match
 - Each person has asymmetric information
 - Each person is different (heterogeneity)
- Difficult to find compatible person!
- In the marriage market, those who find each other get married. However, if no-one is found, one remains single.
 - Can stay together after marriage (equilibrium)
 - But they may not be able to live together (disequilibrium: divorce).



Rationality of marriage

Marriage

- Gary Becker (1981) -

Presence of people in a situation that causes the division of labor according to the comparative advantage of coexistence between men and women.

This will give rise to the specialization of each person, which will increase economic productivity.

Family formation – Marriage

Marriage are further analyzed in many dimensions

- cost-benefit analysis of marriage,
- game theory of husband and wife's decisions
- macro-economic impact.

Why do people get married?

-Cost-Benefit Analysis



For most decisions, we generally weigh costs and benefits

- choose the way that provides the highest net benefit.

Family formation – Marriage

- Marriage decisions are made based on getting married (state X) and staying married to this person (person Y).
 - If $B(X) > C(X)$, a person will decide to get married or enter into state X
 - If $B(Y) > C(Y)$, a person will decide to get married to this person (Y)
 - B and C are benefits and costs (monetary (money) and non-monetary (Psychic – love, desire, trust))
- Divorce decisions are also made based on staying married (X) and staying married to this person (Y)

Family formation – Marriage

- ⬡ In fact, benefits and costs do not stem from a single moment, but from the marriage period (length of time spent in a marriage), which can have more than one period.
- ⬡ The decision to marry and whom to marry is the sum of the expectation of entering the marriage (X) and deciding to marry this person (Y). The rules of the marriage decision will occur when -

$$\sum_{t=1}^T E \left[\frac{B_t(X)}{(1+r)^t} \right] > \sum_{t=1}^T E \left[\frac{C_t(X)}{(1+r)^t} \right]$$

Family formation – Marriage



Likewise, the law of marrying someone will only happen when -

$$\sum_{t=1}^T E \left[\frac{B_t(Y)}{(1+r)^t} \right] > \sum_{t=1}^T E \left[\frac{C_t(Y)}{(1+r)^t} \right]$$

When r is the subjective discount rate and T is the last period of marriage.

Costs and Benefits of Marriage



In fact, most people will stay married during their lifetimes if there is a benefit compared to being single.

- This can be summarized into four theoretical economic benefits:

1. Economies in production
2. Internalizing externalities (Inclusion of external effects)
3. Reduction of transaction costs
4. Reduction of utility fluctuations (through resource pooling)



Costs and Benefits of Marriage (in Theory)

1

Economies in production – Many household members in a household can save time and/or money.

In the production process, compared to household with only one person (or being single), the marginal cost of production is reduced due to more people.

- For example, cooking or washing for two people is done only once, not twice.

The average productivity of household members has increased because of the division of labor within households.

Costs and Benefits of Marriage (in Theory)

2

Internalizing externalities – The inclusion of external effects.

The happiness of household members can lead to the happiness of other household members.

- For example, a spouse's salary increase not only affects that person in terms of happiness and money, but also the welfare of other members and it increases household utility.

Costs and Benefits of Marriage (in Theory)

3

Reduction of transaction costs - Transaction costs incurred in negotiating contracts or agreements.

- If activities require multiple labor forces, it would be easier for each household member to take on responsibilities in their own right.
- These are implicit contracts that do not require a written contract or agreement, such as a mother taking care of a child or a father fixing a car.

Costs and Benefits of Marriage (in Theory)

4

Reduction of utility fluctuations through resource pooling – Multiple

households can achieve consumption smoothing through resource pooling.

- For example, working income aggregation of husband and wife increases utility by reducing the risk of no income.
- Alternatively, if one person loses their job, there will still be income from the other person.



Assortative Mating

Source: Paweenawat, S., and L. Liao.
“Educational Assortative Mating and Income Inequality in Thailand”
Journal of Demographic Economics (Forthcoming 2022)

doi:10.1017/dem.2022.9

Assortative mating

Becker (1973, 1974) – Marriage Market is like a matching game.

Greenwood et al. (2016) – People would find potential life partners based on the number of singles available on the market.

- They will get married if that single person can respond to their needs

Educational assortative mating



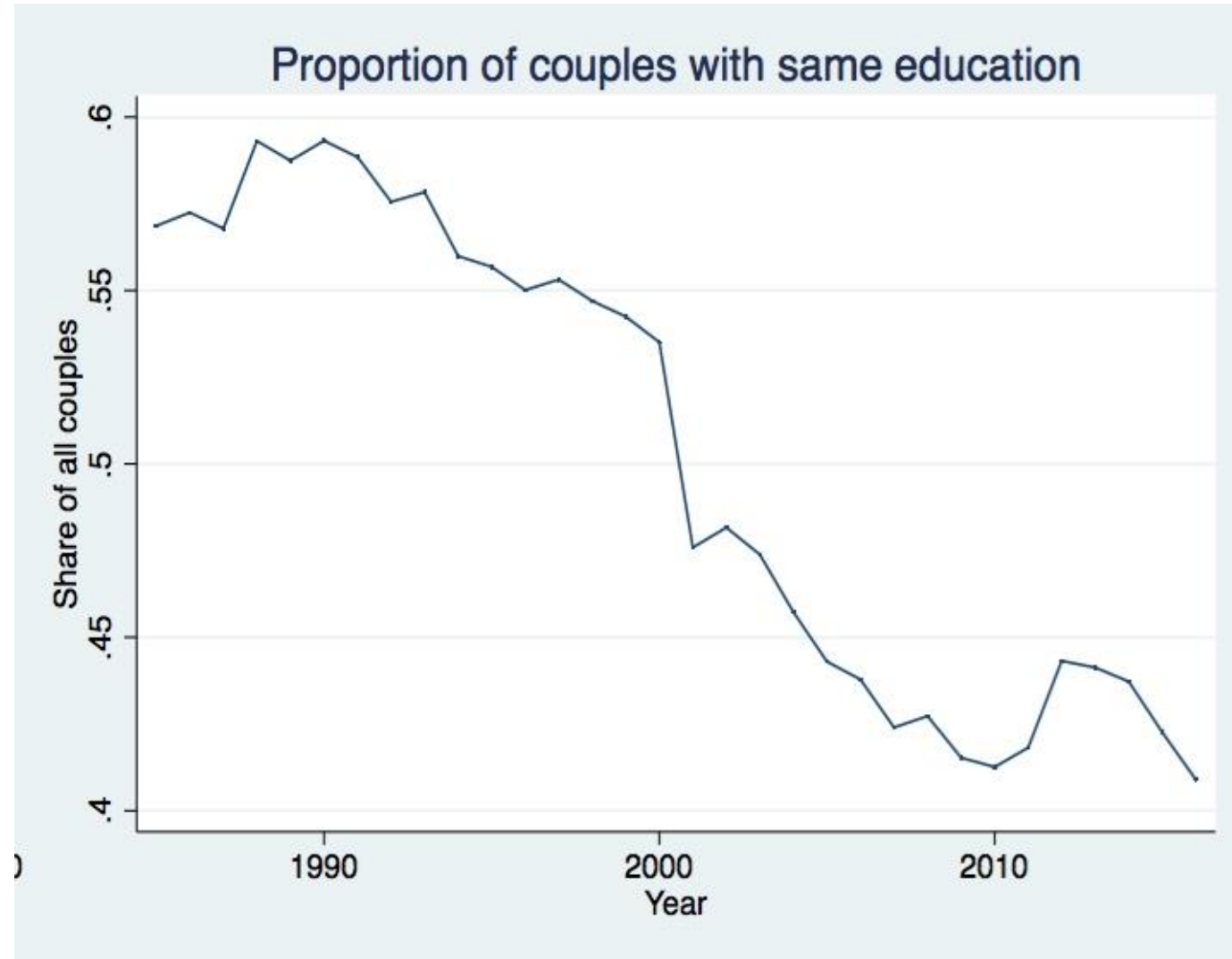
Assortative mating based on the spouse's educational level

“Educational assortative mating”

Smits and Park (2009) studied educational assortative mating in 10 Asian countries, including Thailand

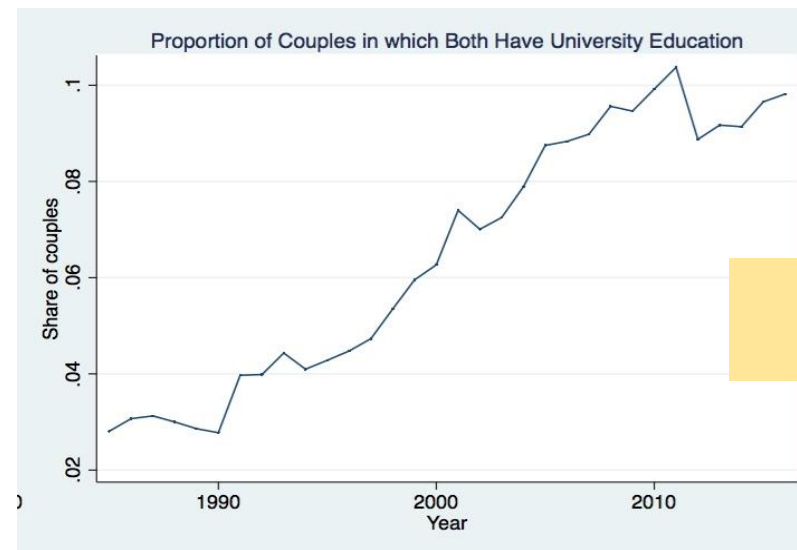
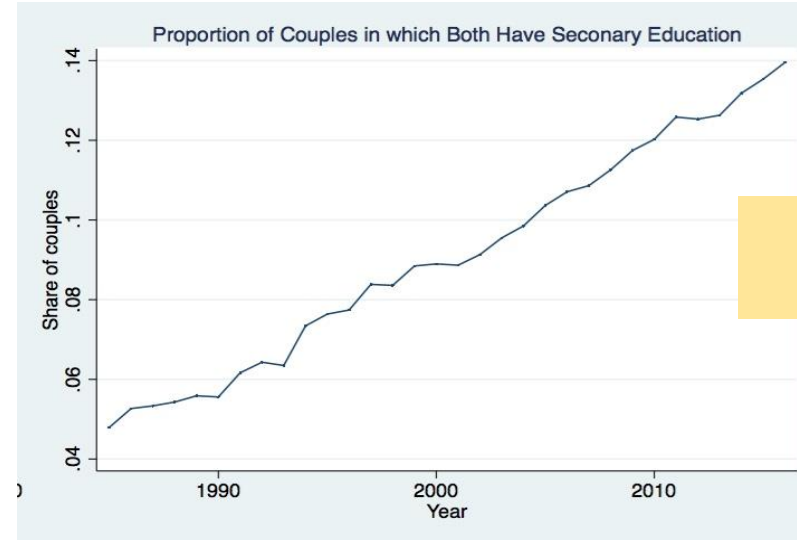
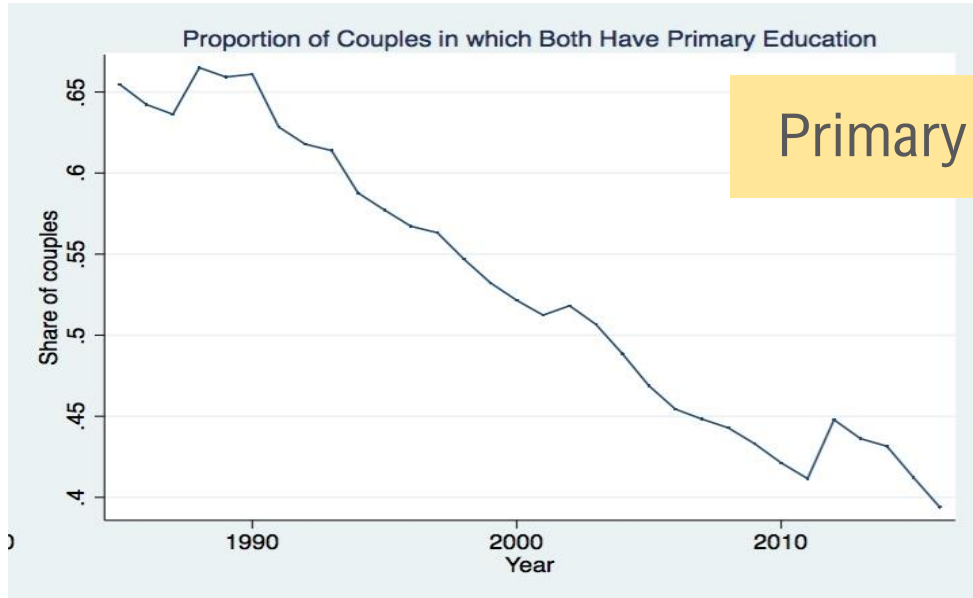
– Decreasing trend in educational homogamy corresponded to educational expansion

Educational Assortative Mating



Educational Homogamy
has decreased in
Thailand

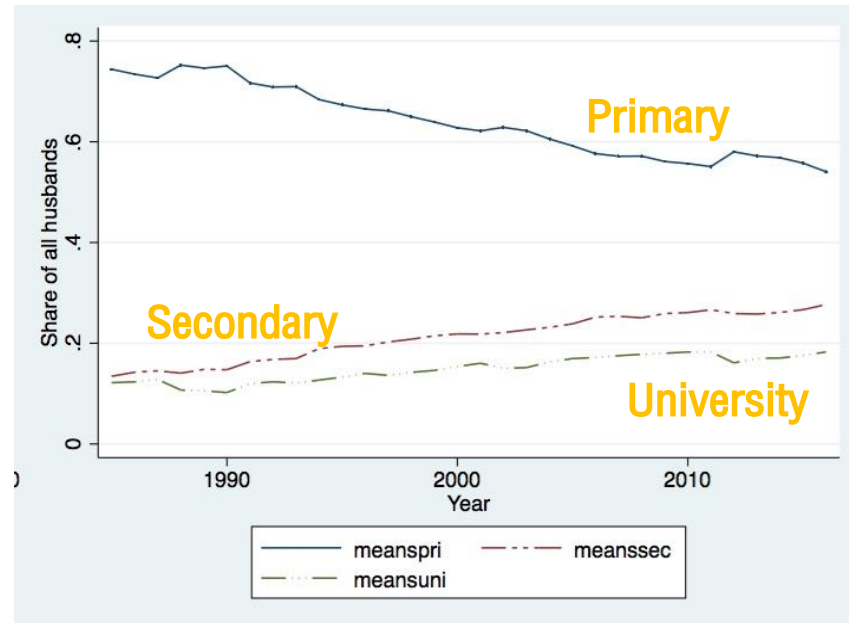
Educational Assortative Mating



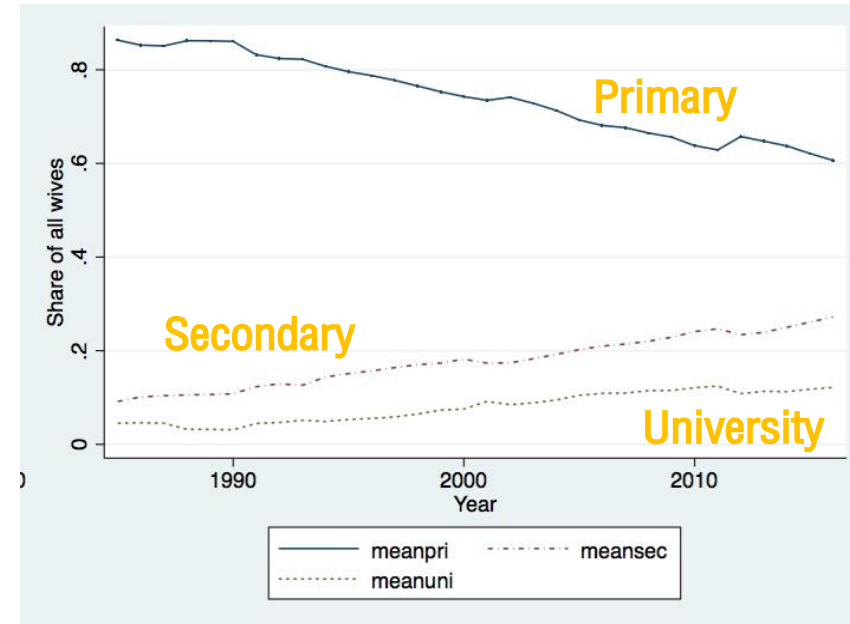
Educational homogamy has decreased only in couples, who completed primary education.

Educational Assortative Mating

Husband

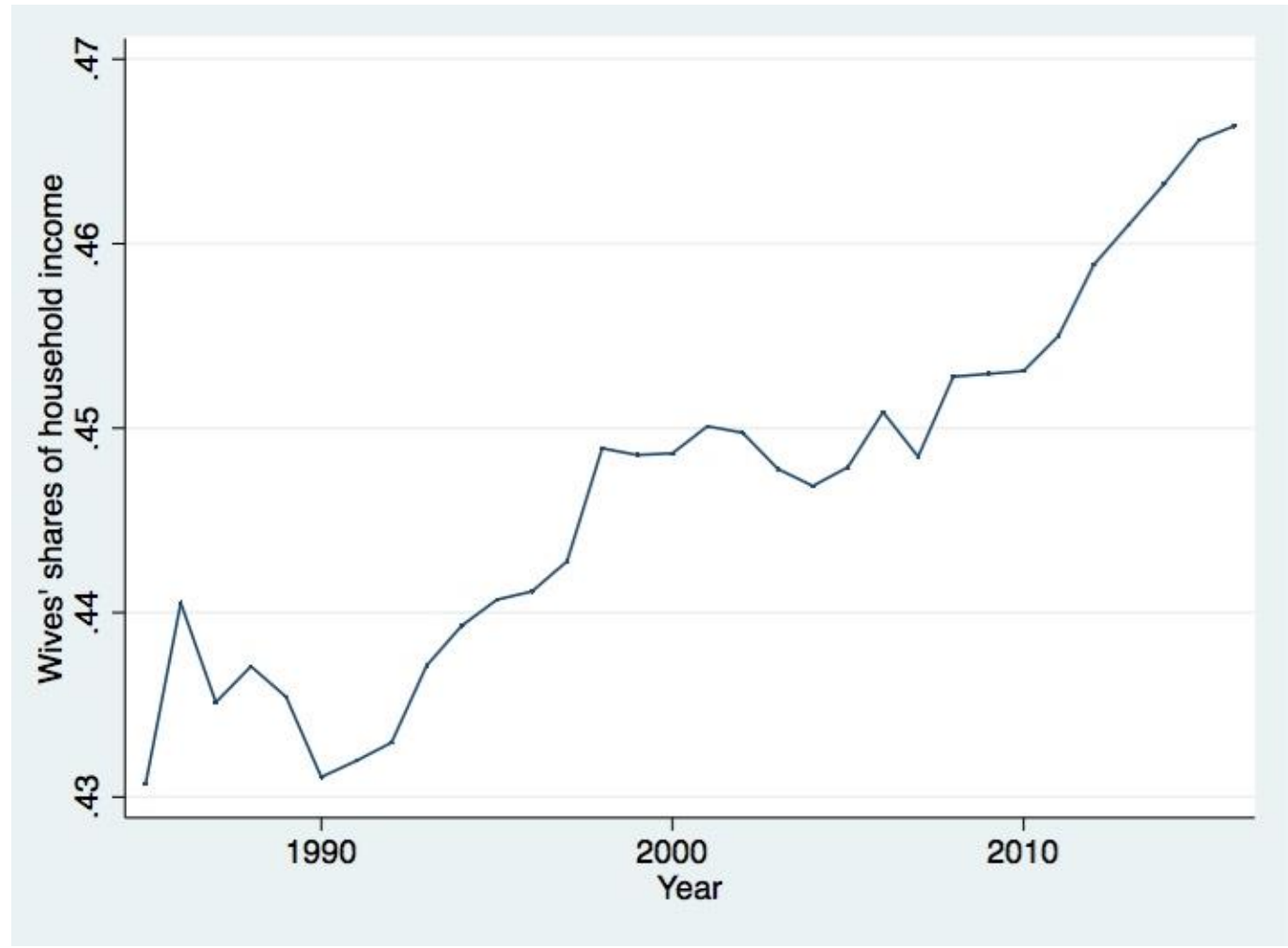


Wife



- The trends in the education of husbands and wives
- The proportion of husbands and wives with primary education decreased.
 - But the proportion at the secondary and university level has increased.

The ratio of wife's income to total household income



Source: Paweenawat and Liao (Forthcoming 2022)

Assortative mating and income inequality in Thailand

- Several studies found that educational assortative mating explained household income inequality (Burtless, 1999; Schwartz, 2010)
- Increase in education homogamy contributed to an increase in income inequality - US, Denmark, Germany, UK (Eika et al. 2017); China (Hu & Qian, 2015)
- Assortative mating only have small effects on income inequality (Olivo-Villabrille, 2017; Kremer, 1997; Cancian & Reed, 1999; Hryshko et al., 2017)


Assortative mating with income inequality in Thailand




Paweenawat and Liao (2022) aimed to study the changes in household income inequality in Thailand during 1985-2016 by focusing on the changes in educational assortative mating in Thai households.

- 1) Measuring educational assortative mating
- 2) Investigating the relationship between educational assortative mating and household income inequality in Thailand

Assortative mating with income inequality in Thailand


 Paweenawat and Liao (2022) applied the semiparametric decomposition method of DiNardo, Fortin and Lemieux (1996) to study the relationship between “Educational assortative mating” and household Income Inequality in Thailand.

 Decrease Educational Homogamy (wives and husbands have the same education level)

Hypergamy –Wife is less educated than husband

Hypogamy - Wife is more educated than husband.

Assortative mating with income inequality in Thailand

 Main finding shows in addition to a decreasing trend of educational homogamy, but educational hypergamy existed.

 Educational assortative mating has impacted Thai household income inequality.

However, income inequality and educational hypogamy has inverse relationship, which contradicts evidence found in developed countries.