

Do immigrants assimilate more slowly today than in the past?

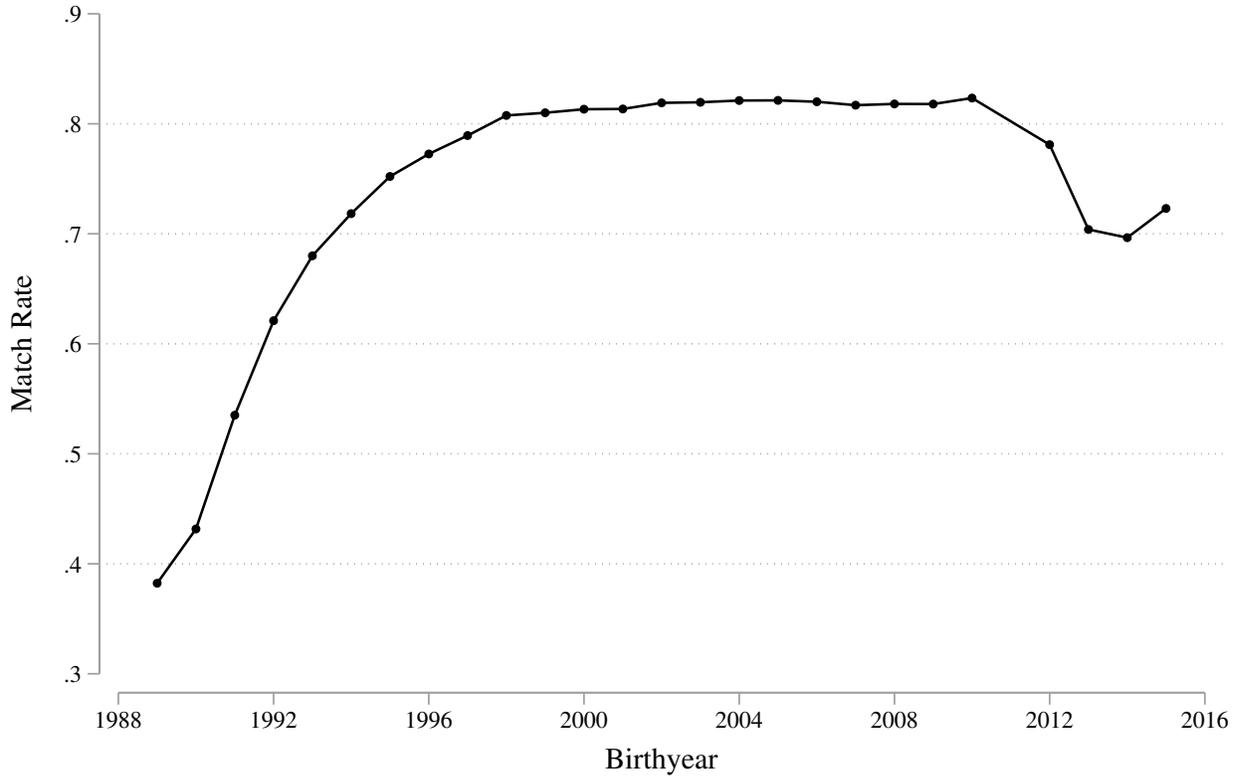
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Online Appendix

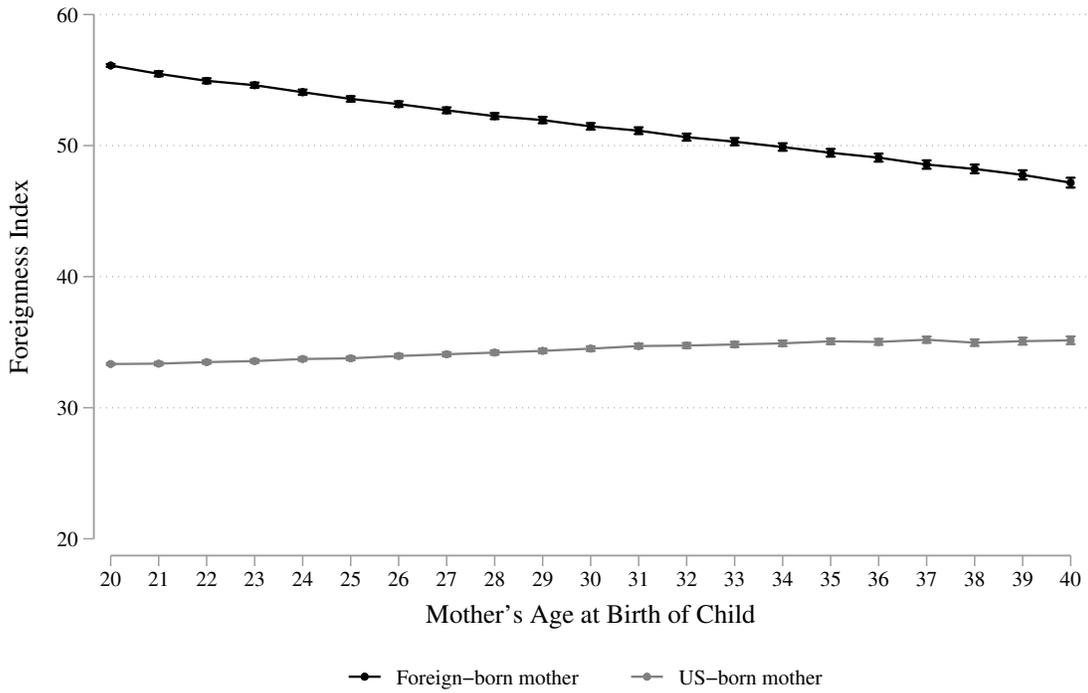
Appendix Figure 1: Match Rate by Year, California Birth Records



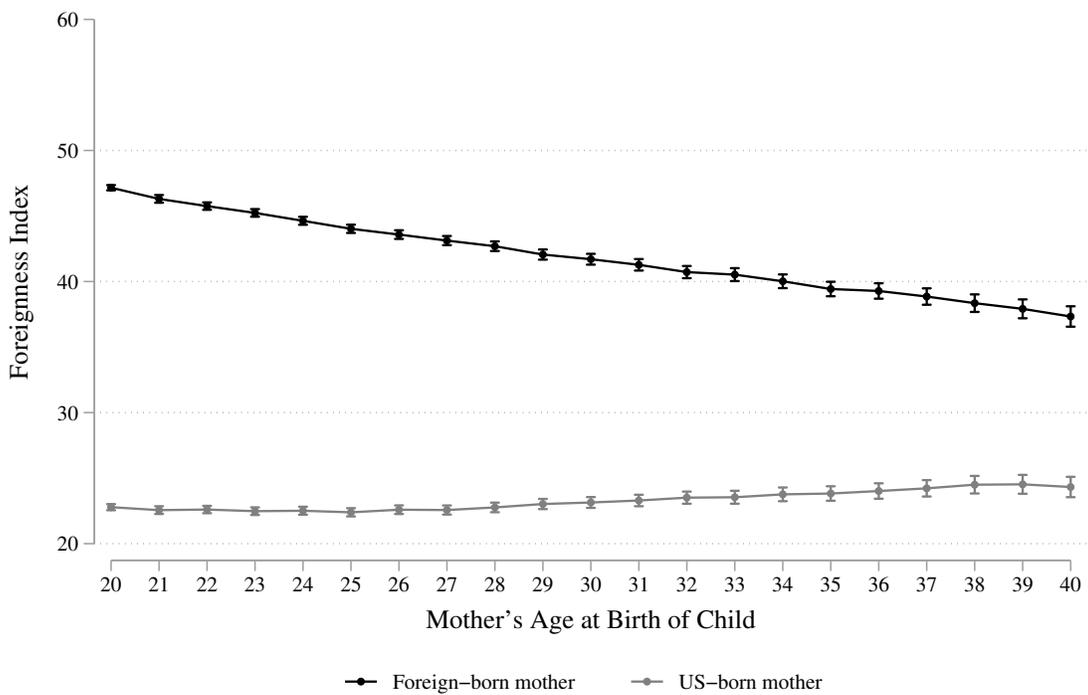
Note: This figure reports the estimated match rate for California mothers by birth year. The sample contains all mothers with two or more births, as reported by birth parity. For these mothers we calculate the share who have a missing match characteristic or who we only observe once in the data. We then estimate the match rate as 1 - this share.

Appendix Figure 2. Name foreignness by mother's age at birth, accounting for differences in naming traditions, past and present

(A) Historical data (1920 Census)

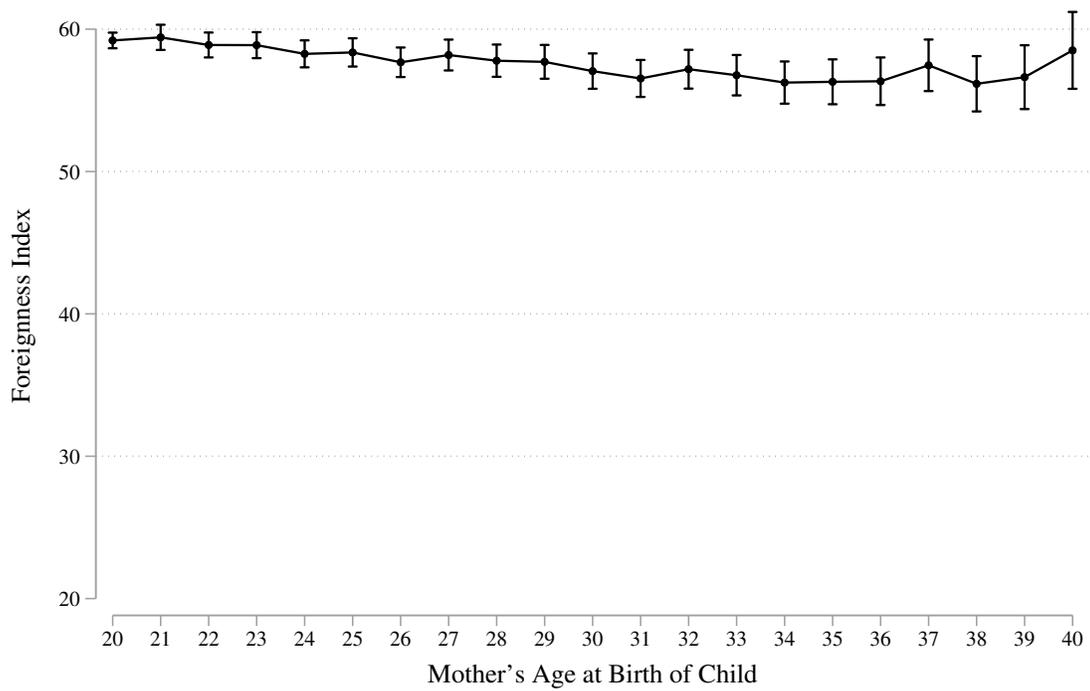


(B) Modern data (California birth certificates)



Note: These figures report the constant plus the estimated effect of the individual mother's age at birth indicators from equation (2). For the children of foreign-born mothers, the regression includes the interactions between indicators for birth order and the mother's country of birth. Regressions also include indicators for child's rank in the birth order, birth year in five-year bands, and mother fixed effects. For sample details see notes to Figure 1.

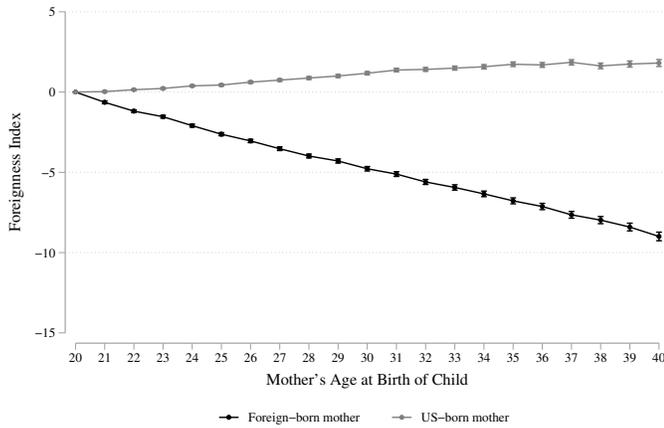
Appendix Figure 3: Name foreignness of foreign-born children by mother's age at birth



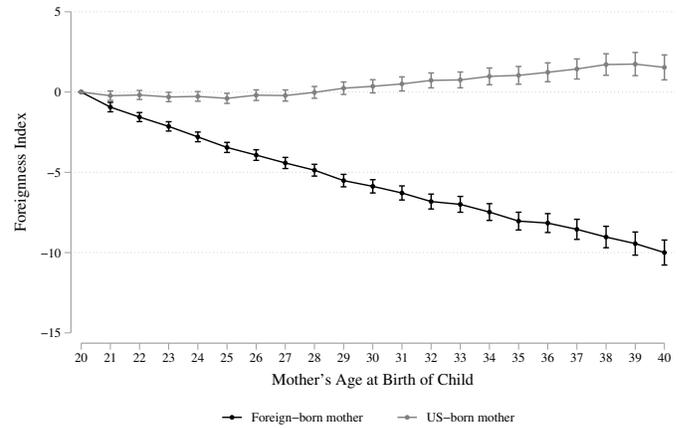
Note: This figure shows the Foreignness Index of names given to children born outside of the US by the mother's age when the child was born. These figures report the constant plus the estimated effect of the individual mother's age at birth indicators from equation (2). Regressions also include indicators for child's rank in the birth order, birth year in five-year bands, and mother fixed effects. Data is from the complete count 1920 census. Sample details in Note to Figure 1. N =339,336 .

Appendix Figure 4. Immigrants selected less foreign names after spending time in US, past and present

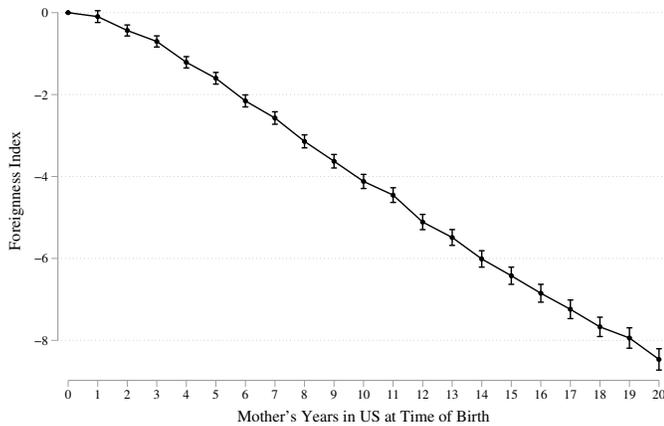
(A) Historical data (1920 Census)



(B) Modern data (California birth certificates)

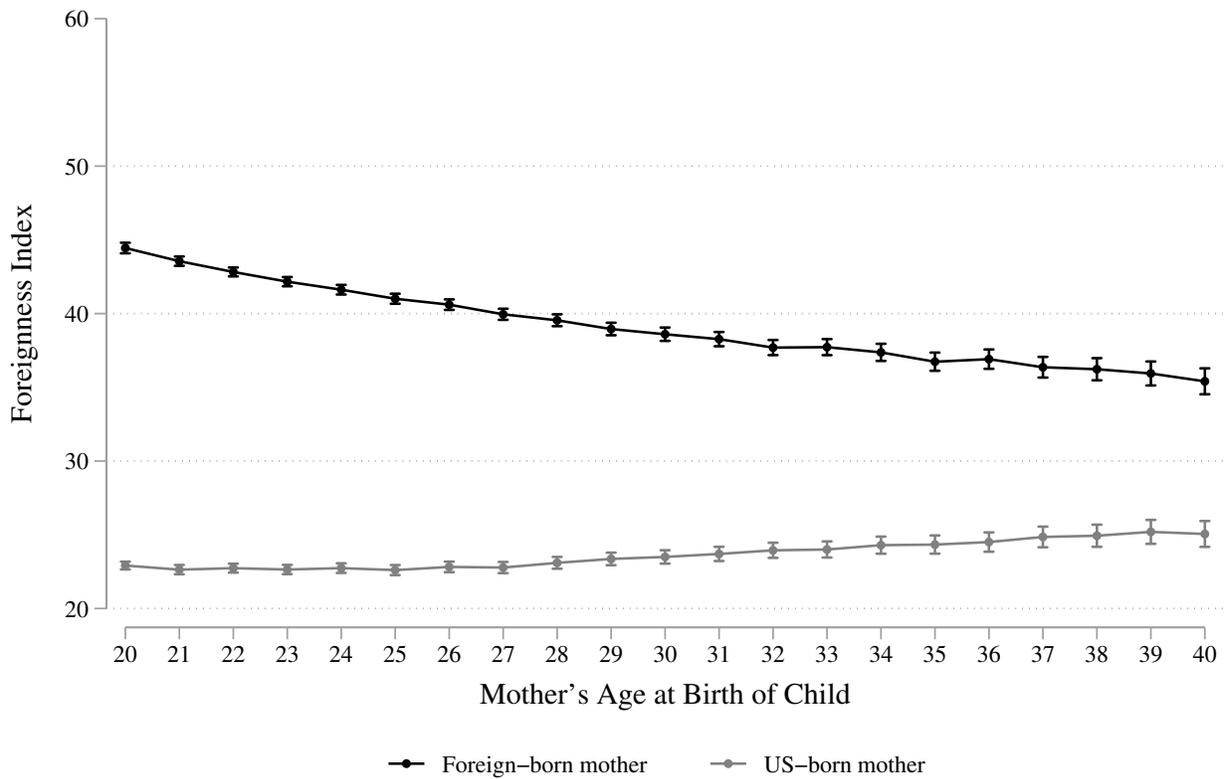


(C) Mother's years in US at time of child's birth (1920 Census)



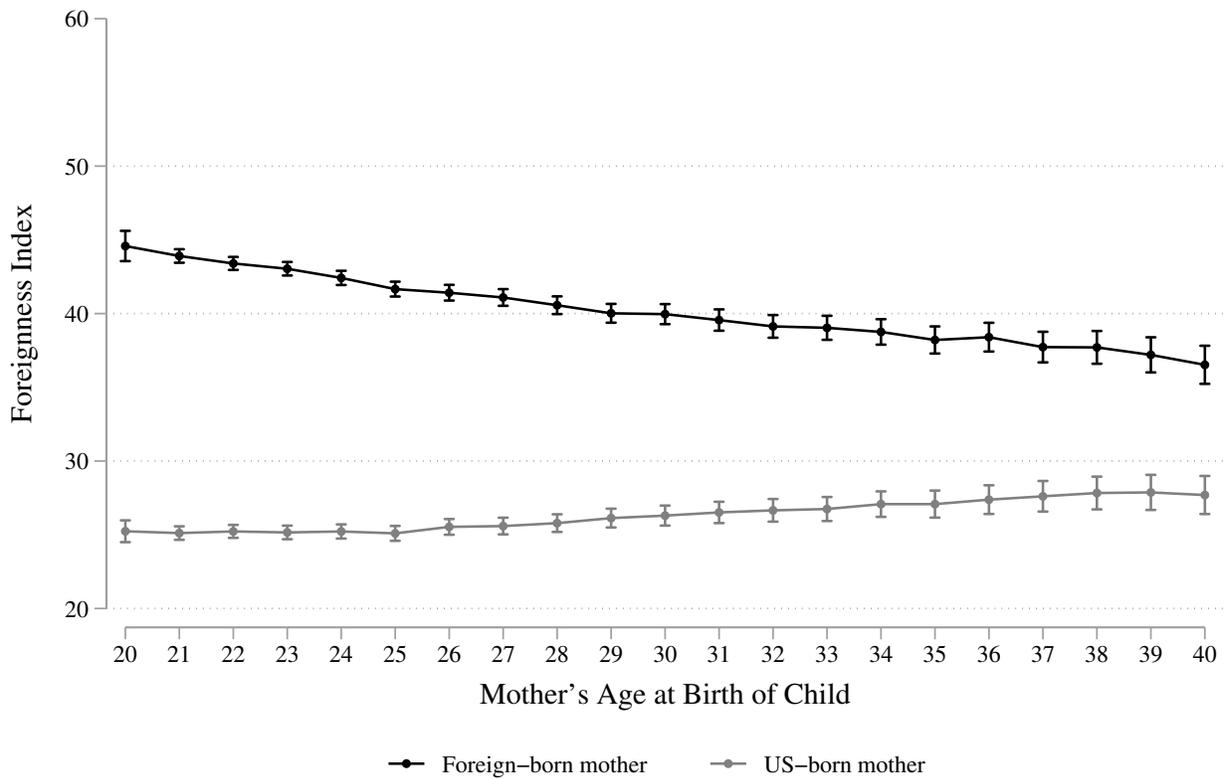
Note: Panels (A) and (B) report the coefficient estimates from equation 1, a regression of the Foreignness Index of a child's name on a set of indicators for mother's years in the US when the child was born. Panel (C) reports the coefficient estimates from equation 2, a regression of the Foreignness Index of a child's name on a set of indicators for mother's age when the child was born. Regressions also include indicators for child's rank in the birth order, birth year in five-year bands, and mother fixed effects. Sample details in Note to Figure 1.

Appendix Figure 5: Name foreignness by mother’s age at birth, for children of mothers who had all reported births in California



Note: This figure reports estimates of cultural assimilation when restricting the sample to mothers who had all births in California. Reported coefficients are indicators for mother’s age at birth of child. Regressions also include indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. $N(\text{foreign}) = 2,082,142$, $N(\text{native}) = 2,957,731$.

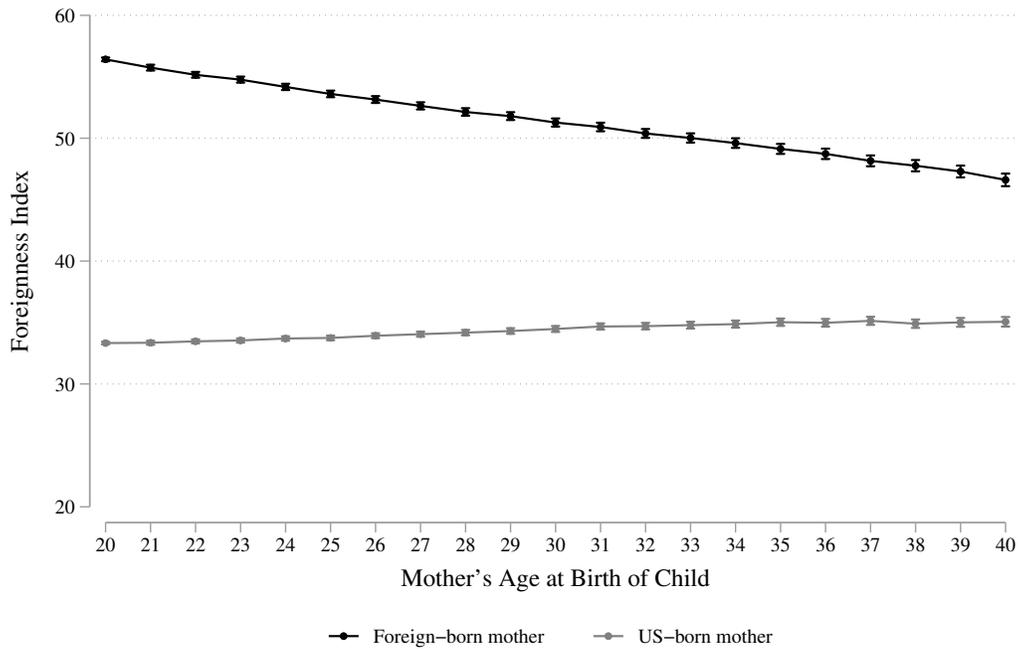
Appendix Figure 6: Name foreignness by mother’s age at birth, for children of mothers who had all reported births after 1998



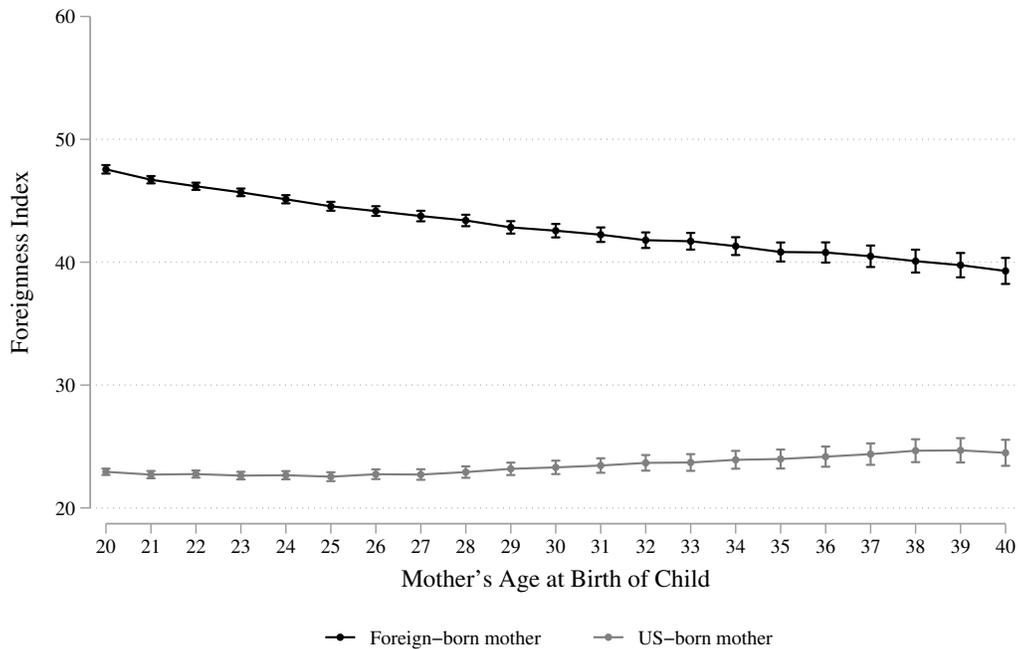
Note: This figure reports estimates of equation 2 for children born to mothers in California between 1998-2015. Reported coefficients are indicators for mother’s age at birth of child. Regressions also include indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. $N(\text{foreign}) = 2,380,097, N(\text{native}) = 2,456,595$.

Appendix Figure 7: Name foreignness by mother’s age at birth, controlling for name trends using three-year bands, past and present

(A) Historical data (1920 Census)

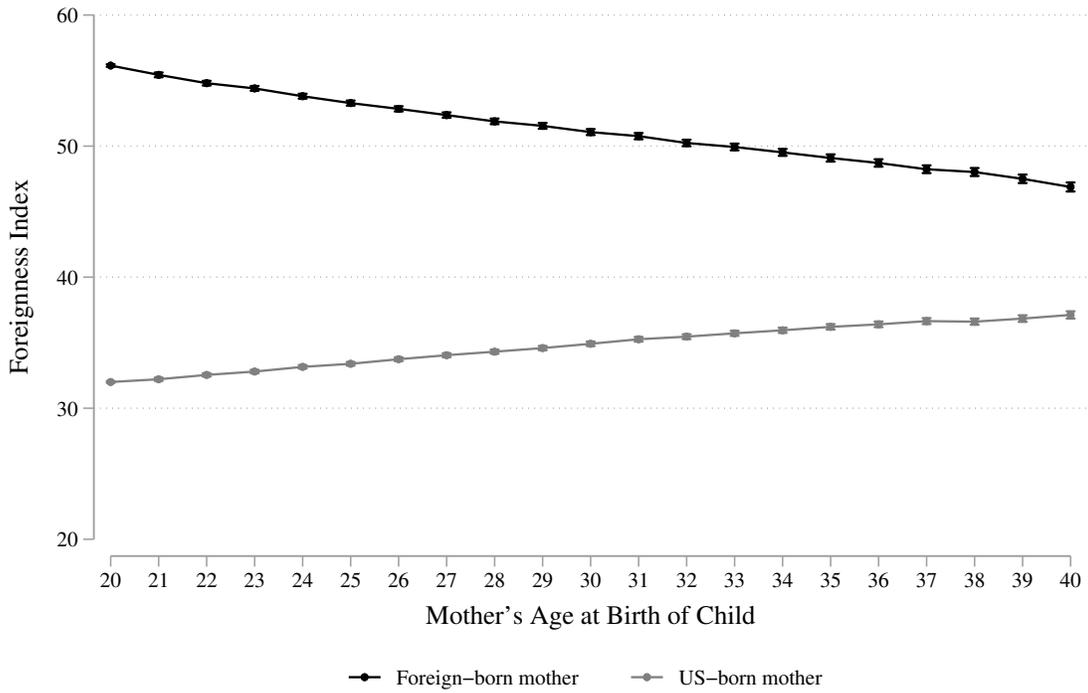


(B) Modern data (California birth certificates)



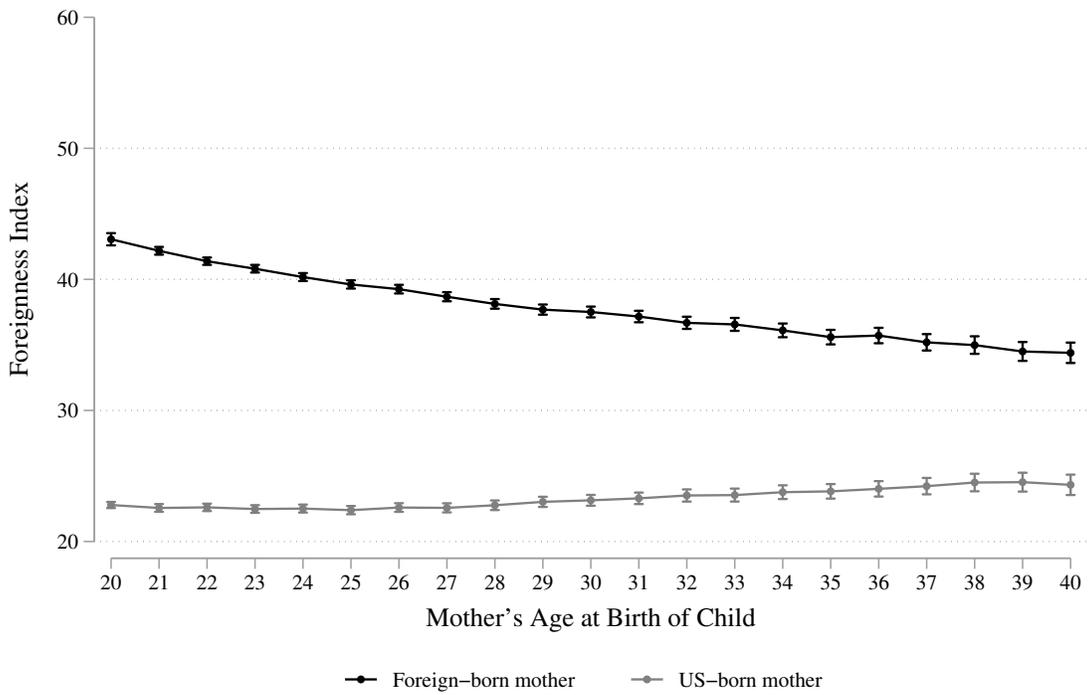
Note: These figures report foreignness index of children’s age by mother’s age when the child was born. Estimates are from equation 2, a regression of the Foreignness Index of a child’s name on a set of indicators for mother’s age when the child was born. Regressions are estimated separately for children of foreign-born and white native-born mothers and include indicators for child’s rank in the birth order, birth year in three-year bands, and mother fixed effects. Panel (A) uses the complete count 1920 census. $N(\text{foreign}) = 4,219,213$, $N(\text{native-born}) = 9,337,285$. Panel (B) uses California birth records data. $N(\text{foreign}) = 3,841,048$, $N(\text{native-born}) = 4,160,299$. Sample details in Note to Figure 1.

Appendix Figure 8: Name foreignness by mother’s age at birth using cohort specific foreignness index, 1920 census



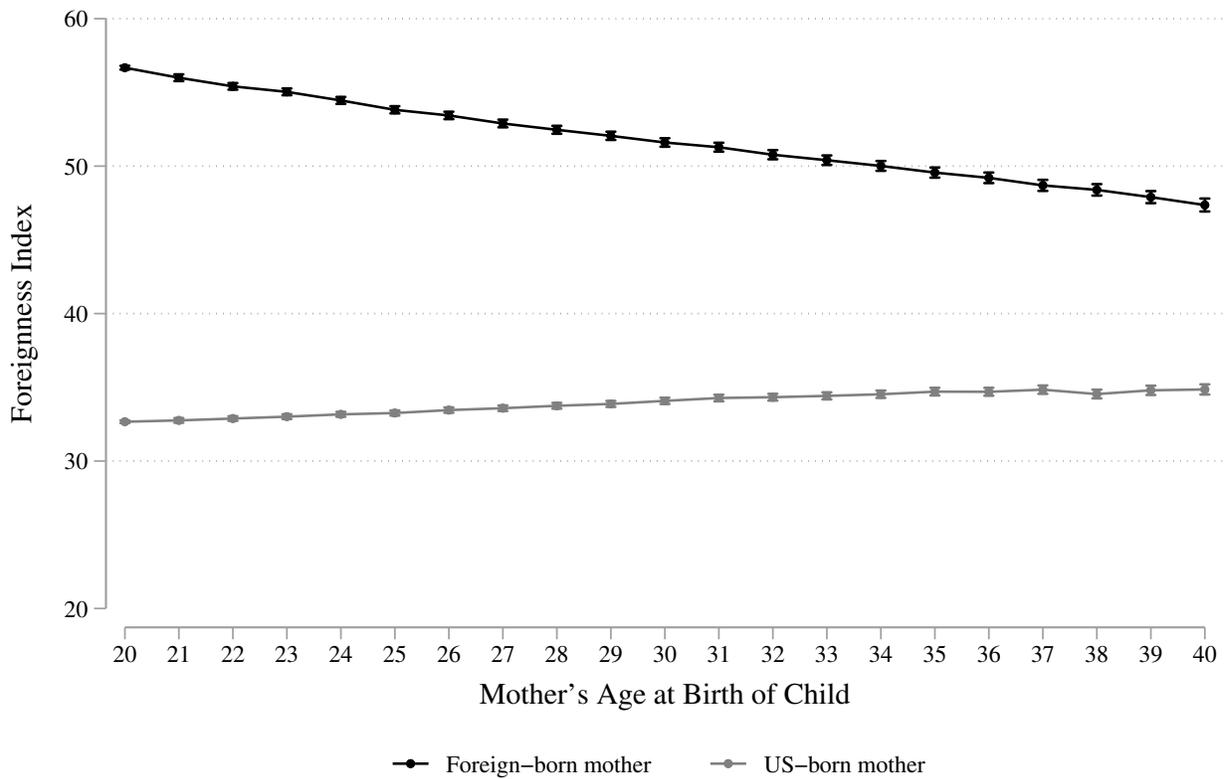
Note: This figure reports name foreignness of children by mother’s age at birth. Levels are from a regression of the Foreignness Index of a child’s name on a set of indicators for mother’s age when the child was born. Regressions also include indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. In this version, we calculate a birth-cohort-specific Foreignness Index based on the 20 years of cohorts prior to a child’s birth. Data is from the complete count 1920 census. Sample details in Note to Figure 1. $N(\text{Native-born}) = 9,645,549$; $N(\text{Foreign-born}) = 4,370,749$.

Appendix Figure 9: Name foreignness by mother’s age at birth California data (1998-2015), re-weighted to match national country-of-origin distribution



Note: This figure reports the constant plus the estimated effect of the individual mother’s age at birth from equation (2), estimated separately for children of foreign-born (N = 3,841,048) and white native-born mothers (N = 4,160,299). Regressions include the full set of dummy variables for mother’s age at time of child’s birth and indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. The sample includes all children born to a mother aged 20-40 in California from 1989-2015. The foreign-born sample is re-weighted so that the distribution of mothers from foreign countries matches the distribution observed in the 2000 Census.

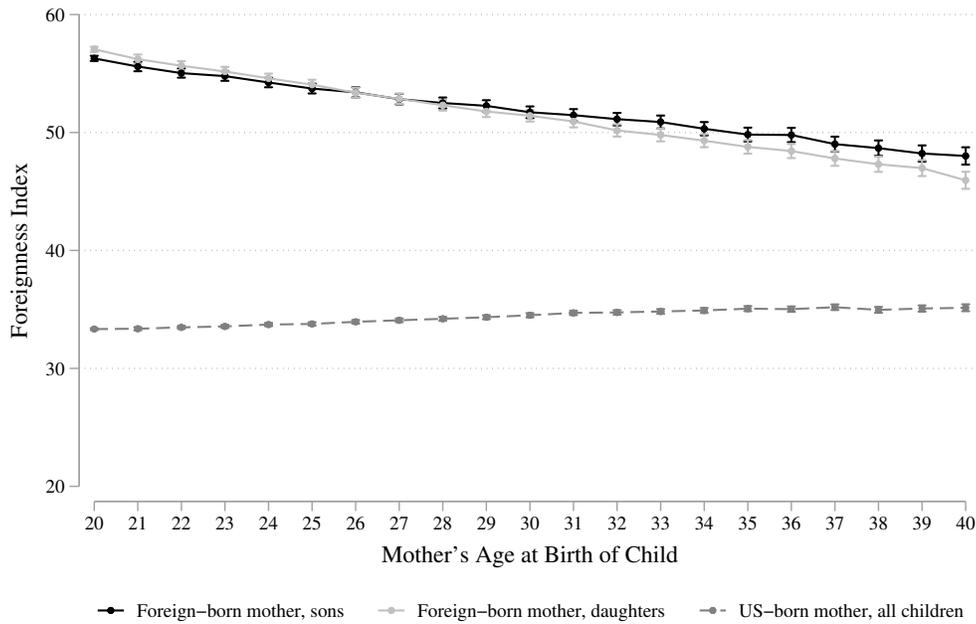
Appendix Figure 10: Name foreignness by mother’s age at birth using only parents to construct Foreignness Index, 1920 census



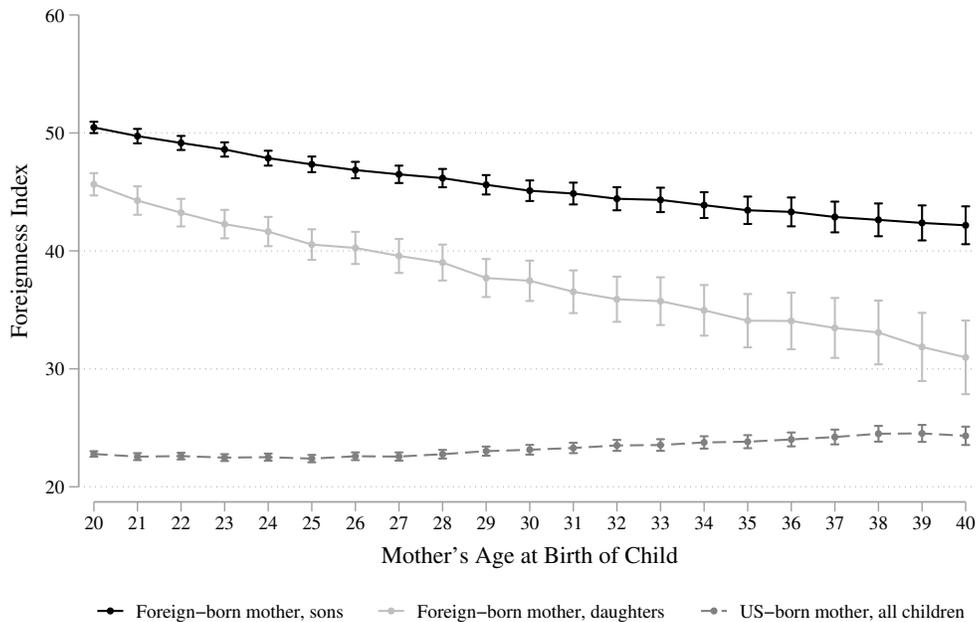
Note: This figure reports the constant plus the estimated effect of the individual mother’s age at birth indicators from equation (2). In this version, we use only people with at least one child in the 1920 census to construct the Foreignness Index. Regressions include indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. Data is from the complete count 1920 census. $N(\text{Native-born}) = 8,599,388$. $N(\text{Foreign-born}) = 3,932,059$. Sample details in notes to Figure 1.

Appendix Figure 11: Name foreignness by mother’s age at birth for sons and daughters, past and present

(A) Historical data (1920 Census)



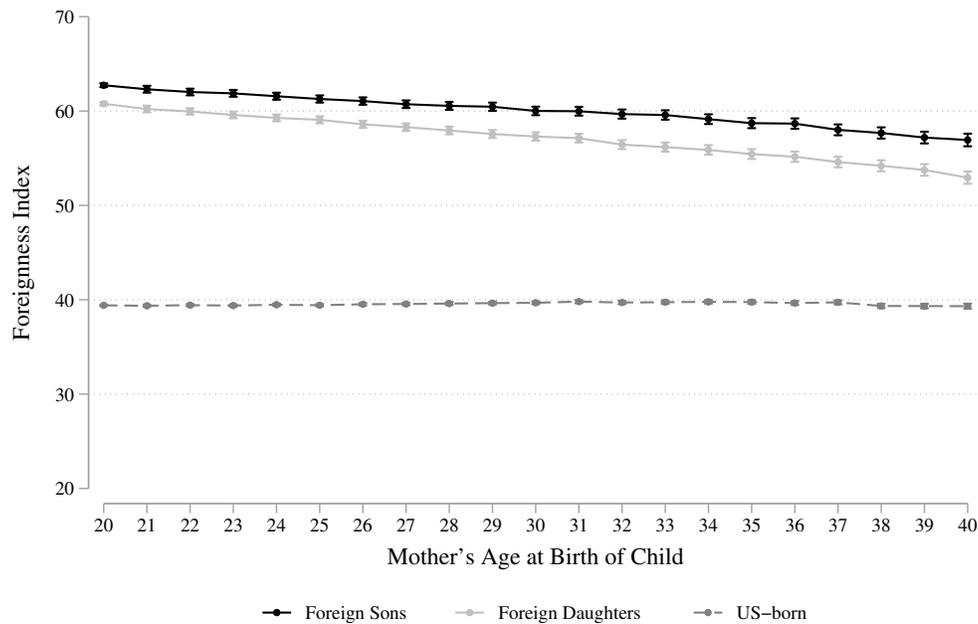
(B) Modern data (California birth certificates)



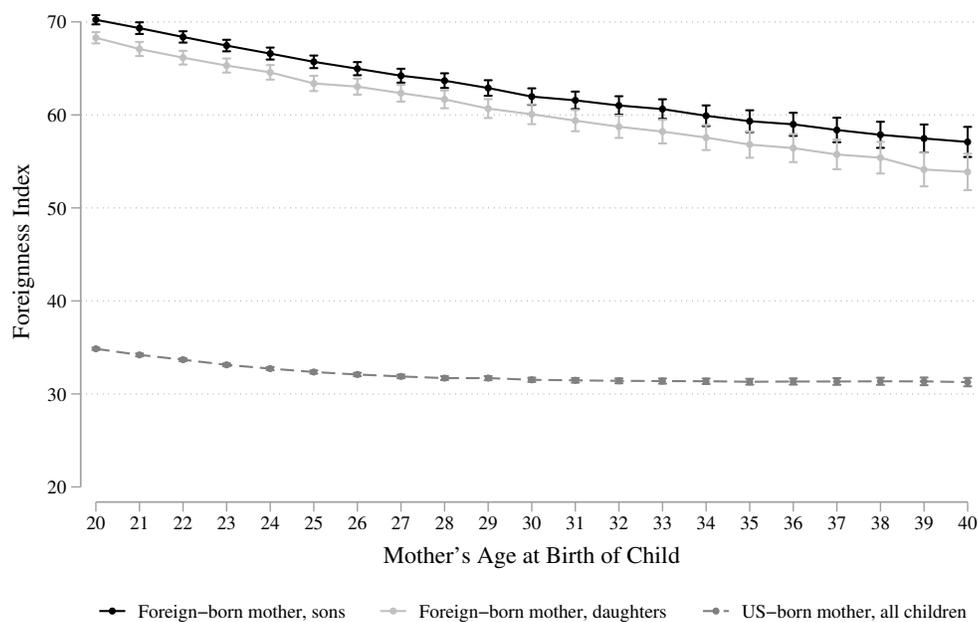
Note: This figure shows the results of equation 2, a regression of the Foreignness Index of a child’s name on a set of indicators for mother’s age when the child was born, estimated separately for sons and daughters of foreign-born and white native-born mothers. Specifically, the figure reports the constant plus the estimated effect of the individual mother’s age at birth indicators from equation. Regressions also include indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. See Note to Figure 1 for sample details. Panel A is based on sons of foreign-born mothers (N = 2,139,825), daughters of foreign-born mothers (N = 2,079,388), and children of white native-born mothers (N = 9,337,285). Panel B is based on sons of foreign-born mothers (N = 2,055,731), daughters of foreign-born mothers (N = 1,785,317), and children of white native-born mothers (N = 4,160,299).

Appendix Figure 12: Name foreignness by mother’s age at birth for sons and daughters, using second-generation Foreignness Index, past and present

(A) Historical data (1920 Census)



(B) Modern data (California birth certificates)



Note: This figure shows the results of equation 2, a regression of the Foreignness Index of a child’s name on a set of indicators for mother’s age when the child was born, estimated separately for sons and daughters of foreign-born and white native-born mothers. Specifically, the figure reports the constant plus the estimated effect of the individual mother’s age at birth indicators from equation. The dependent variable is the Foreignness Index constructed from the names of the children of foreign-born and native-born mothers. Regressions also include indicators for child’s rank in the birth order, birth year in five-year bands, and mother fixed effects. See Note to Figure 1 for sample details. Panel A is based on sons of foreign-born mothers (N = 2,212,366), daughters of foreign-born mothers (N = 2,157,483), and children of white native-born mothers (N = 9,643,084). Panel B includes all children born to a mother aged 20-40 in California from 1989-2015, foreign sons (N = 2,506,821), foreign daughters (N = 2,294,440), white native-born (N = 5,635,373).

Appendix Table 1: Characteristics of Matched and Unmatched Mothers

(A) Characteristics of all matched and unmatched mothers

	Matched (1)	Unmatched (2)	Difference (3)
Age	27.880	29.135	1.256***
Native	0.584	0.415	-0.169***
CA Born	0.460	0.263	-0.197***
Less than HS	0.241	0.282	0.040***
HS Diploma	0.278	0.273	-0.005***
Some College	0.221	0.206	-0.015***
BA or More	0.260	0.240	-0.020***
Observations	3,064,641	1,103,684	

(B) Characteristics of matched and unmatched mothers born outside of California

	Matched (1)	Unmatched (2)	Difference (3)
Age	27.564	28.205	0.642***
Less than HS	0.126	0.126	-0.001
HS Diploma	0.315	0.314	-0.002
Some College	0.292	0.307	0.015***
BA or More	0.267	0.254	-0.013***
Observations	1,002,867	132,797	

Note: This table reports characteristics of matched and unmatched mothers for mothers who are not missing a matching characteristic. All characteristics are measured as of the birth of the second child. Each mother is counted only once.

Appendix Table 2: Pairwise correlations of various measures of cultural assimilation

Variables		Out-group marriage	Speaks English	Applied for citizenship
A. 16 sending countries				
1	Out-group marriage rate (+)			
2	Able to speak English (+)	0.642***		
3	Applied for citizenship (+)	0.476*	0.944***	
4	Average F-index of sons(-)	-0.489*	-0.767***	-0.666***
B. Individual (N = 23,043)				
1	Out-group marriage rate (+)			
2	Able to speak English (+)	0.065***		
3	Applied for citizenship (+)	0.075***	0.258***	
4	Average F-index of sons(-)	-0.247***	-0.106***	-0.156***

Note: IPUMS 5% sample of 1930 census. (+) and (-) indicate positive and negative indicators of cultural assimilation. All samples are restricted to white men who were born abroad and were 10 years or older. We use 1930 Census for this exercise because it includes a question about age at first marriage that allows us to identify marriages that occurred in the US. For the out-group marriage rate, the sample is further restricted to men who were currently married in 1930 and whose marriage took place after arrival in the US. For average F-index of sons, the sample is restricted to men whose spouse is younger than 43 years old and whose oldest child is below 18 years old. The list of 16 sending countries underlying the correlations in Panel A can be found in Figure 2.

Appendix Table 3: Examples of foreign and native names.

Most Native (F-Index <10)		Neutral (50 < F-Index < 60)		Most Foreign (F-Index >90)	
Historical	Present	Historical	Present	Historical	Present
(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Male Names					
Clarence	Logan	John	Adrian	Manuel	Ahmed
Howard	Mason	Frank	Samuel	Antonio	Andrey
Earl	Tracos	Martin	Cristian	Angelo	Pavel
Elmber	Chase	Victor	Erick	Hyman	Elder
Russell	Blake	Maurice	Manuel	Jose	
Panel B: Female Names					
Hazel	Ashley	Elizabeth	Abigail	Yetta	Yazmin
Myrtle	Emily	Francis	Olivia	Carmela	Salma
Lucile	Alyssa	Catherine	Julia	Antonia	Juana
Opal	Nicole	Bertha	Valeria	Concetta	Citlali
Velma	Samantha	Eva	Ariana	Stefania	Mariam

Note: Names with 100 or more observations selected for having low/neutral/high Foreignness Index values in historical and present data. Odd-numbered columns report names in the historical data and even- numbered columns report names in the California data.

Appendix Table 4: Cultural assimilation in historical data, robustness to sample restrictions

Dependent Variable = Foreignness Index	
Baseline	-0.420 (0.009)
<i>N</i>	4,219,213
Born in California	-0.261*** (0.067)
<i>N</i>	112,771
Children \leq 6 years old	-0.379*** (0.015)
<i>N</i>	2,383,260

Note: Each row represents a coefficient from a separate regression of Foreignness Index of a child's name on a linear measure of mother's age at the time of birth (equation 2) using the children of all foreign-born mothers. Row 1 uses all children in the sample, row 2 keeps only children born in California, and row 3 uses only children 6 years old. Data is from the 1920 complete-count census. For sample details see notes to Figure 1. Robust standard errors are reported in parentheses. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Appendix Table 5: Cultural assimilation past and present, robustness to various Foreignness Index calculations

Dependent Variable = Foreignness Index		
	Historical	Modern
Baseline	-0.420*** (0.009)	-0.472*** (0.021)
<i>N</i>	4,219,213	3,841,048
Country-Specific F-index	-0.617 *** (0.015)	-0.536*** (0.025)
<i>N</i>	2,794,847	3,581,318
Adjust with NYSIIS	-0.391 *** (0.010)	-0.182*** (0.018)
<i>N</i>	4,696,779	4,932,920

Note: This table reports measures of cultural assimilation using different measures of the F-index. Row 1 reports the baseline estimate. Row 2 calculates a country-specific index. Row 3 adjusts names using the NYSIIS algorithm. All reported coefficients are from a linear measure of mother's age at birth of child. All regressions are estimated on foreign-born mothers only and include indicators for child's rank in the birth order, indicators for child's birth year in five-year bands, and mother fixed effects. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.