Family structure, infant health, and social context in France, the U.K., and the U.S.

Emma Romell, Lidia Panico, Melissa L. Martinson

Outline

Descriptives

Main regression and decomposition analyses – with U.S. results!

Race, ethnicity, and migrant status analyses

How much do infant health inequalities across family structures differ in France, the U.K., and the U.S.?

What are the mechanisms behind these inequalities? To what extent do they differ across countries?

Data: Étude Longitudinale Française depuis l'Enfance (Elfe) (2011)

Millennium Cohort Study (MCS) (2000-2002)

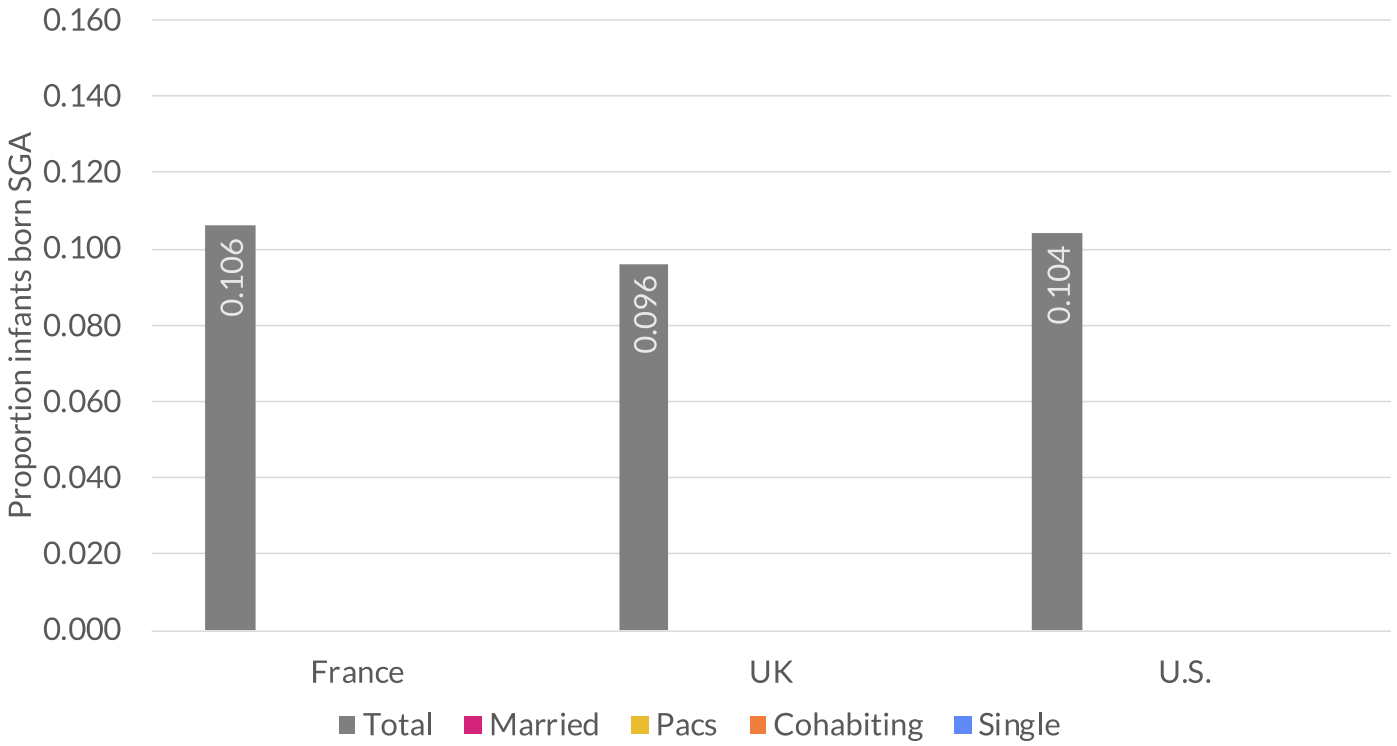
Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) (2000-2001)

Outcomes: Small for gestational age (SGA); birth weight

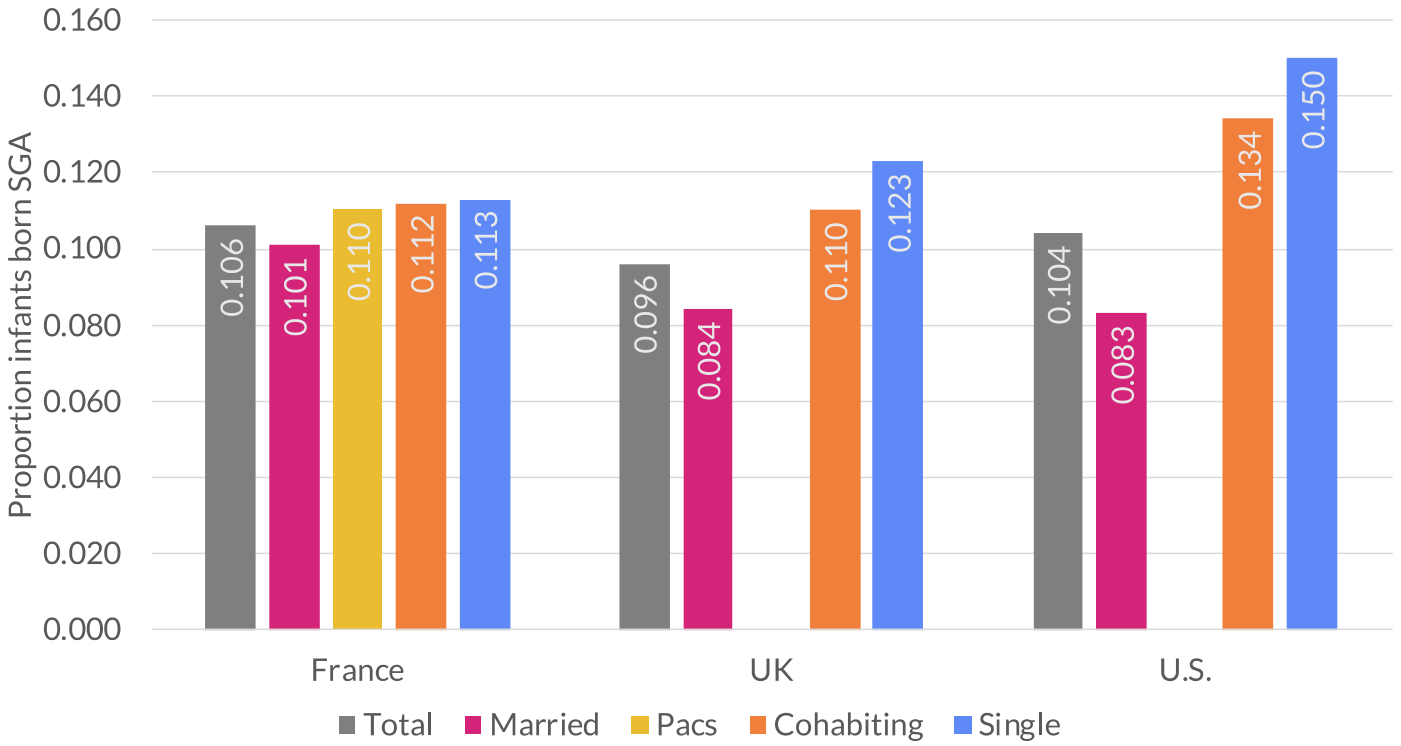
Predictor: Family structure at birth (married, Pacs, cohabiting, single mother)

Descriptives

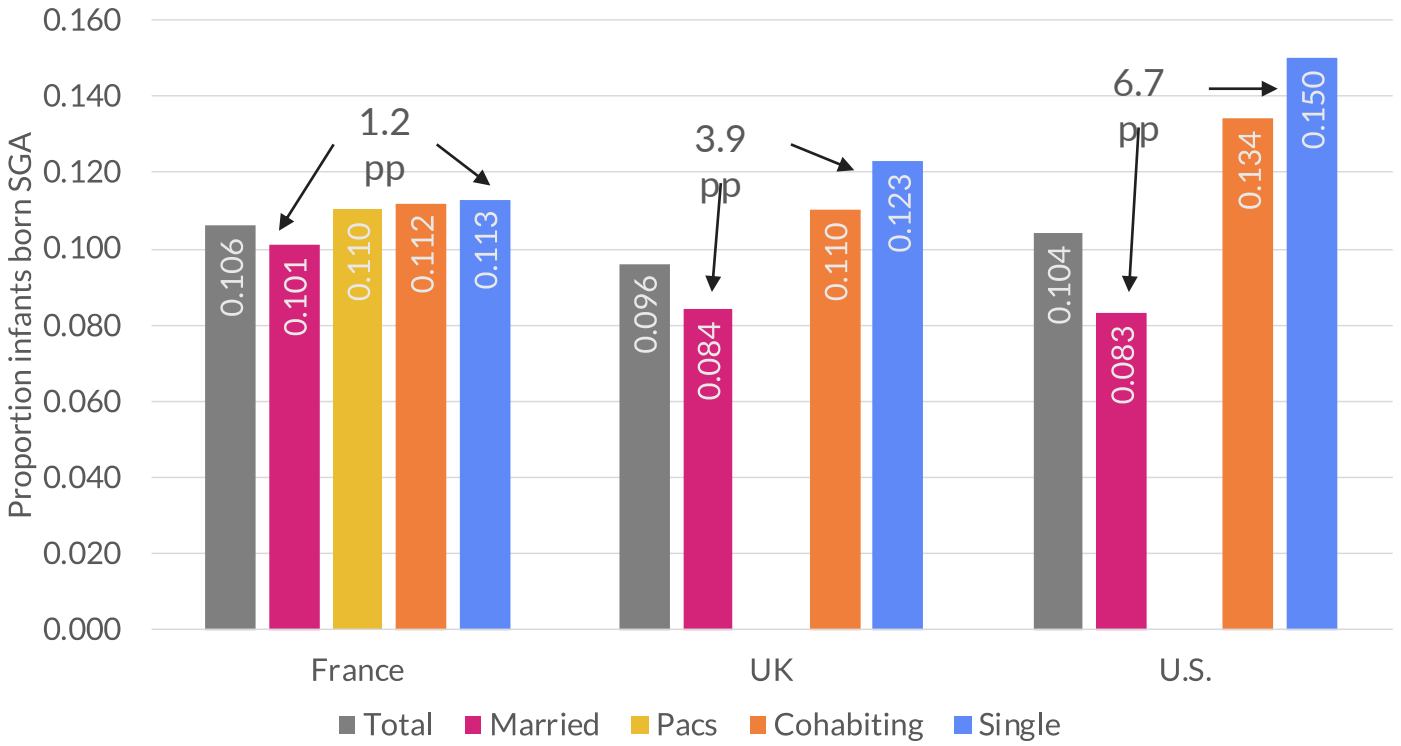
The proportion of infants born small for gestational age (SGA) is similar in each country…



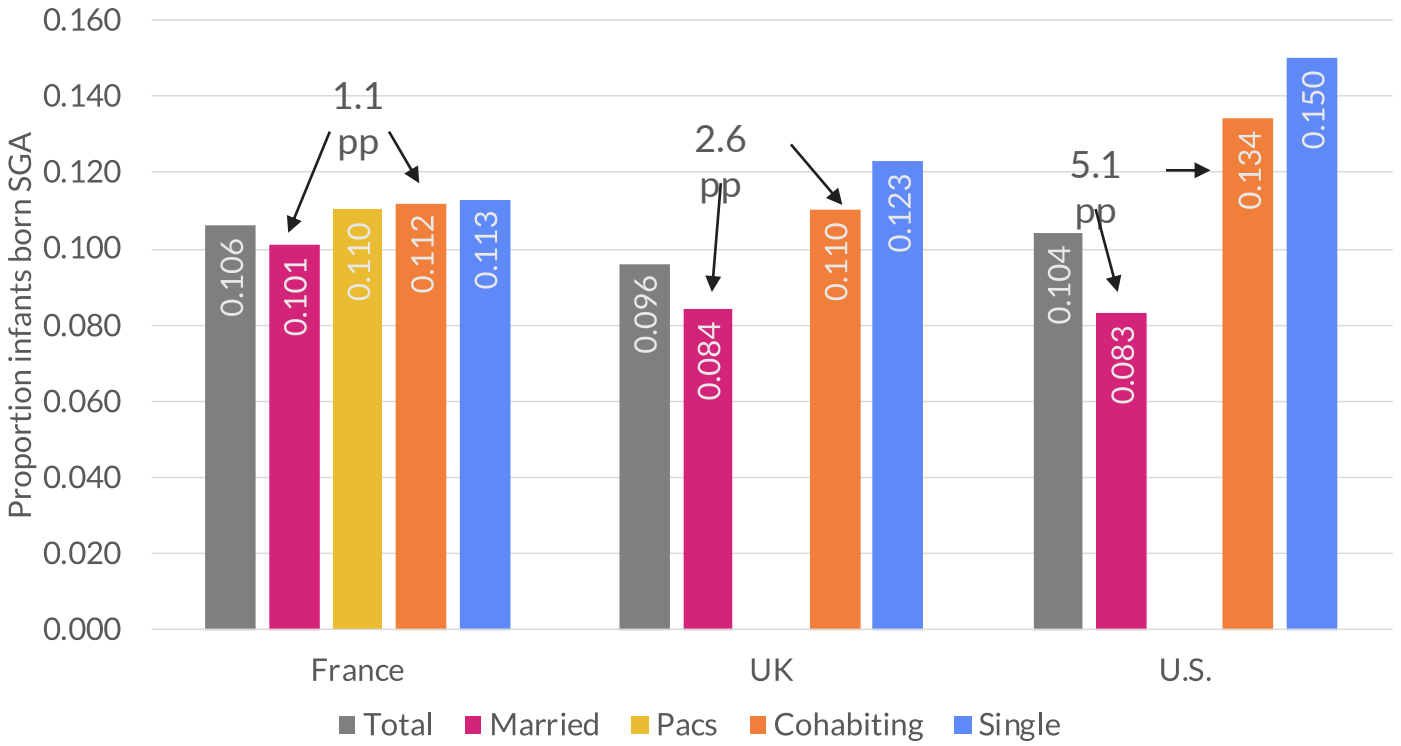
…but inequality across family structures in the U.S. is **much** larger.



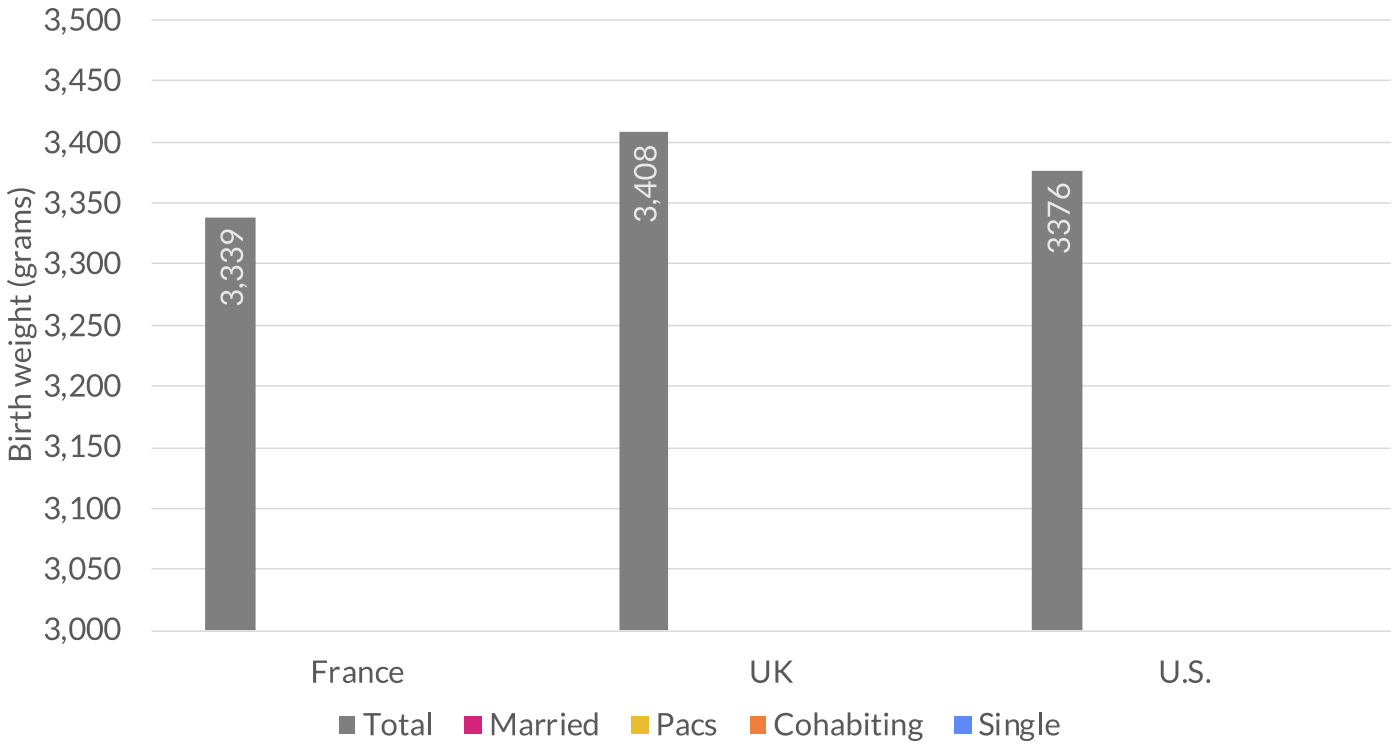
…but inequality across family structures in the U.S. is **much** larger.



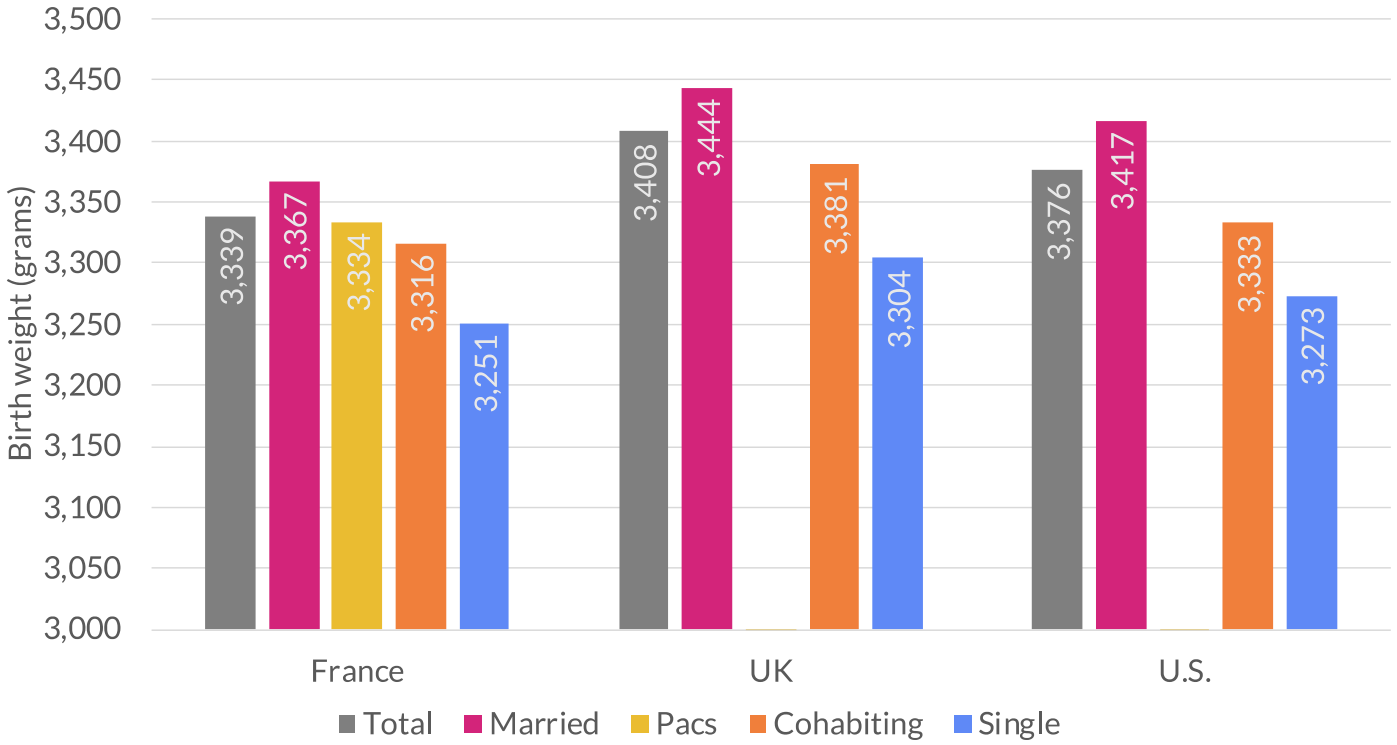
…but inequality across family structures in the U.S. is **much** larger.



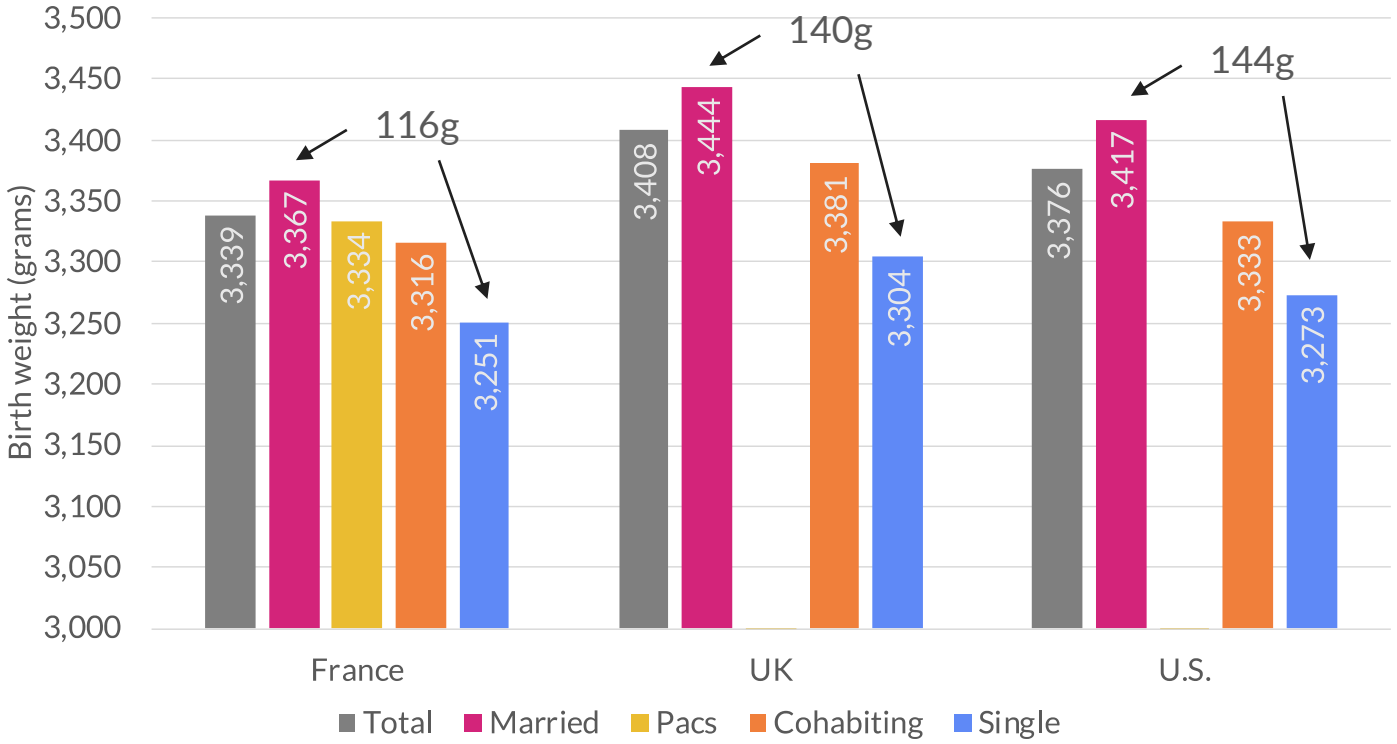
Overall birth weights are also comparable…



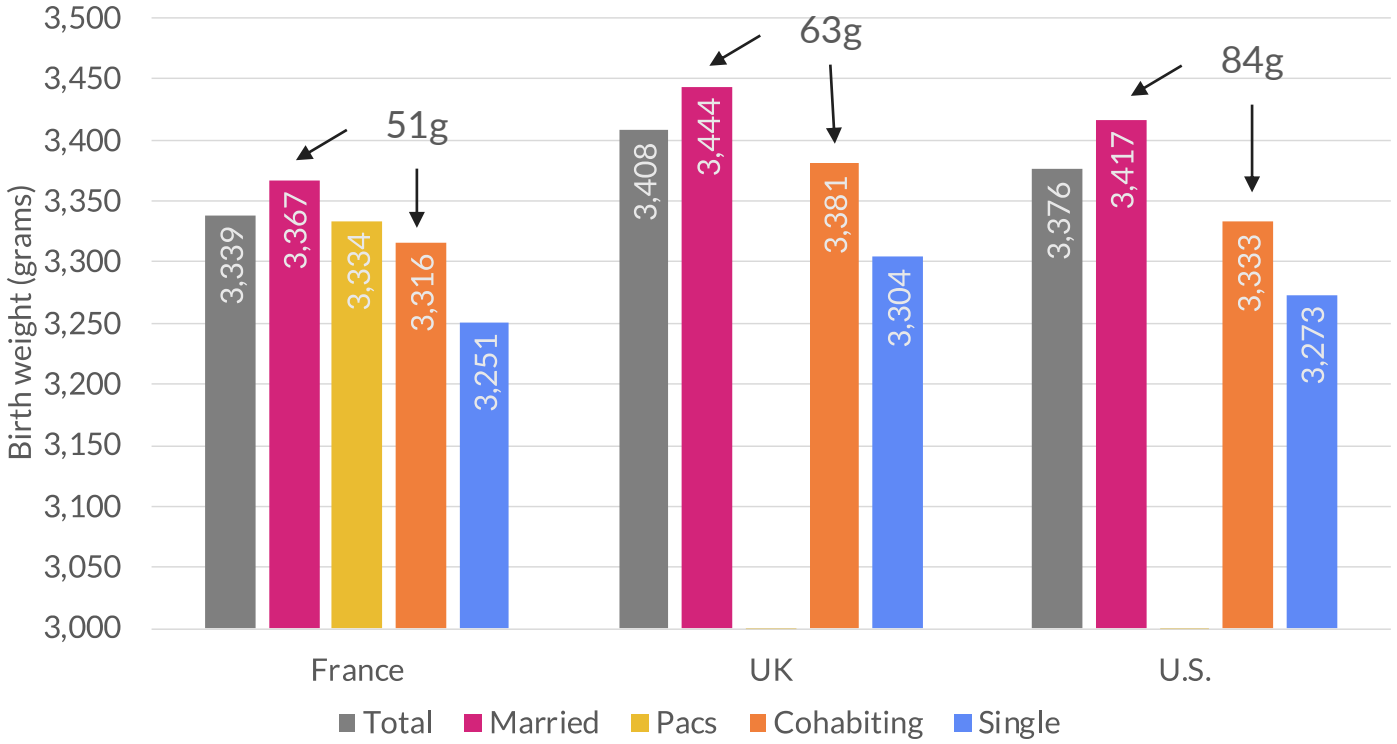
…and inequality in birth weight across family structures is relatively more similar across countries.

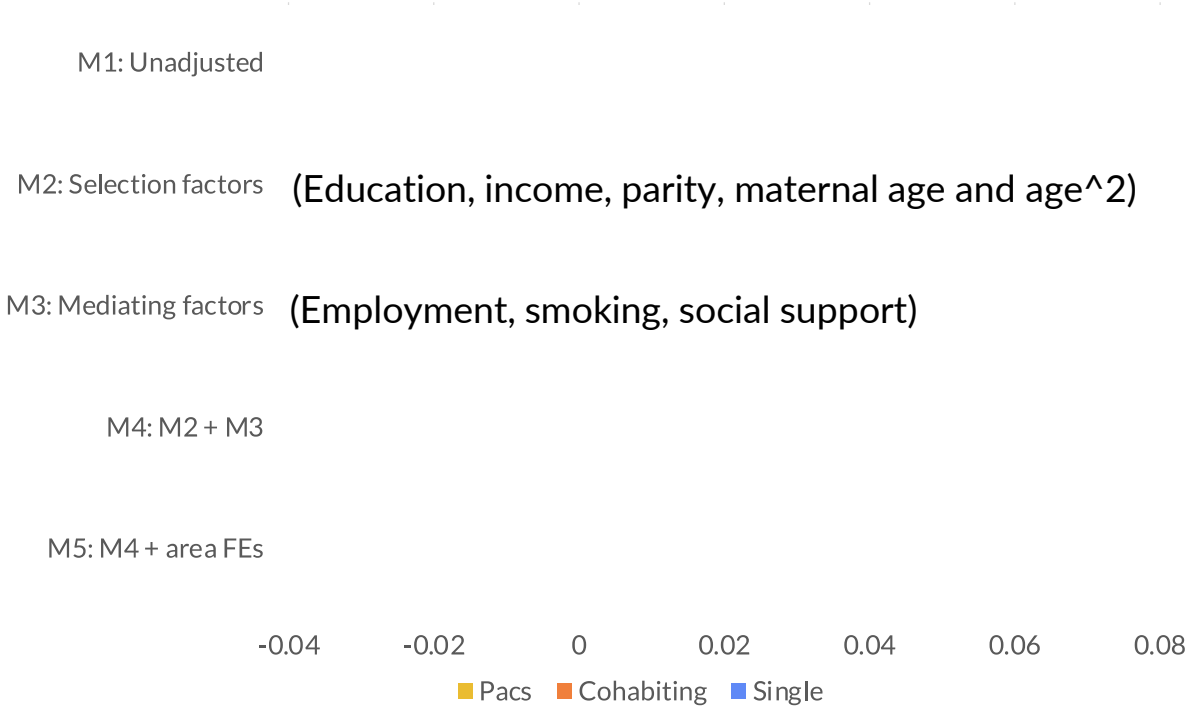


…and inequality in birth weight across family structures in the U.S. is similar to inequality in the U.K.

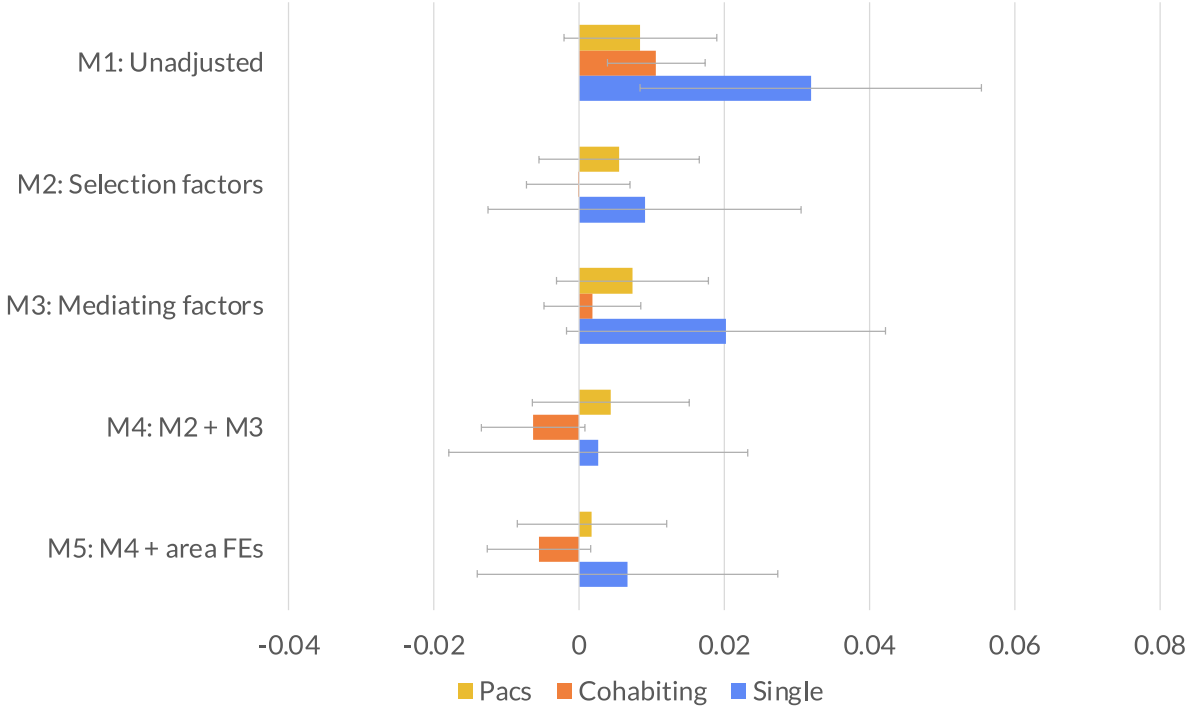


…and inequality in birth weight across family structures in the U.S. is similar to inequality in the U.K.

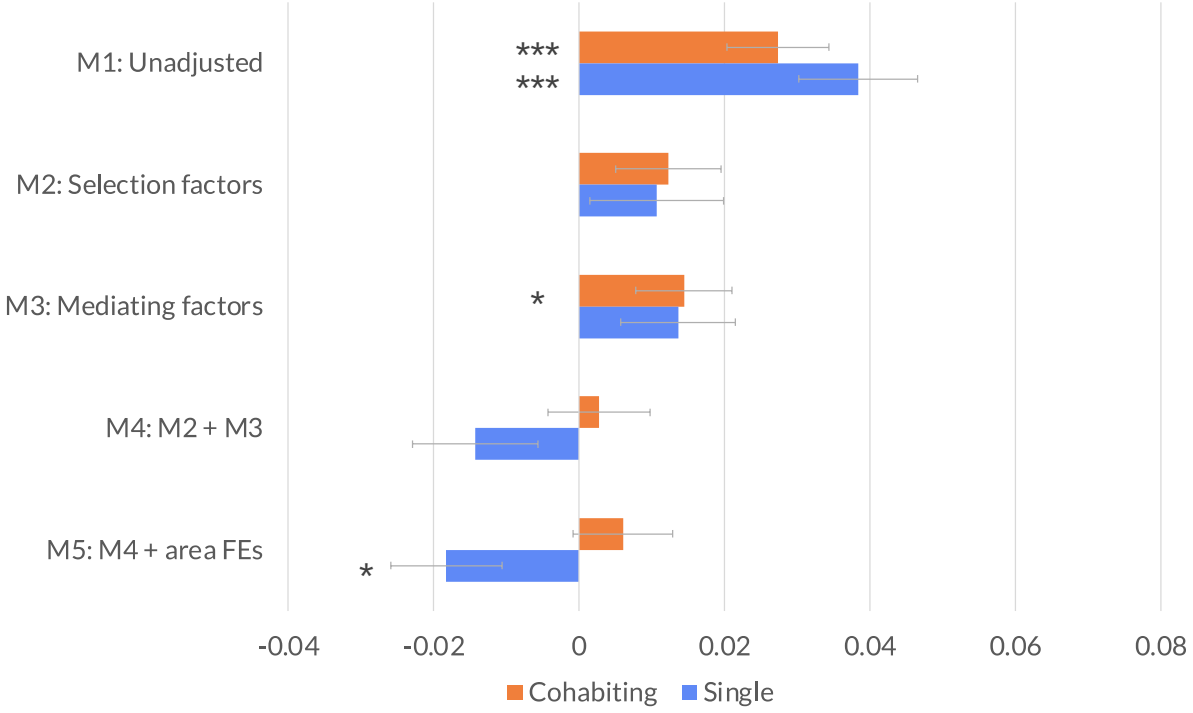



M1: Unadjusted
M2: Selection factors
(Education, income, parity, maternal age and age^2)
M3: Mediating factors
(Employment, smoking, social support)
M4: M2 + M3
M5: M4 + area FEs
-0.04
-0.02
0
0.02
0.04
0.06
0.08
Pacs
Cohabiting
Single

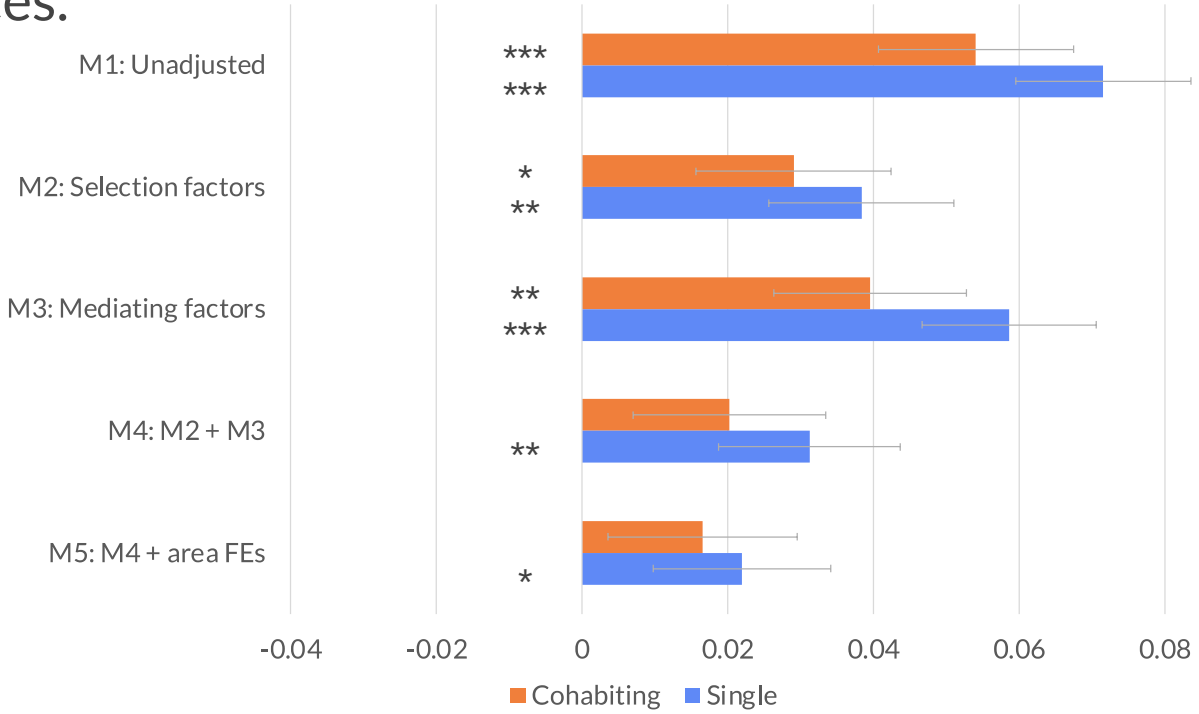
Accounting for our selection and mediating factors + area fixed effects reduces the gaps in SGA in **France** to less than one percentage point.

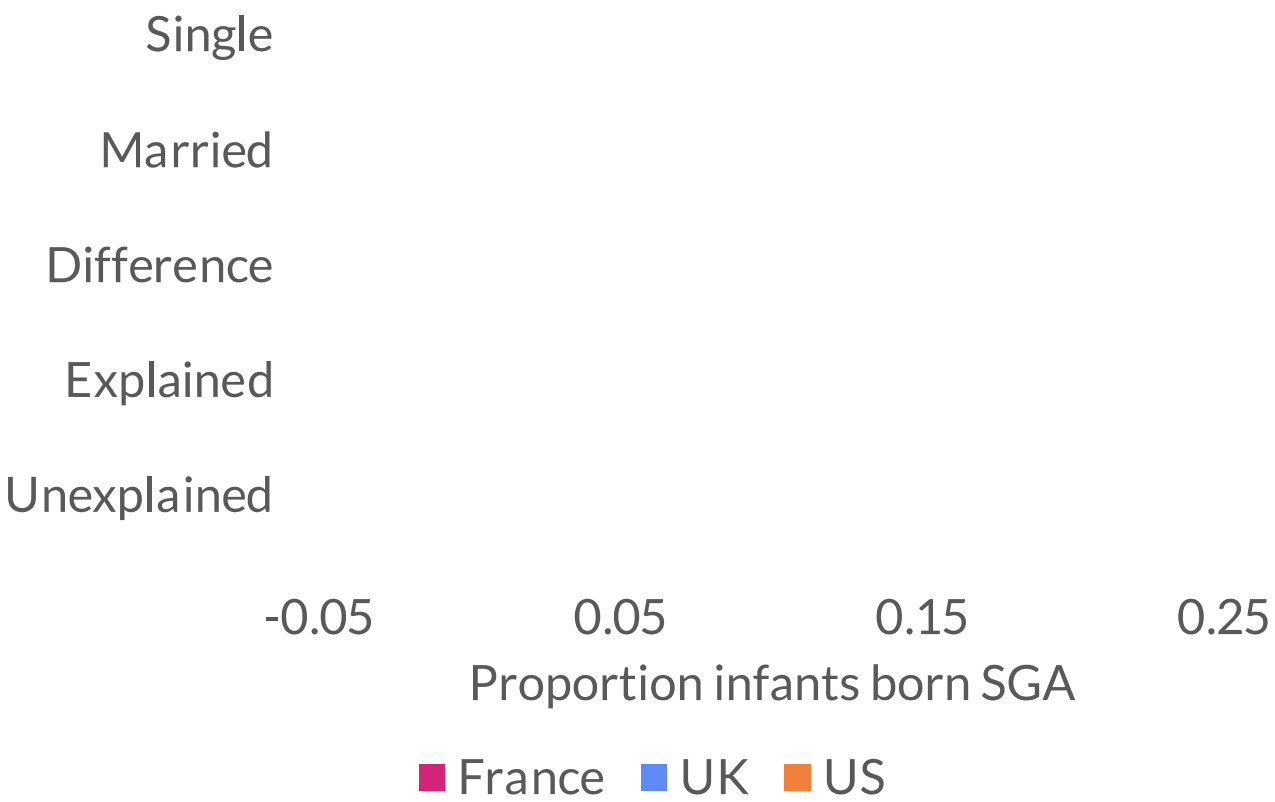


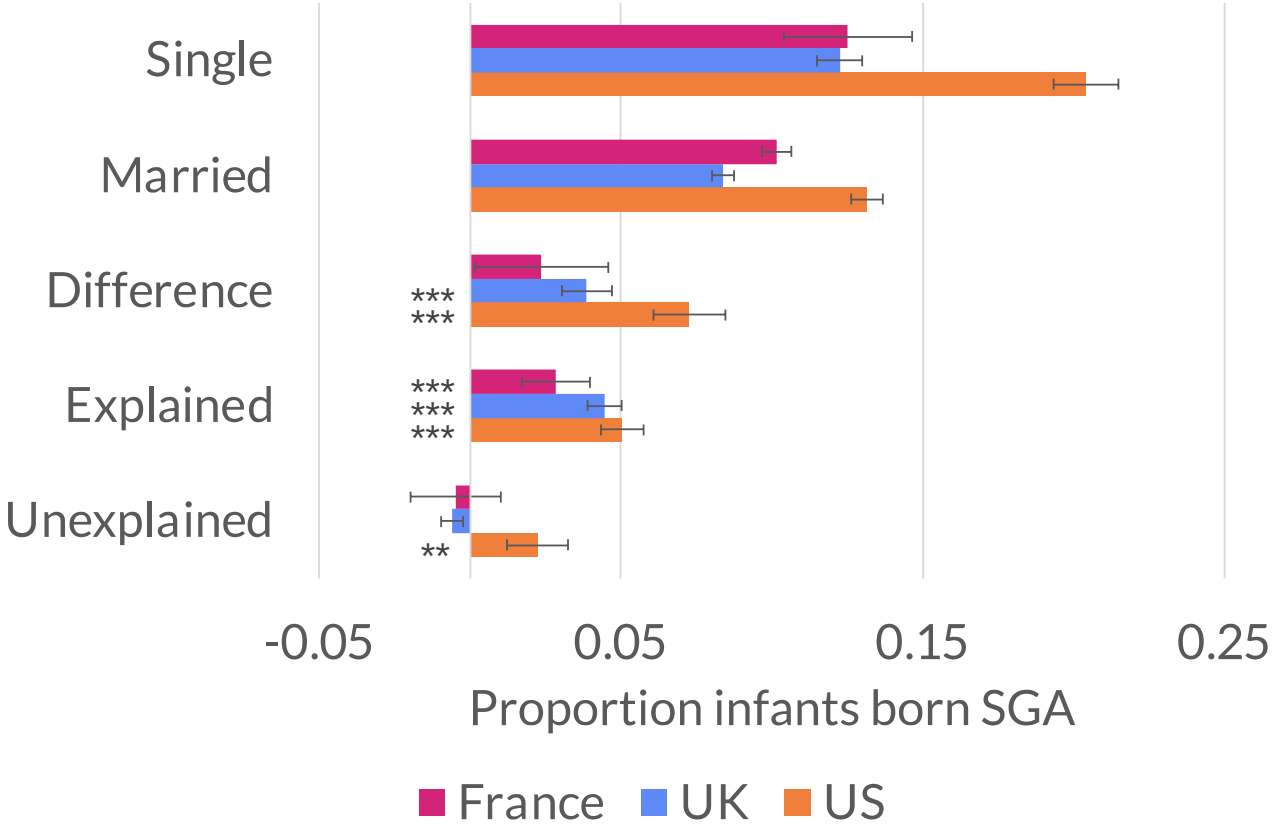
In full models, infants born to single mothers in the **U.K.** are *healthier* than those born to married parents.

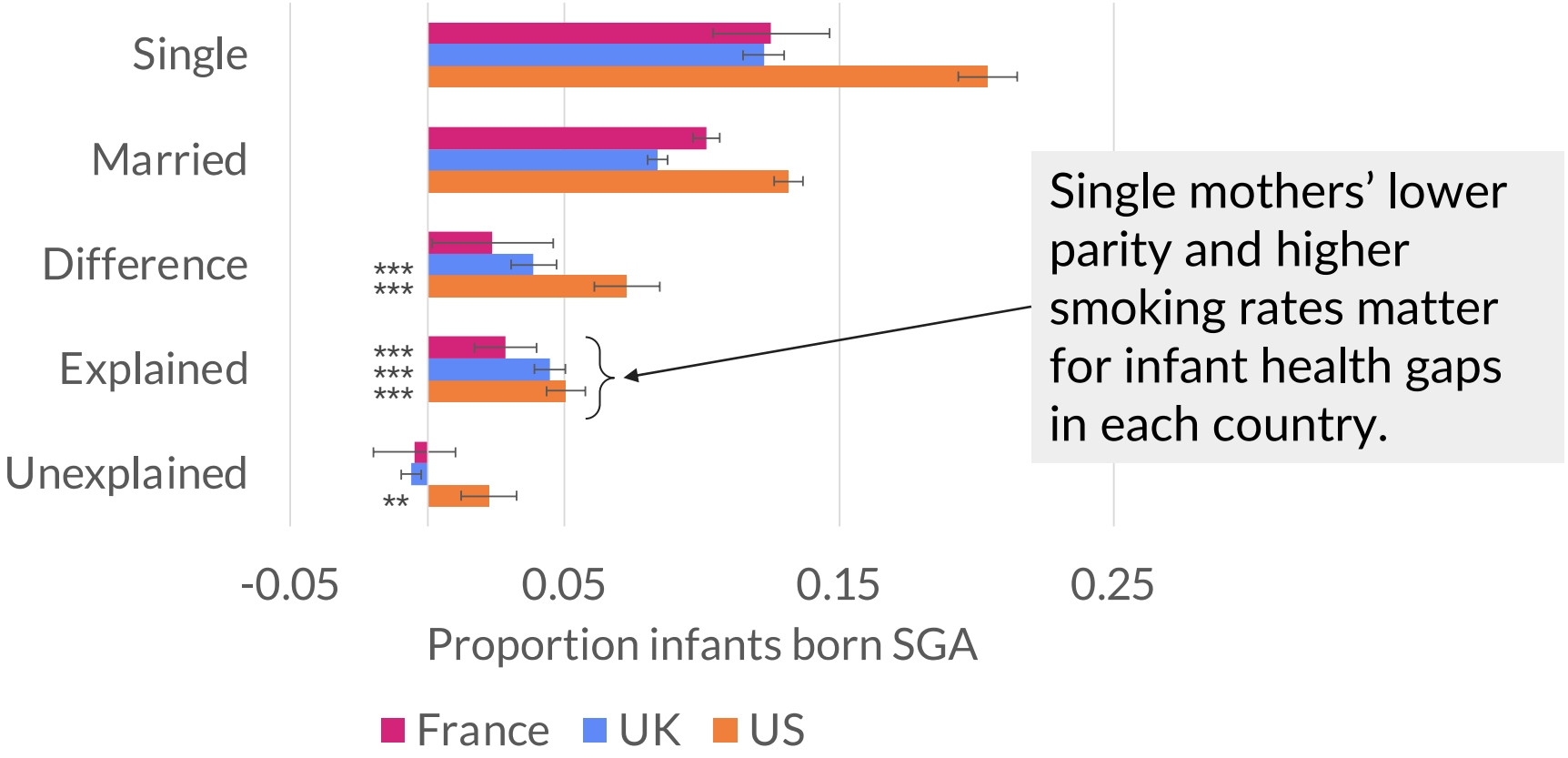


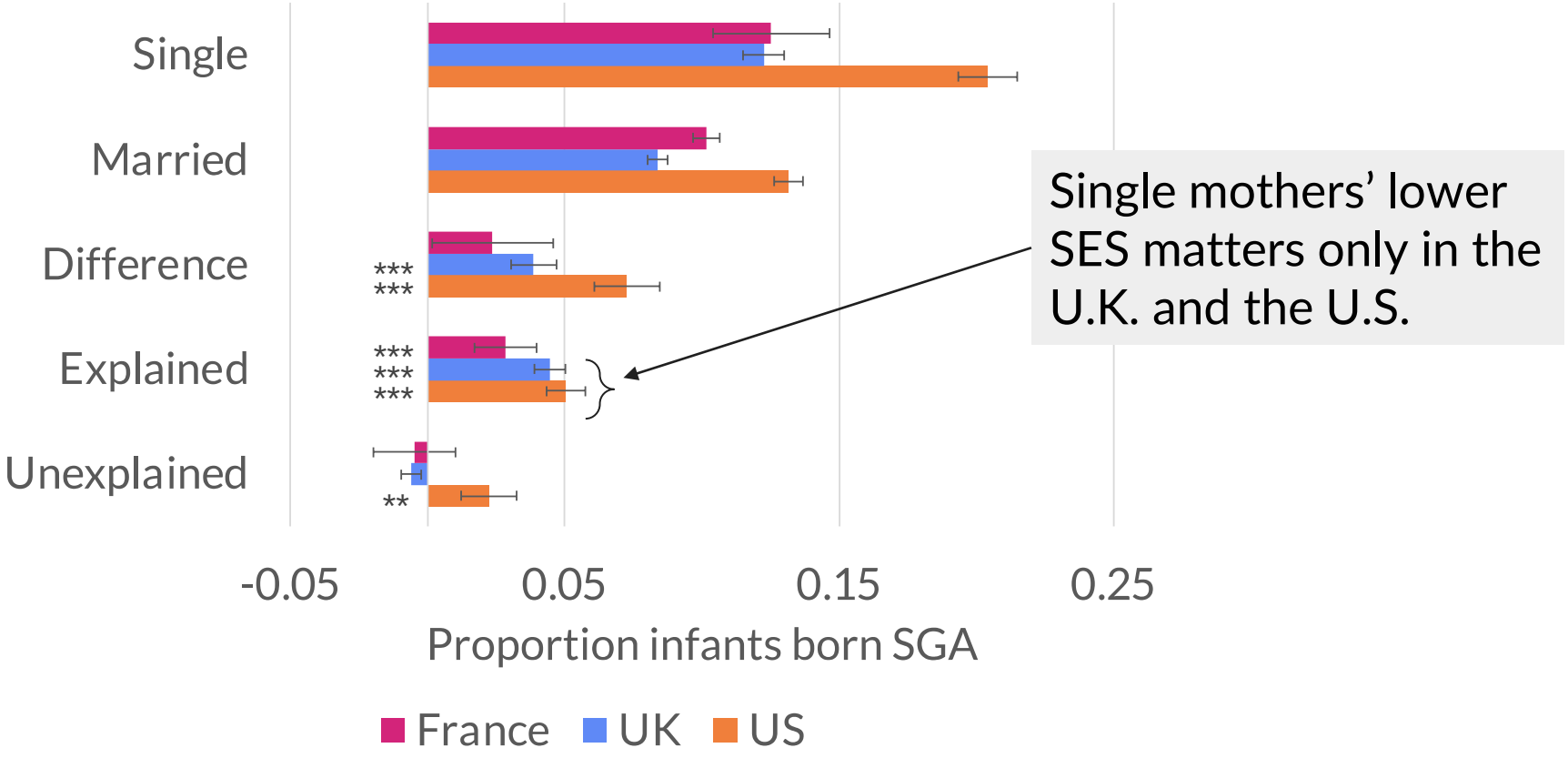
Significant gaps remain between married and single mother **U.S.** families after accounting for SES, life course factors, and pregnancy experiences.

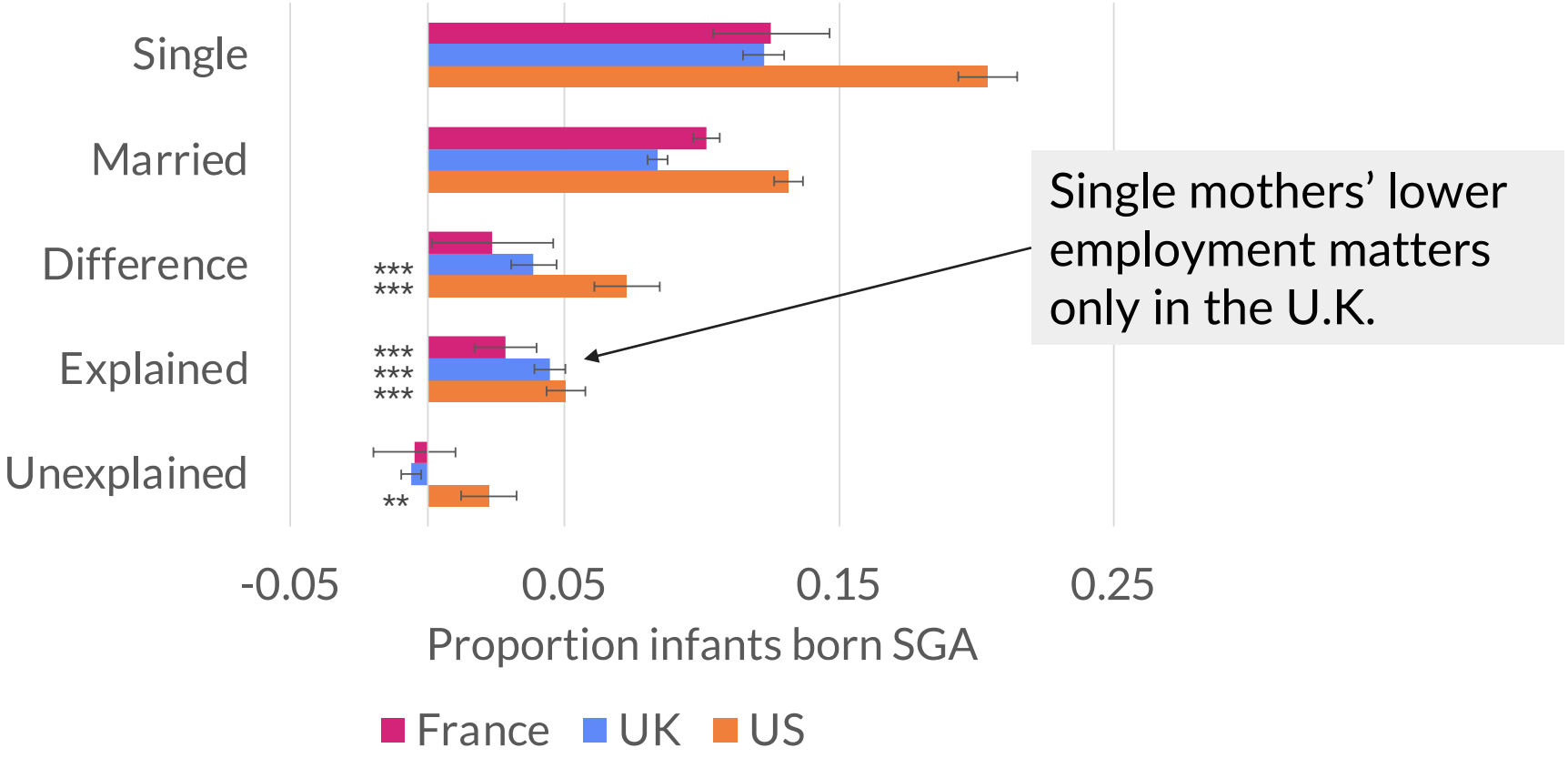


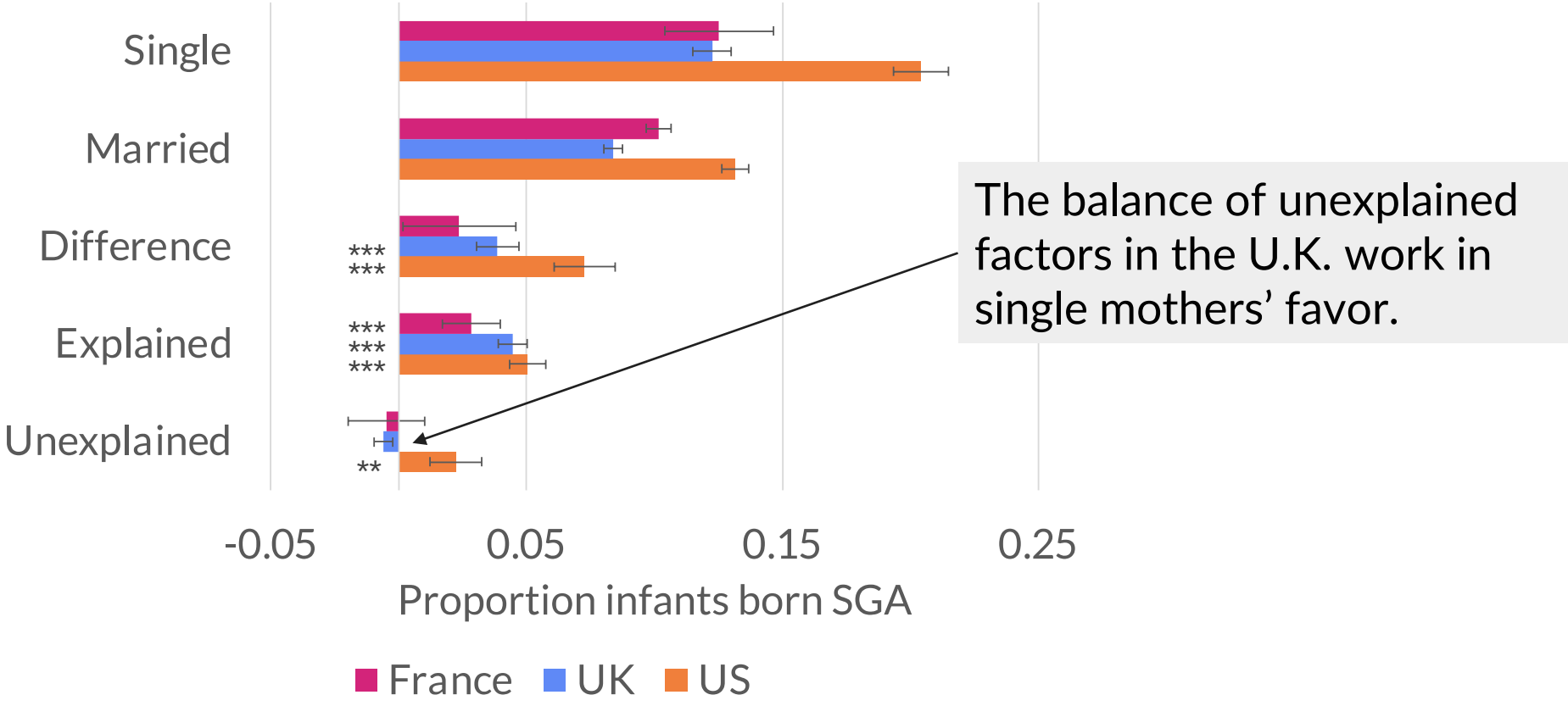

Single
Married
Difference
Explained
Unexplained
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US

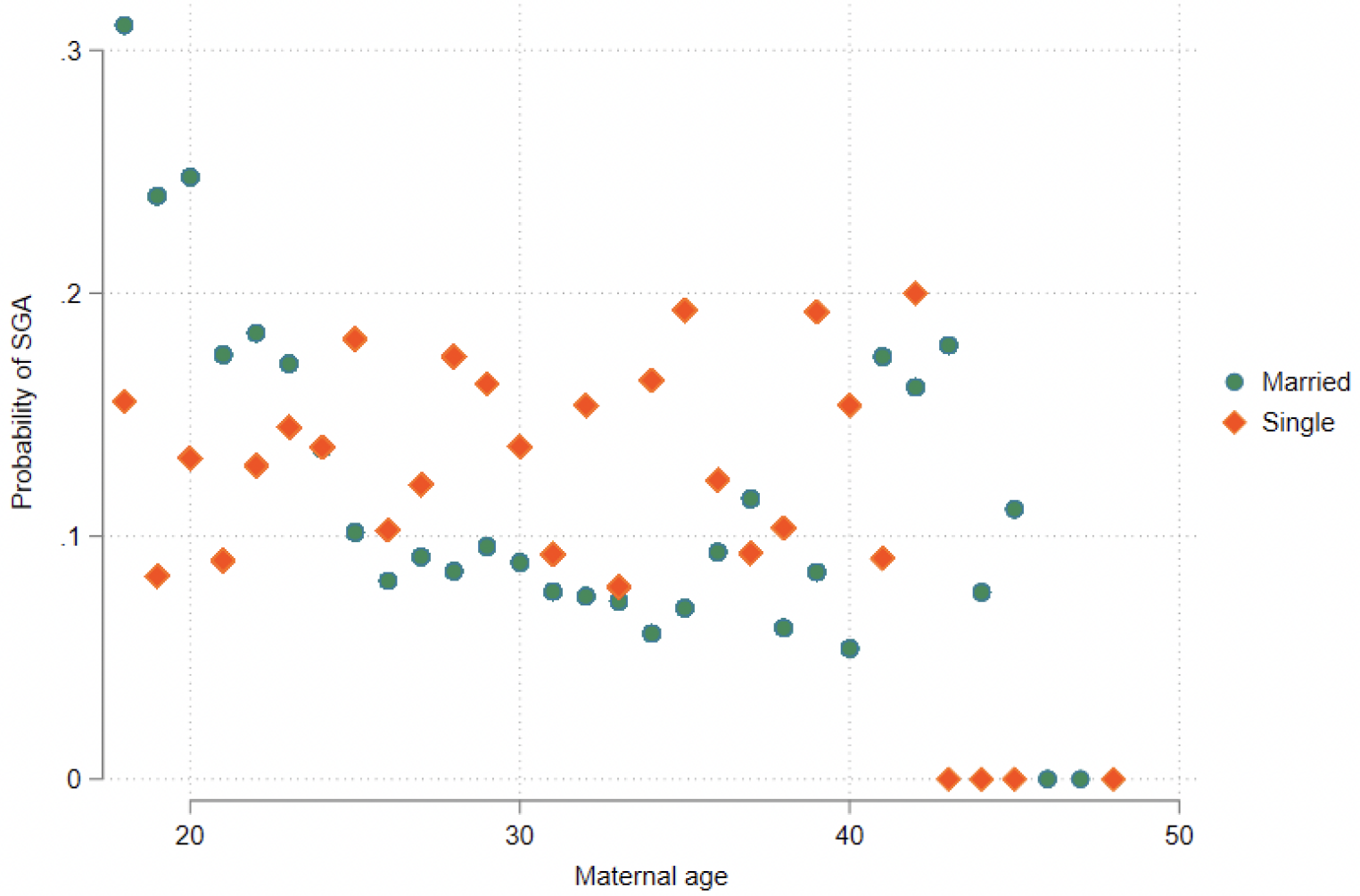

Single
Married
Difference
Explained
Unexplained
***
***
***
***
***
**
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US

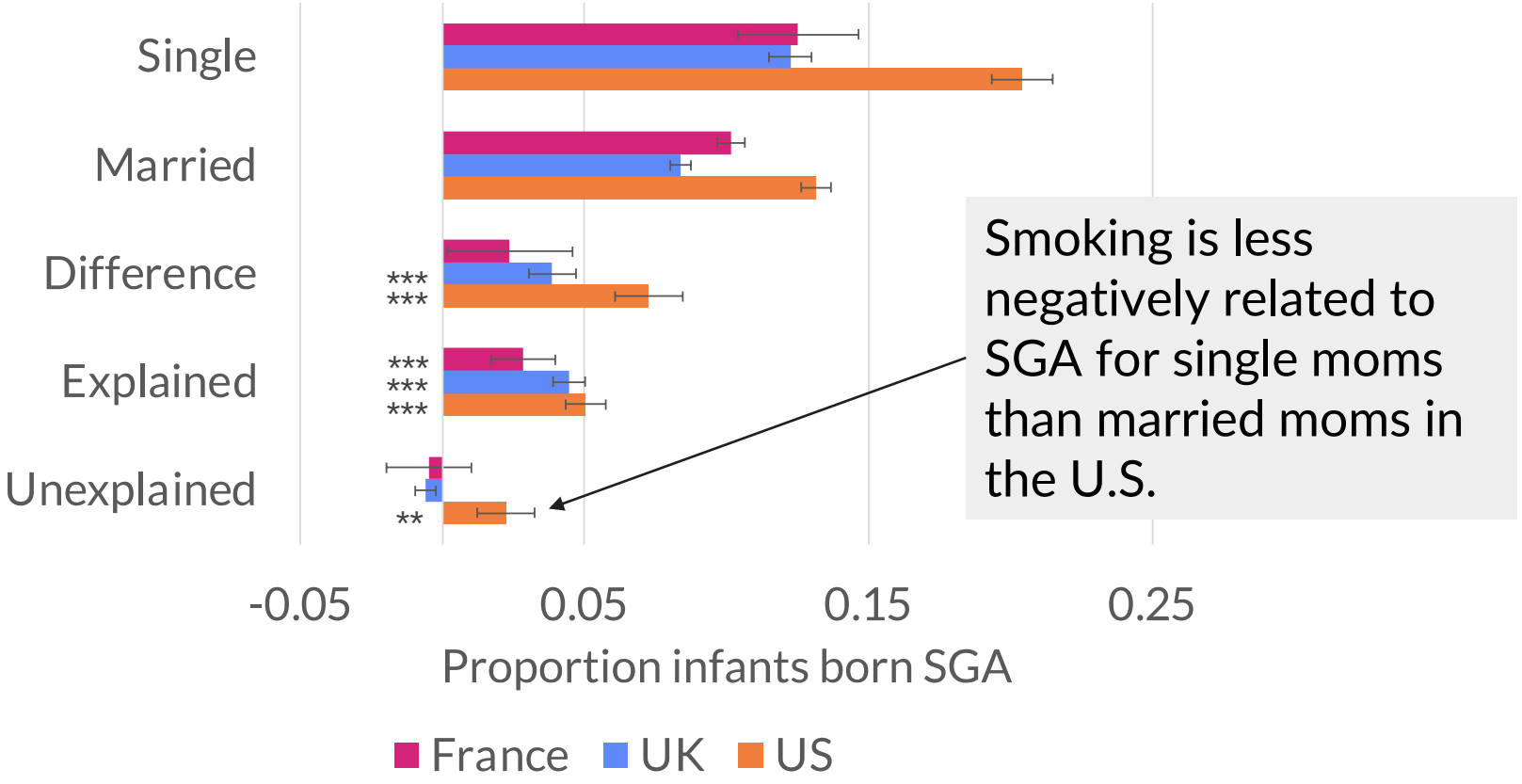

Single
Married
Difference
Explained
Unexplained
***
***
***
***
***
**
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US
Single mothers' lower parity and higher smoking rates matter for infant health gaps in each country.


Single
Married
Difference
Explained
Unexplained
***
***
***
***
***
**
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US
Single mothers' lower SES matters only in the U.K. and the U.S.

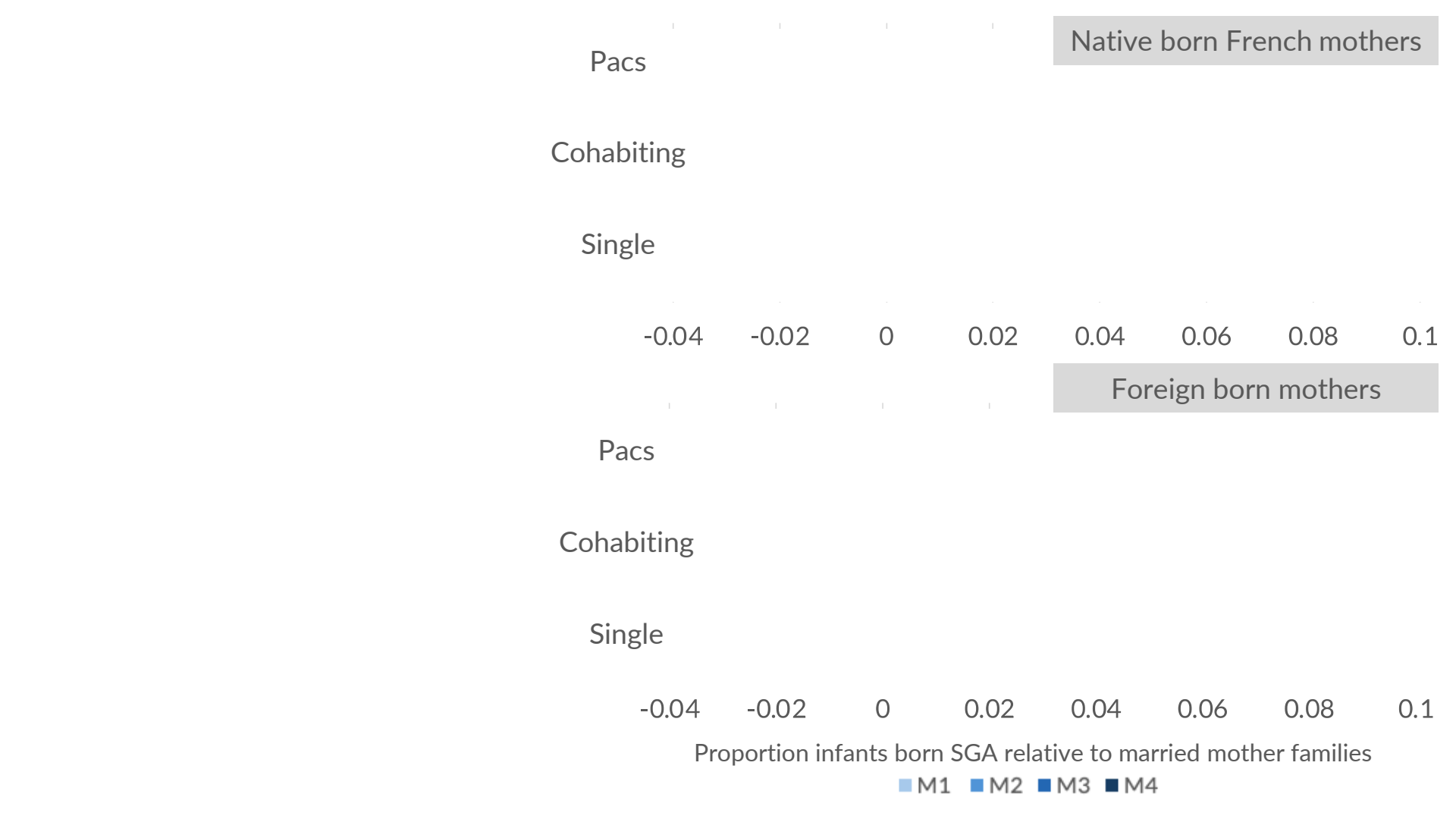

Single
Married
Difference
Explained
Unexplained
***
***
***
***
***
**
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US
Single mothers' lower employment matters only in the U.K.


Single
Married
Difference
Explained
Unexplained
***
***
***
***
***
**
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US
The balance of unexplained factors in the U.K. work in single mothers' favor.

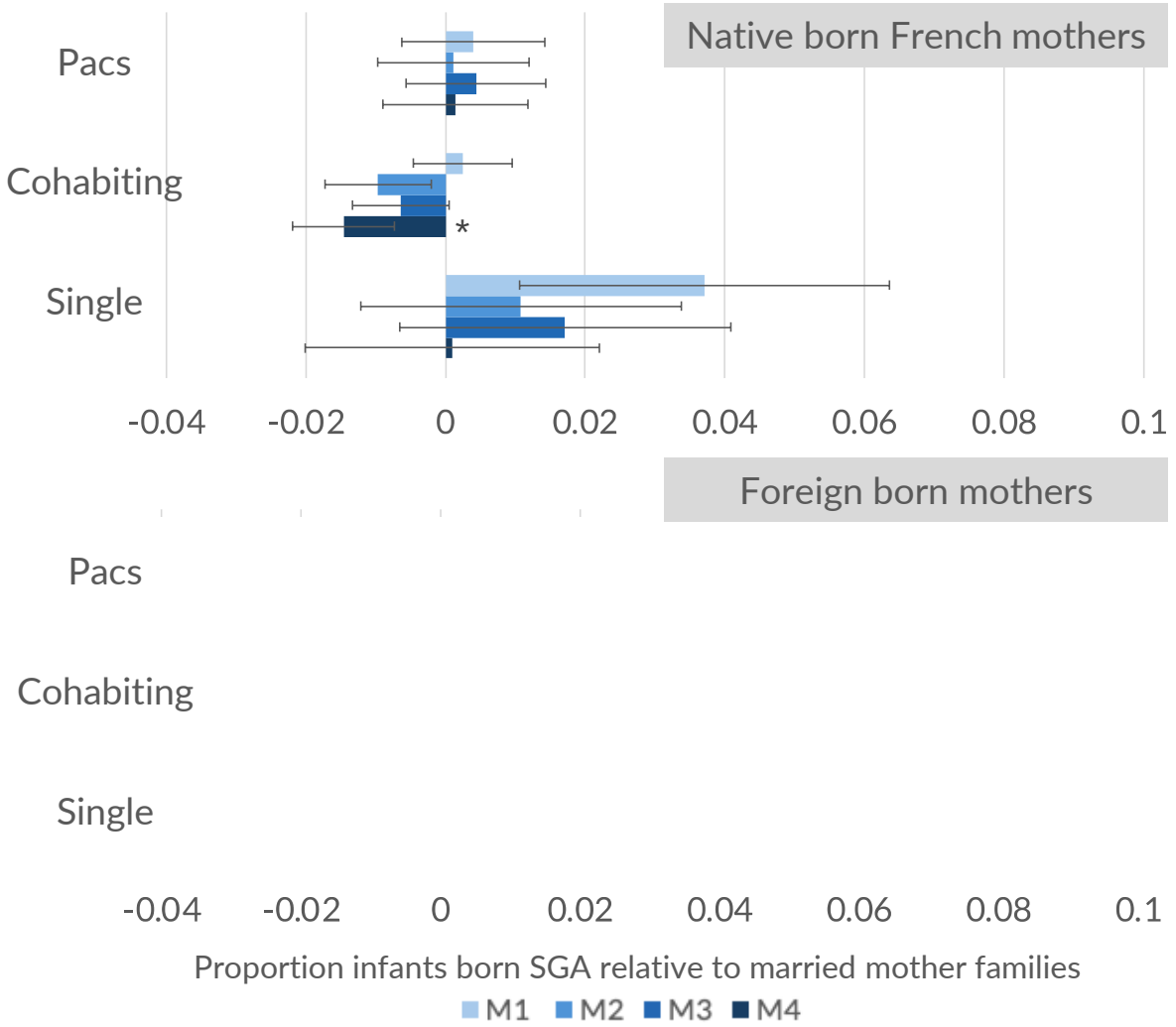

Probability of SGA
.3
.2
.1
0
20
30
40
50
Maternal age
Married
Single


Single
Married
Difference
Explained
Unexplained
***
***
***
***
***
**
-0.05
0.05
0.15
0.25
Proportion infants born SGA
France
UK
US
Smoking is less negatively related to SGA for single moms than married moms in the U.S.

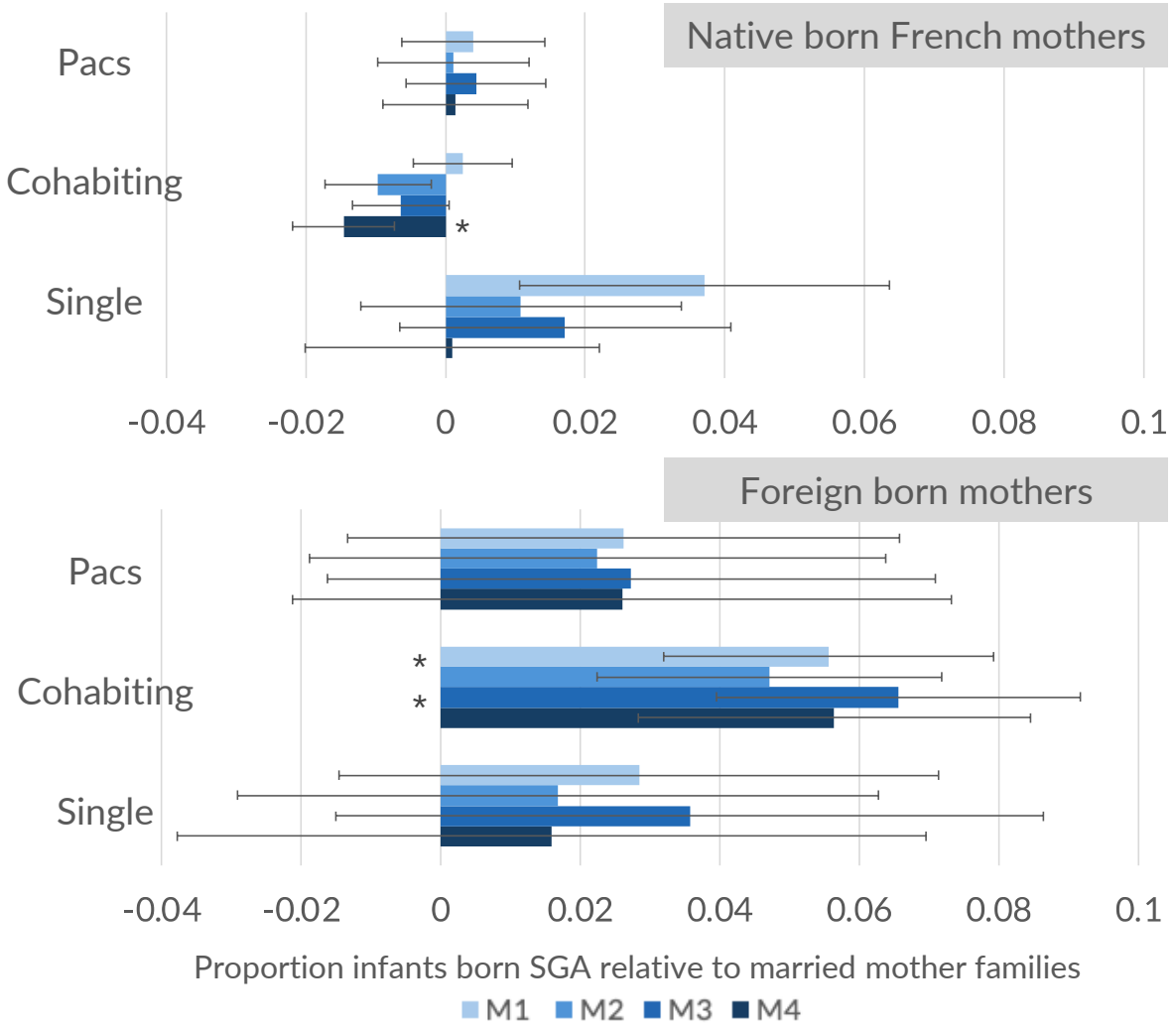
Race, ethnicity, and migrant status

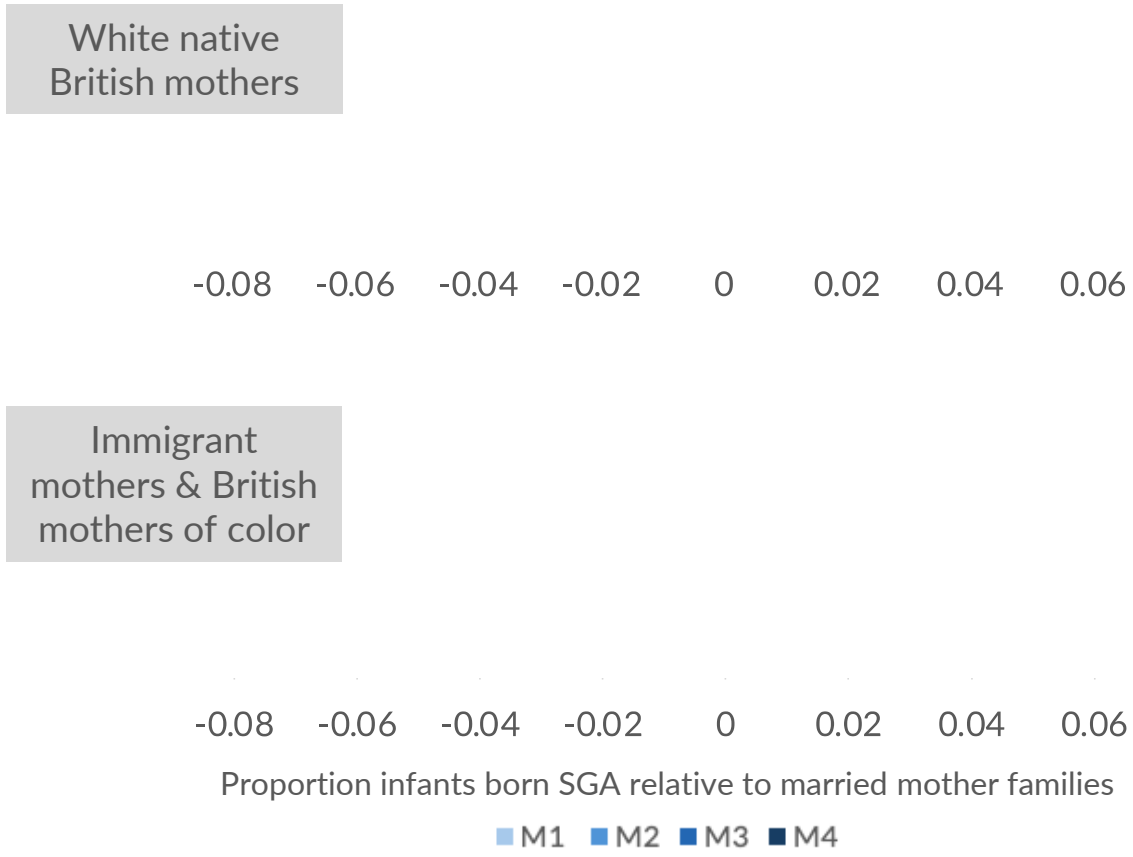

Native born French mothers
Pacs
Cohabiting
Single
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Foreign born mothers
Pacs
Cohabiting
Single
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Proportion infants born SGA relative to married mother families
M1
M2
M3
M4

Relative to married native French mothers, the chance of SGA for native French mothers in any other family structure group is not significantly higher in any model, and coefficient magnitudes are fairly small.

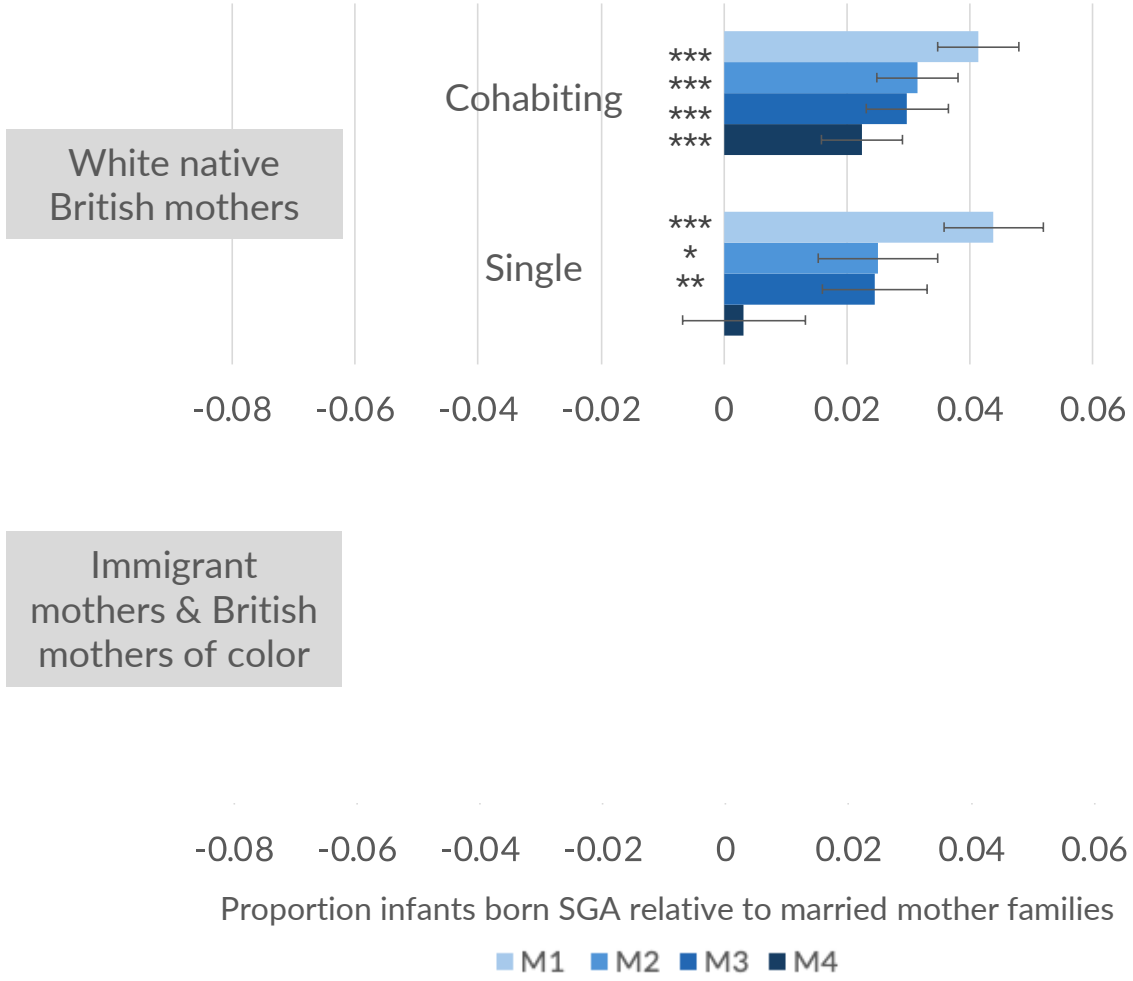


Relative to married foreign born mothers, the chance of SGA for foreign born mothers in any other family structure group is consistently higher, though not consistently significant.

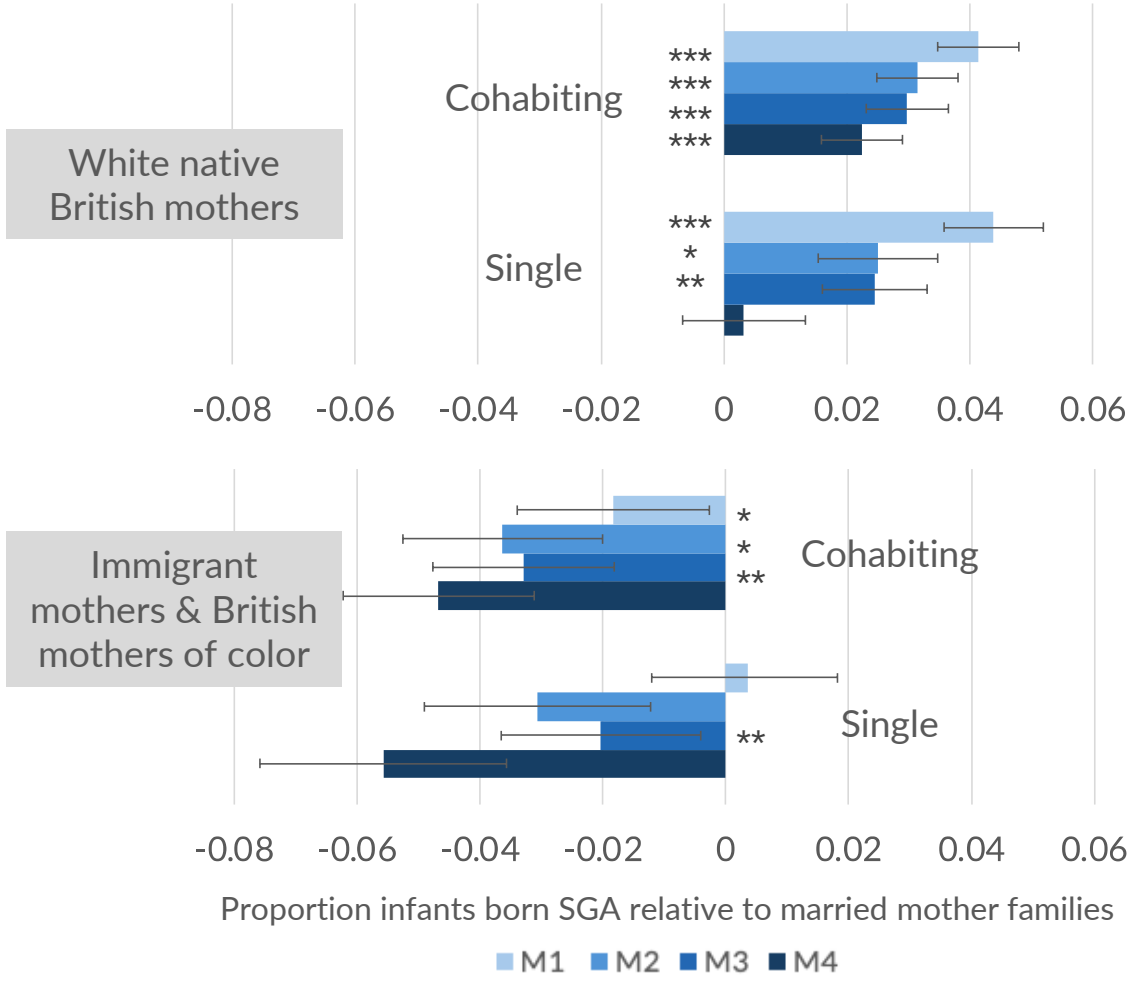


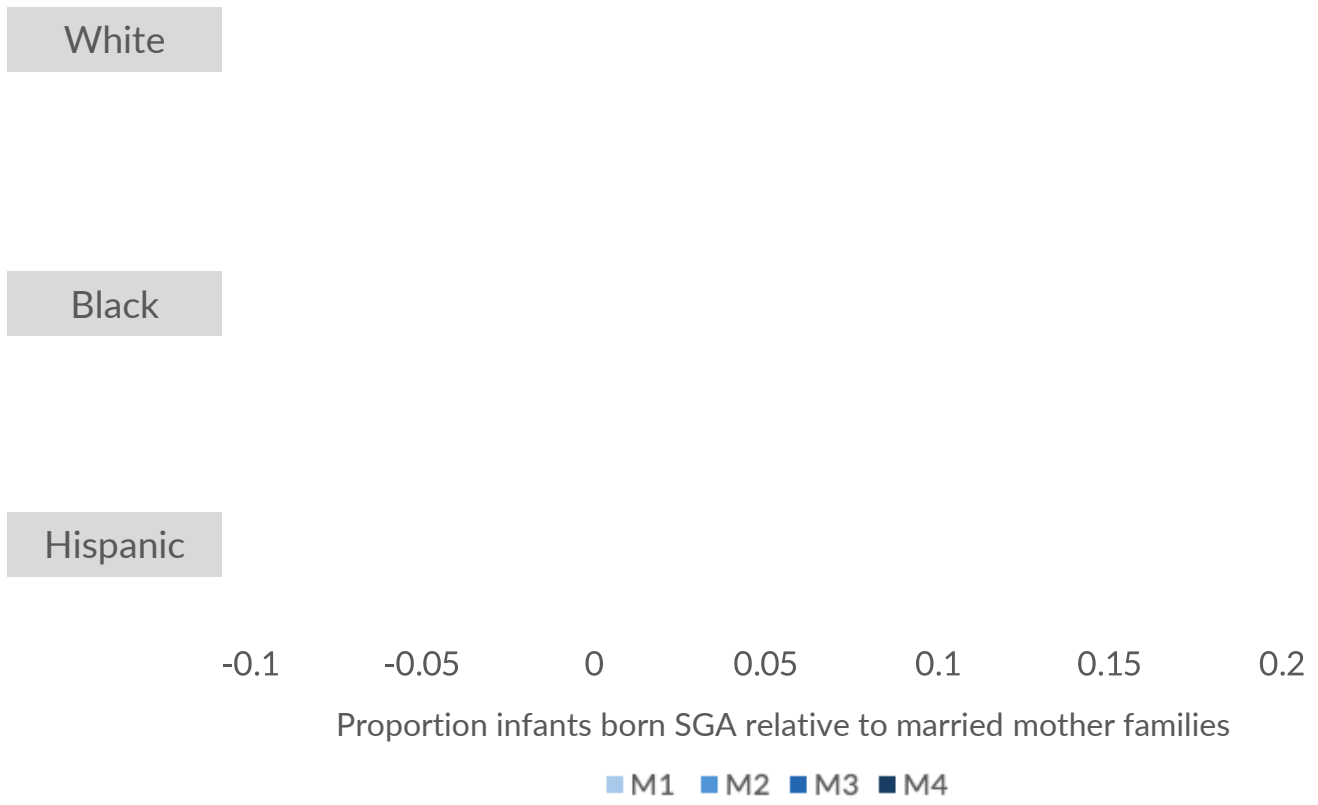

White native British mothers
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
Immigrant mothers & British mothers of color
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
Proportion infants born SGA relative to married mother families
M1
M2
M3
M4

The chance of SGA for infants born to White native British mothers who are cohabiting or single is higher than the chance for their counterparts born to married parents.

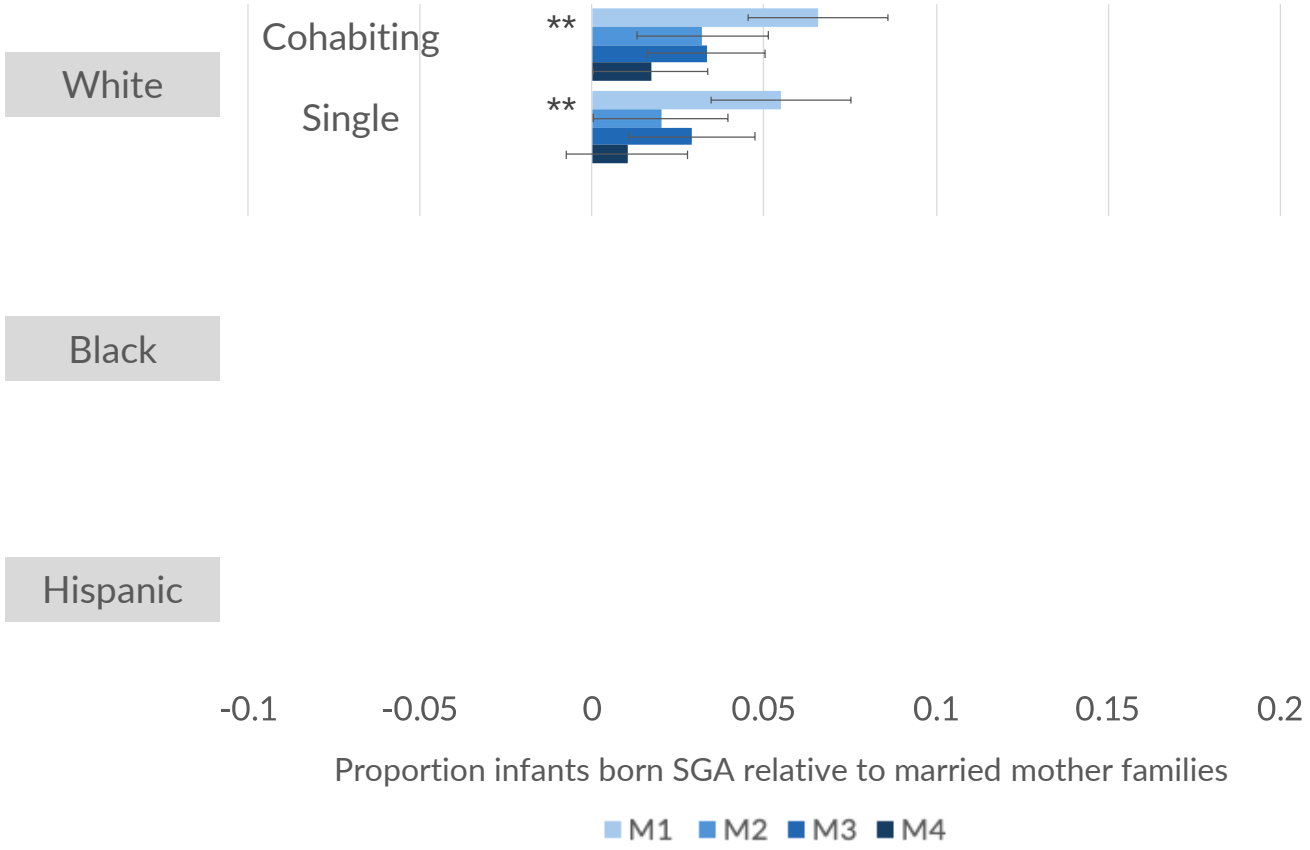


Infants born to cohabiting and single immigrant mothers and British mothers of color have consistently lower risks of SGA. Their advantage grows with controls.

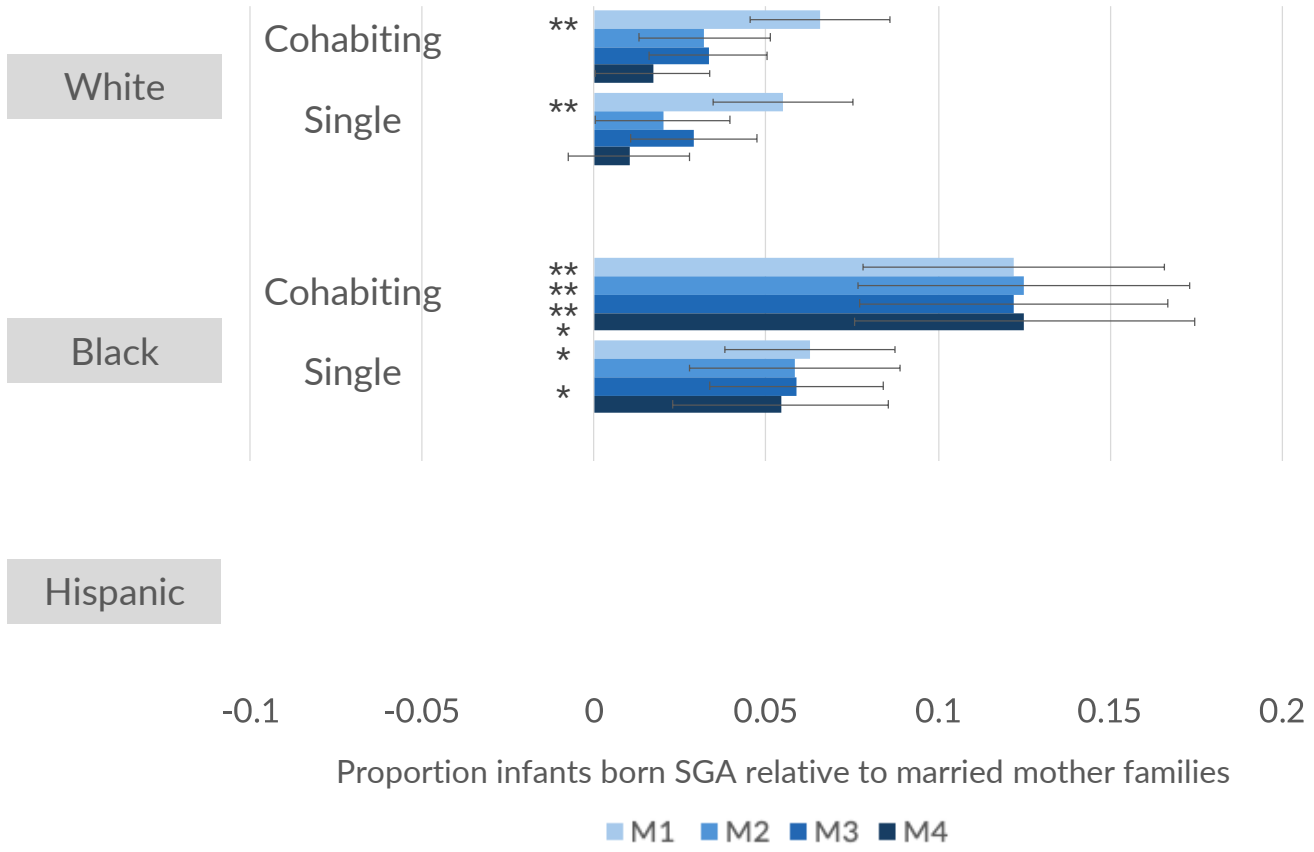



White
Black
Hispanic
-0.1
-0.05
0
0.05
0.1
0.15
0.2
Proportion infants born SGA relative to married mother families
M1
M2
M3
M4

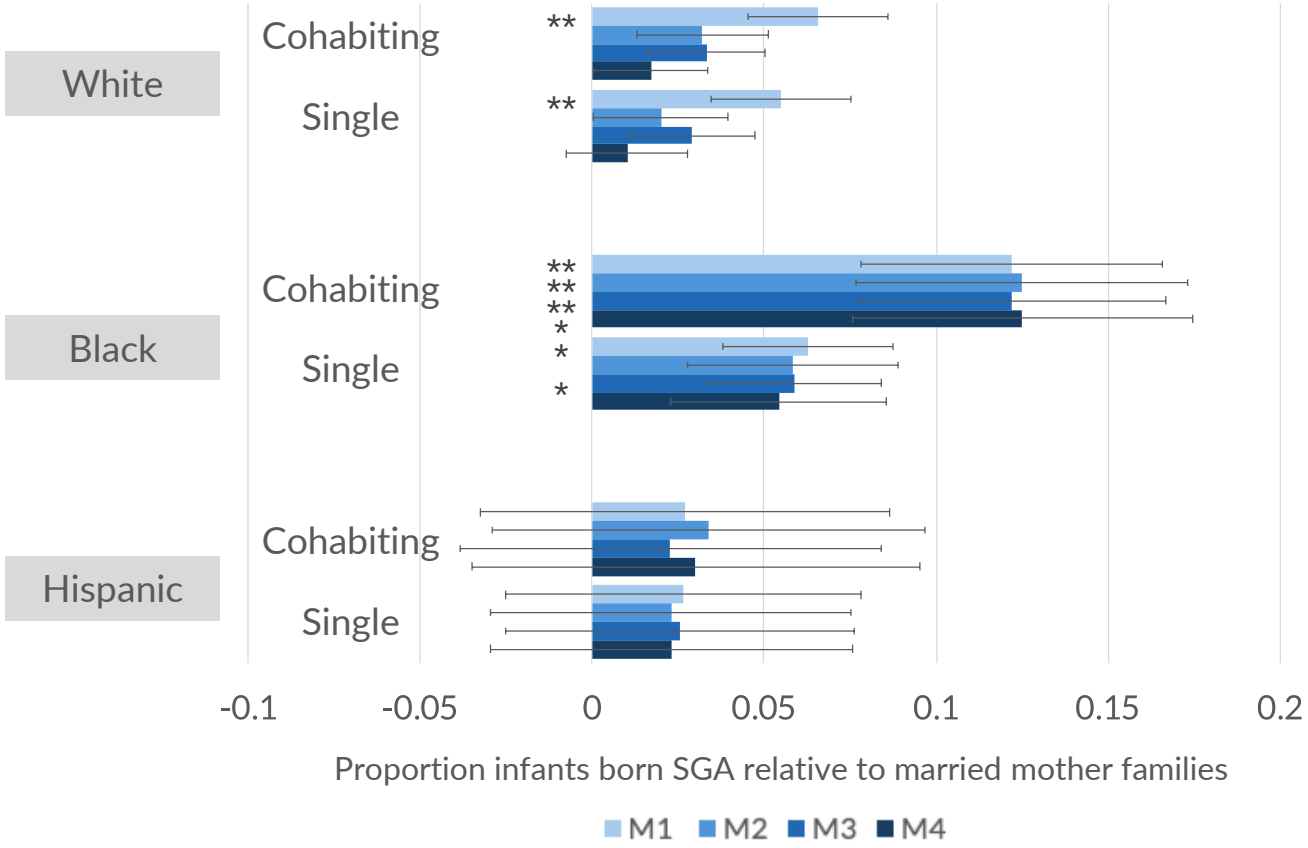
Among White U.S. parents, controlling for socioeconomic and life course selection factors *or* experiences during pregnancy accounts for gaps in infant health between married and cohabiting or single parents.



Socioeconomic and life course factors account for the gap in SGA between Black married and single parents. Infants born to Black cohabiting parents remain at significantly higher risk of SGA across models.



There are no significant differences in the risk of SGA across family structures among Hispanic parents.



So what?

Context is key for understanding the meaning of family structure for health in early life.