Single low-educated women and growing female hypogamy

• Introduction
• I – Changes in education and couple status
• II – Women are now in hypogamic couples
• III – The impact on fertility
• IV – Conclusion
Introduction

• The reversal of the gender gap in education
  → Albert Esteve’s project based on iPUMS data, Jan Van Bavel project on implications for assortative mating and fertility
    + A preliminary version presented at the PAA, 2011

• A global phenomenon, with country specificities.
• A further exploration of French trends.

I – Changes in education and couple status

• The diffusion of education, especially among women
  → A dramatic change in educational attainment
• Adults live less often as a couple
  → A recent decline in first unions
  → After an increase in union disruptions
• Sex-specific trends, common to many countries
  → Women become more educated than men
  → Men as well as women live less often as a couple
I – a. Data

• IPUMSi data
  → French censuses, 1962 to 2006
  → Age range 30-39, men and women
  → A partner? (no age limit for the partner)
  → Educational attainment in 4 groups
  → Not very precise but sufficient to describe the trends
    – Definition of age range (results quite stable)
    – Education and qualifications (educational attainment)
• Family and housing survey, 2011
  → Couple biography: “Ever lived as a couple?”
  → Children and stepchildren

I – b. The diffusion of education

• The education revolution
  → Completed secondary spread from less than 20% in 1962 to 80% in 2006, for adults around age 35
• Graphs 1 and 2: distribution of men and women aged 30-39 by highest (completed) level of education, by birth cohort
• A reversal in the gender gap: for cohorts born after 1960, having a university degree is more frequent among women than among men
I – b. The diffusion of education

Distribution of men and women aged 30-39 by highest level of educational attainment, by census year

I – b. The diffusion of education

Proportion of men and women aged 30-39 with a primary, secondary or university degree, by birth cohort
I – c. Adults live less often as a couple

Proportion of men and women aged 30-39 not living as a couple, by birth cohort (per cent)

I – c. Stable differentials for men

Proportion of men aged 30-39 living as a couple, by education and birth cohort (per cent)
I – c. A reversal for women

Proportion of women aged 30-39 living as a couple, by education and birth cohort (per cent)

I – c. Similar trends for ever-living as a couple (Family and housing survey, 2011)

Proportion of men and women who ever lived as a couple before 2011, by education and birth cohort
II – Women are now in hypogamic unions

- Homogamy in the “union market”:
  → Partners are more often alike than if they were chosen at random
- Hypergamy is the traditional situation
  → When partners are different, on an ordered variable, the man is in a higher position than the woman
  → Women “marry up”
- Hypogamy is becoming more frequent
  → Women in a higher position than men

II – Women are now in hypogamic couples

- Esteve: gender gap and social preferences
  → gender gap in education (structural constraints),
  → marriage market (probability of entering a union by sex and education),
  → social preferences (net of the constraints, distribution of unions)
- Van Bavel: adjustments on unions and fertility
  → more homogamy, more hypogamy,
  → decline of age homogamy, increase in exogamy
  → increase in singlehood among highly educated women
II – a. Differential singlehood makes no difference (and in fact increases the gap)

Distribution of men and women living in union aged 30-39 by highest level of education, by census year

II – b. Structural constraints and the “union market”

- Structural effects (top, left)
  → A U-shape for homogamy
  → Inversed-U for hypergamy
  → An increase in hypogamy
- Additional effects (bottom)
  → Increase in the “social preference for hypogamy”
- Results (top, right)
  → More hypogamic than hypergamic couples

Single low-educated women and growing female hypogamy. Quetelet Seminar, November 2014
II – b. The change in mating preferences

- The previous situation
  - For men: exclusion of the lowest educated from the marriage market
  - For women: exclusion (of the most educated), but also women’s choice, and marriage squeeze
- The new situation
  - For men: exclusion of the lowest educated from the marriage market (no change)
  - For women: exclusion of the lowest educated (like men)
  - Men and women become very similar for mating preferences
- Homogamy still prevalent

II – b. simultaneous changes in constraints and preferences

- A strong negative correlation between hypergamy and gender gap
  - Esteve et al, 2012
  - Female advantage (on the x axis): probability for a random union of being hypogamic (if not homogamic)
  - Prevalence of hypergamy on the y axis: ln(hypergamic couples / hypogamic couples)
- Is France like the USA or Brazil?
II – b. changes in social preferences

- Odds ratios comparing observed and expected proportions (for 100 women plus 100 men)
  → In 1962, Structural excess of hypergamic couples
  → Plus preference for hypergamy (in green) against hypogamy (in blue on the tables)
  → Plus homogamy
  → Plus singlehood of most educated women

- In 2006, many changes
  → Homogamy still prevalent
  → Preference for hypogamy has replaced preference for Hypergamy
  → Women’s singlehood has become more frequent among the less educated

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II – b. The result of these changes:
more and more hypogamic couples

Distribution of couples (one partner aged 30-39) by level of education of both partners, and census year
II – c. Changes in age homogamy?

- Structural constraints
  - if preferences remain stable
    - Fewer unions among less educated men
    - Fewer unions among more educated women
- Changes in preferences
  - More hypogamic unions
- Van Bavel, 2012: many changes, including a polarization among highly educated women
  - More early unions, more single
  - Changes in age homogamy

II – c. changes in age homogamy

- Educational hypergamy and age hypergamy
  - Structural constraints: the younger a partner, the more likely that he or she is highly educated
    - Educational hypergamy related to age hypogamy
  - Higher age difference among hypergamic couples in terms of education if women look for an “old educated man” in case of shortage of young potential partners (van Bavel)
    - Educational hypergamy related to age hypergamy
II – c. An increase in age homogamy?

Cumulative age difference between partners, censuses 1962 to 2006 (a partner aged 30-39)

II – c. changes in age homogamy

- Overall changes
  - A decline in age differences
  - A U-shape for standard deviations
- Sequence of changes
  - A decline in unions with a man older by three years or more in the 1970s, offset by an increase in unions with an age difference of 0-3 years
  - Followed in the 1990s and 2000s by an increase in unions where the man is younger than the woman
II – c. changes in age homogamy

Relative mean (left) and standard deviation (right) of age difference between partners by “mean” level of education (top) and educational differences (bottom)

II – c. changes in age homogamy

• Smaller age difference (and smaller heterogeneity) between partners among highly educated couples
  → True for man’s as well as woman’s level of education
• Hypergamic couples shifted from a small age difference in 1962 (constraints) to a similar mean difference with higher heterogeneity in 2006
  → Polarization of highly educated women
• Difficult to identify the sequence of behaviours
  → Second unions for one or both partners
III – The impact on fertility

- Higher fertility among hypergamic couples
  - Common children, children born before the union, all children
- Childlessness by educational hypergamy
  - And differentials by level of education
- Children born before the union
  - Second unions and stepfamilies
    - Constraints: the lower a partner’s level of education, the more likely that he or she already had a child and a union disruption
    - Union market hypothesis: parents enter a union with a less educated partner (but who does not already have a child)
- Data from the Family and housing 2011 survey
  - Men and women living as a couple
  - 10-year cohort groups (by birth cohort of the woman)

III – a. Mean number of children

- Among homogamic couples, couples with a low level of education have more children (left), all children considered
- Hypergamic couples have more children than hypogamic couples (right), all children considered

![Graph showing mean couple's number of children by educational level and time period]
III – b. Childlessness

- Completely childless couples remain rare, with few differences by level of education (left)
- When common children are considered, heterogamic couples are more often childless; highly educated couples are often parents (right)

Proportion of childless couples: no child at all (left), no common child (right)

III – c. Children born before the union

- Heterogamic couples have a child born before the union more often than homogamic couples
- Hypergamic couples more often have a child born to the woman (left); hypogamic couples more often have a child born to the man (right)

Couples with a child born before the union, to the woman and to the man (%)
III – D. mean number of shared children

- Among homogamic couples, fertility by education is a U-shape curve, when only couple’s shared children are considered (left).
- Hypergamic couples have more children than hypogamic couples (right) (same as when all children are considered).

![Graph showing mean couple's number of children](image)

III – The impact on fertility

- Hypergamic couples have more children than hypogamic couples; this is true for common children as well as for children born before the union.
- Very few couples remain childless, with almost no difference by education, when all children are considered.
- Heterogamic couples have children born before the union more often than homogamic couples.
- When only common children are considered, heterogamic couples are more often childless, and have fewer shared children than homogamic couples.
- Hypergamic couples more often have a child born to the woman, while hypogamic couples more often have a child born to the man: people with a more educated partner are the most likely to have had a child before the union.
III – The impact on fertility

- These results describe all unions in 2011, and the behaviours behind them are not straightforward
  - Union formation,
  - Union disruption and repartnering
- No data on order of union
- Under-reporting of some children
  - Especially by men (no contact after parental disruption)
- The main impact of changing gender gap in educational attainment is on union formation
  - An overall decline in union formation
  - No decline in union propensities for highly educated women

IV – Conclusions (1/3)

- Many limits to this work
  - The change in gender gap in education could be overestimated
    - Type of studies (secondary and university)
    - Potential earnings, other social features of partners
  - Marriage and cohabitation
  - Compare with other countries
- Main results
  - An increase in female educational hypogamy
  - A decline in the “relative” singlehood of more educated women
  - No “specific story” for French trends
IV – Conclusions (2/3)

- Explanations
  - Change in “social preference for hypergamy”
  - Highly educated women may have become more “desirable”
  - Or they now choose lower educated men
- Why are people with low education less often living as a couple?
  - Same reasons for men and women, unrelated to marriage squeeze or gender differentials
  - Less first unions, more union disruptions

IV – Conclusions (3/3)

- Consequences for the future
  - Change in educational gender gap
    - Type of studies
  - Change in actual earnings of men and women
  - Change in gender roles within couples and regarding child-rearing
  - Changes in fertility
    - Work-life balance and gender equity
  - Changing constraints may go with changing preferences
References


• Thank you
II – b. The result of these changes: more and more hypogamic couples

Distribution of expected random couples (one partner aged 30-39) by level of education of both partners, and census year.