Determinants of Past Unauthorized Mexican Worker Migration to the U.S. and Possible Future Flows

Madeline Zavodny

University of North Florida

This presentation draws on Center for Global Development working paper #436, "Unauthorized Mexican Workers in the United States: Recent Inflows and Possible Future Scenarios," co-authored with Pia Orrenius

Why does Mexican worker migration matter?

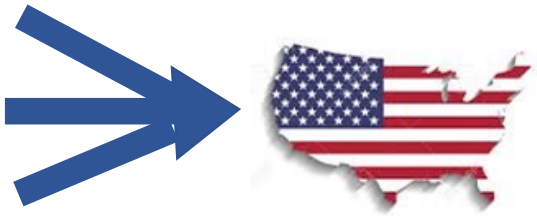
- Important to U.S. economy
- Important to Mexican economy
  - Outlet for excess workers
  - Remittances
- Future: Aging makes it important to both

Push versus pull factors

Push

- Economic factors
  - Mexican wages
  - Mexican job growth
  - Trade with U.S., Canada
- Demographic factors
  - Labor force entrants

Pull

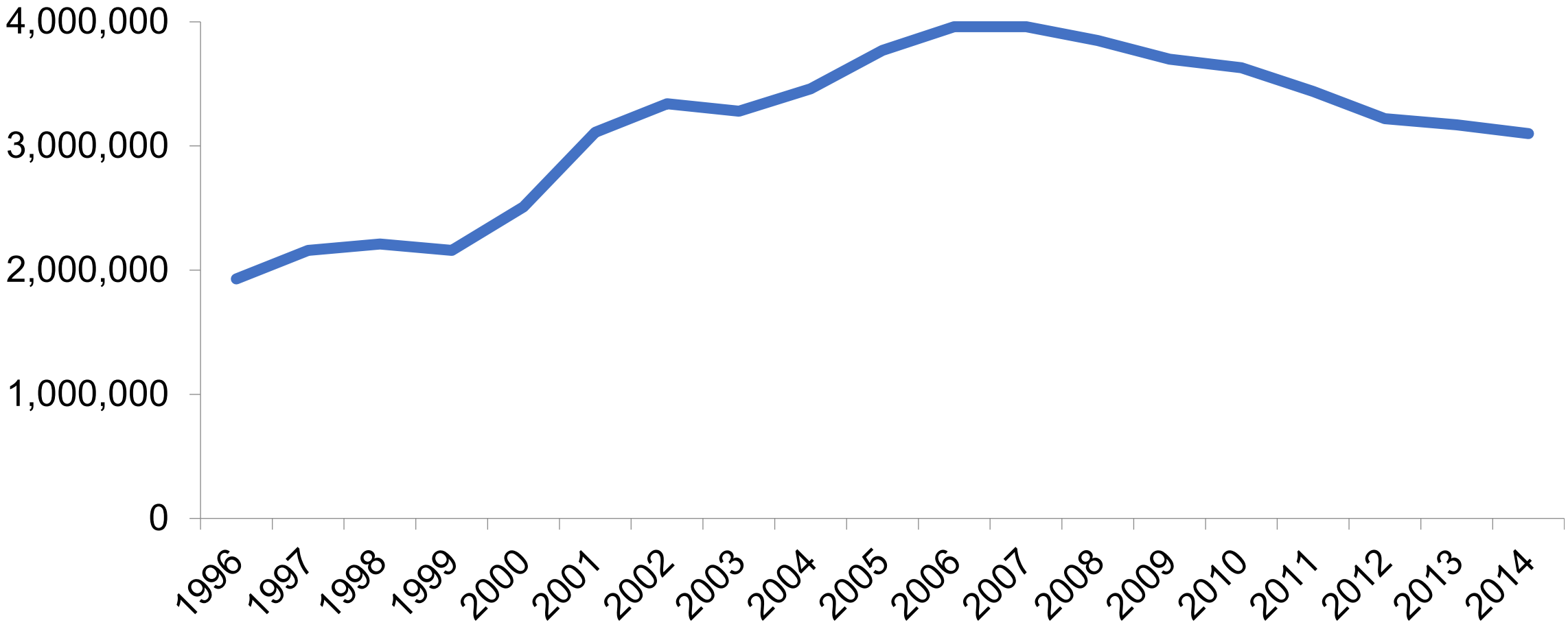


- Economic factors
  - U.S. wages
  - U.S. job growth
  - U.S. construction activity
- Demographic factors
  - Labor force entrants
- Border enforcement

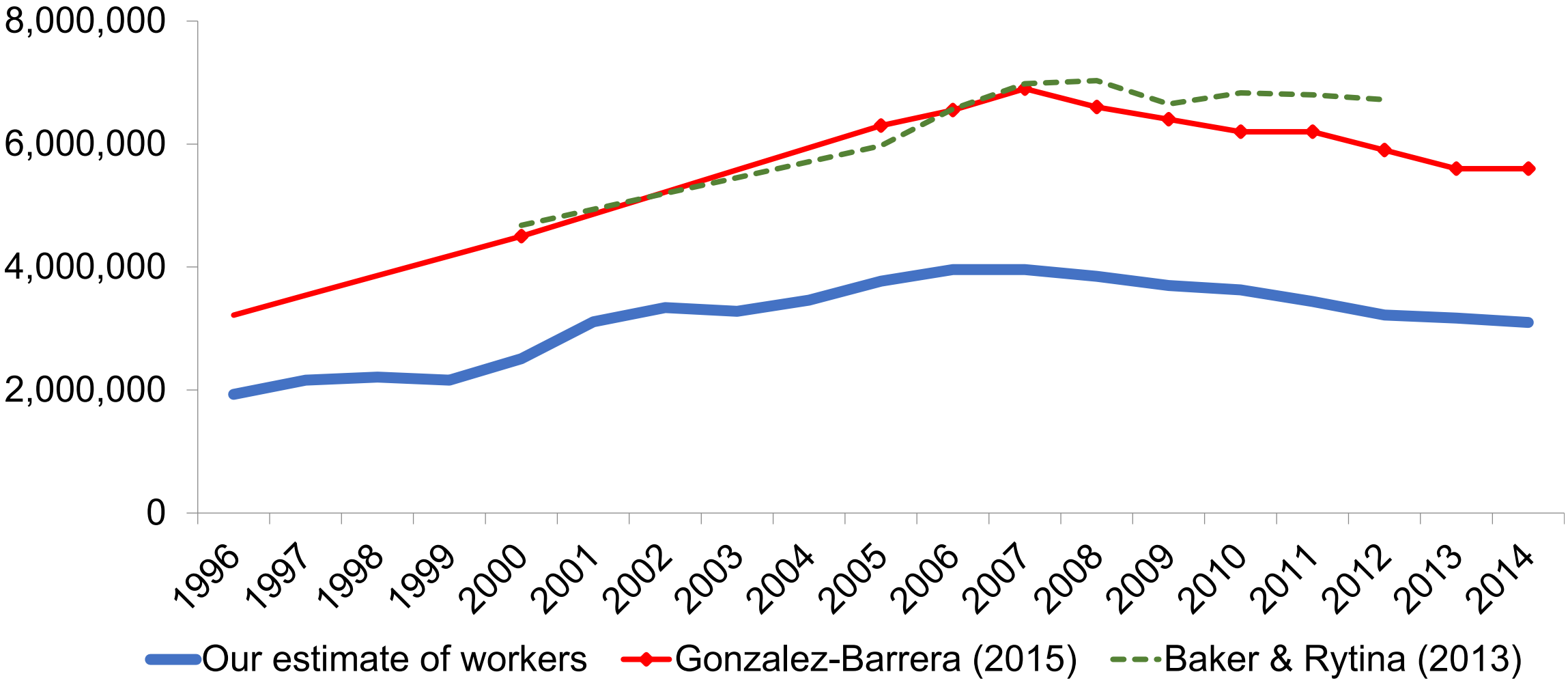
Nitty-gritty details

- Estimate inflow of unauthorized Mexican workers
  - Current Population Survey 1996-2004, American Community Survey 2005-2014
  - Mexican-born workers who entered U.S. within last year
  - 3 methods to estimate # unauthorized:
    - Imputation: Predict legal status based on characteristics, 2008 Survey of Income and Program Participation
    - Residual: Weighted count minus temp worker visa issuances
    - Proxy: Based on education or other logic-based proxies
  - 20% adjustment for undercount

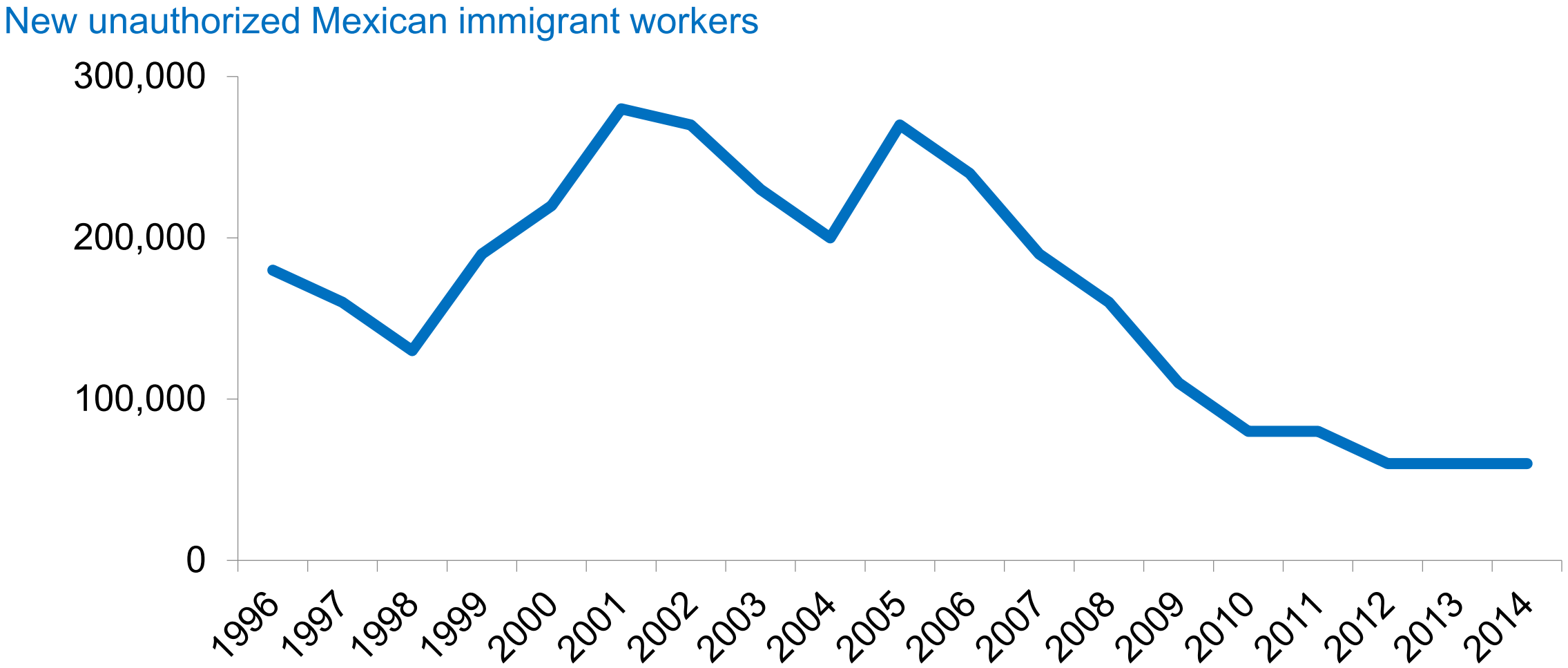
Estimated stock of unauthorized Mexican immigrant workers, based on imputation



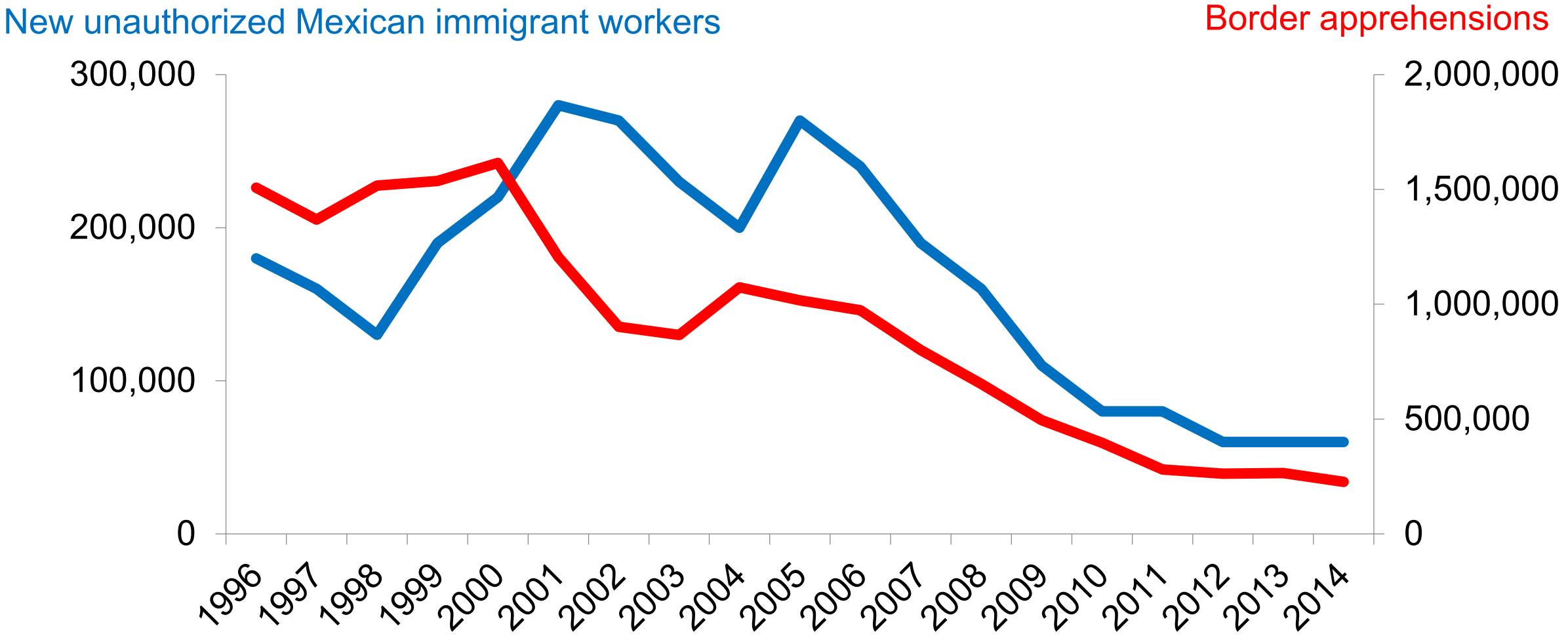
Comparison to estimates of total unauthorized Mexican immigrant population



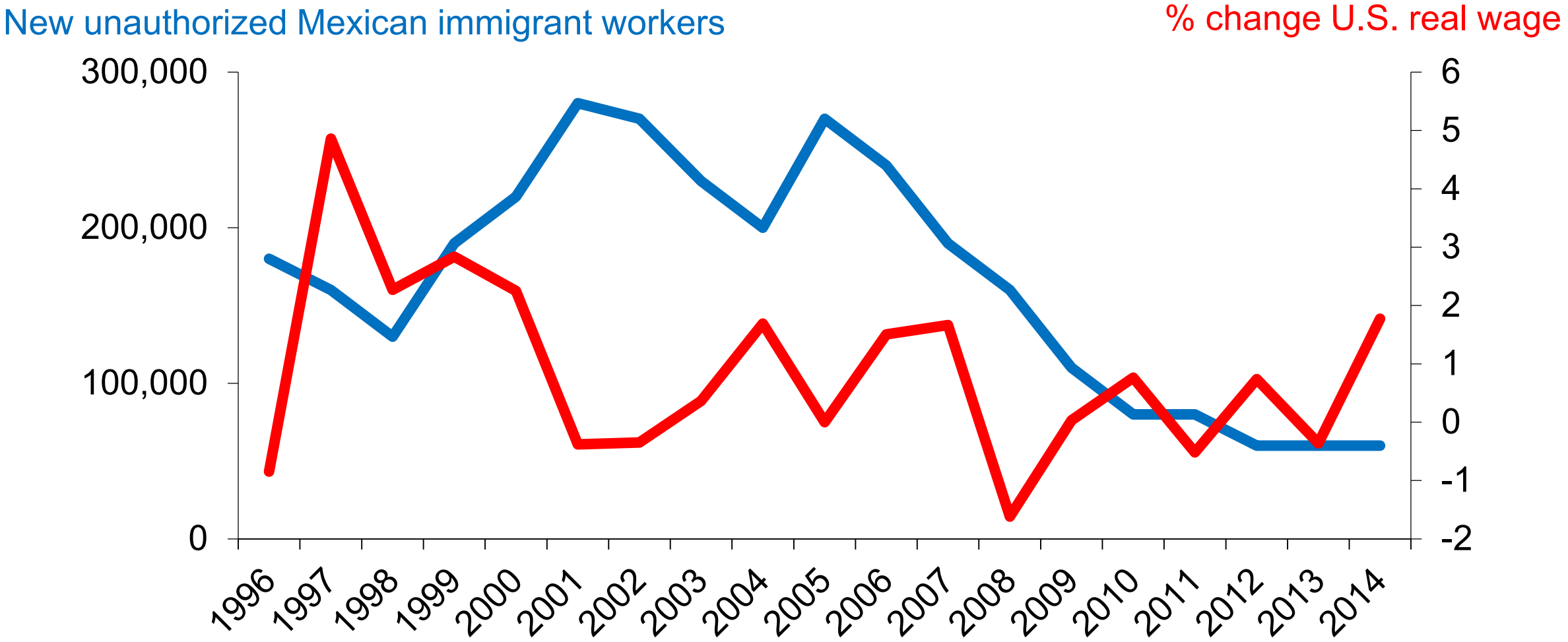
Average estimated inflow of unauthorized Mexican workers



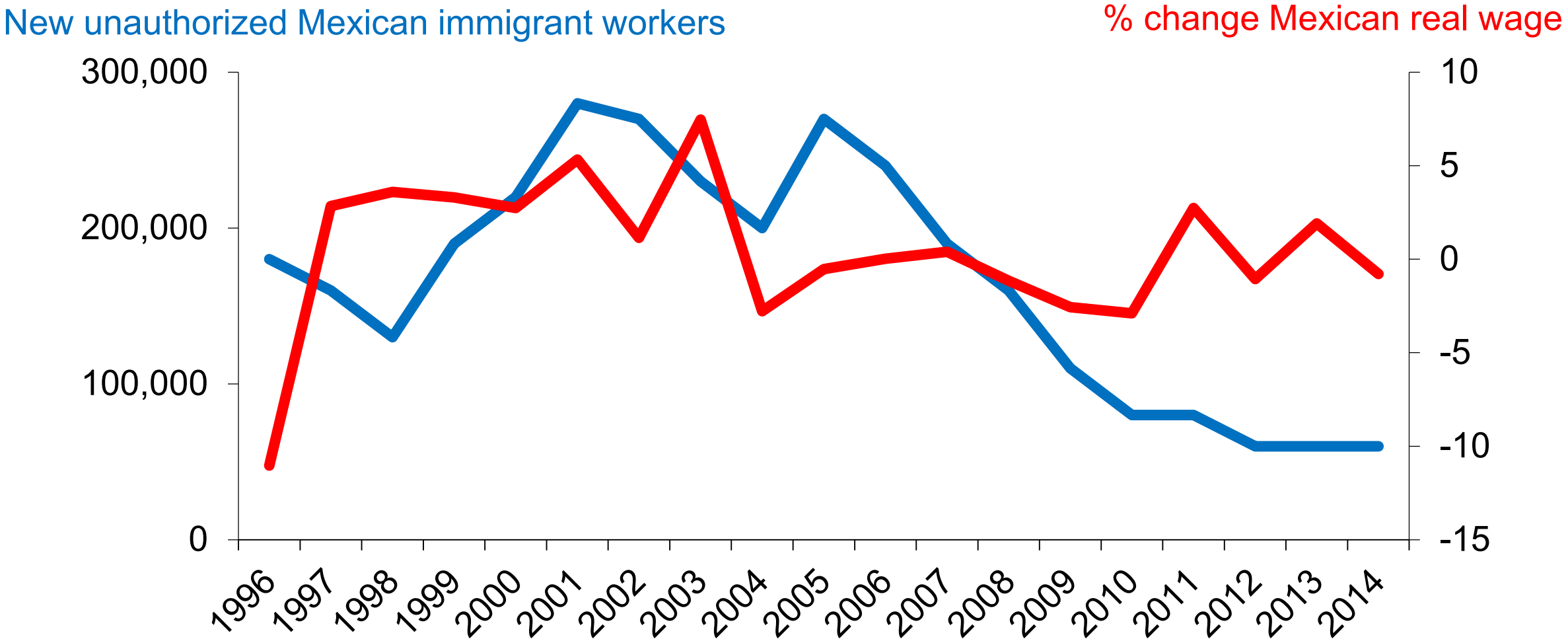
Comparison to border apprehensions



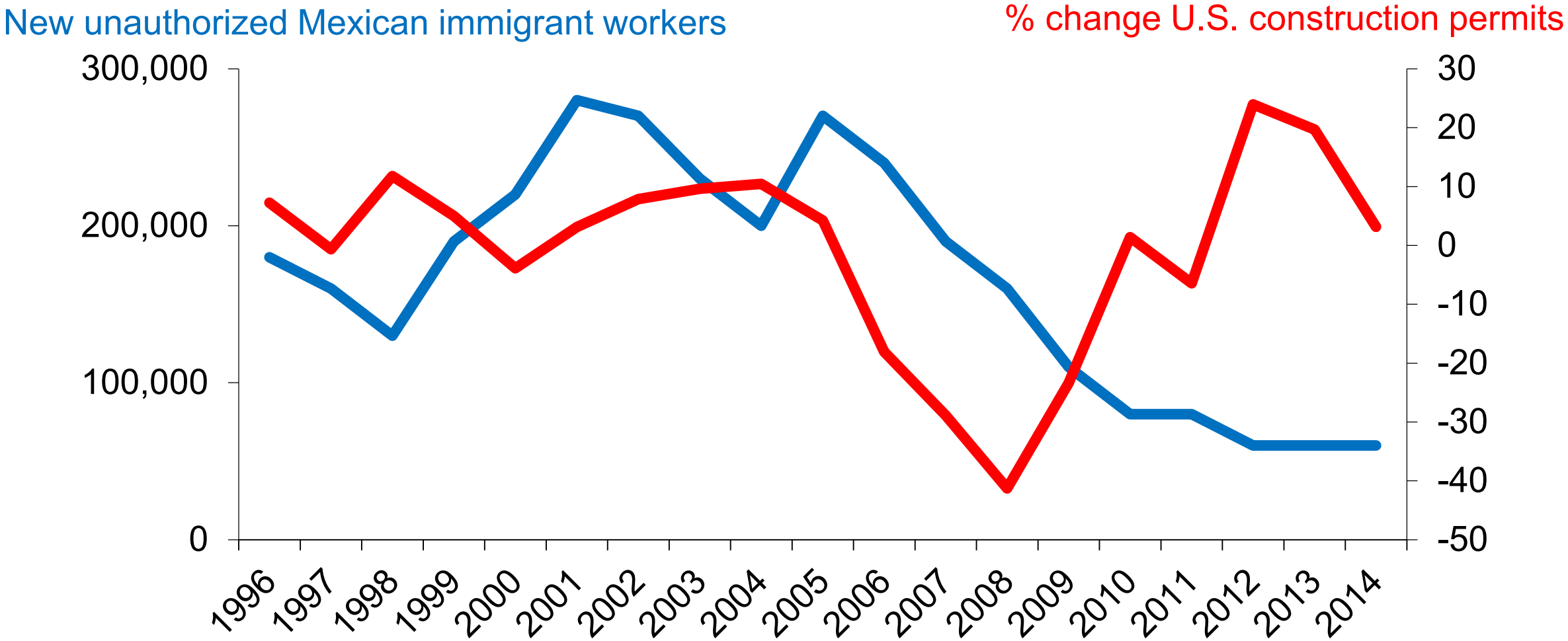
Inflows and U.S. wages



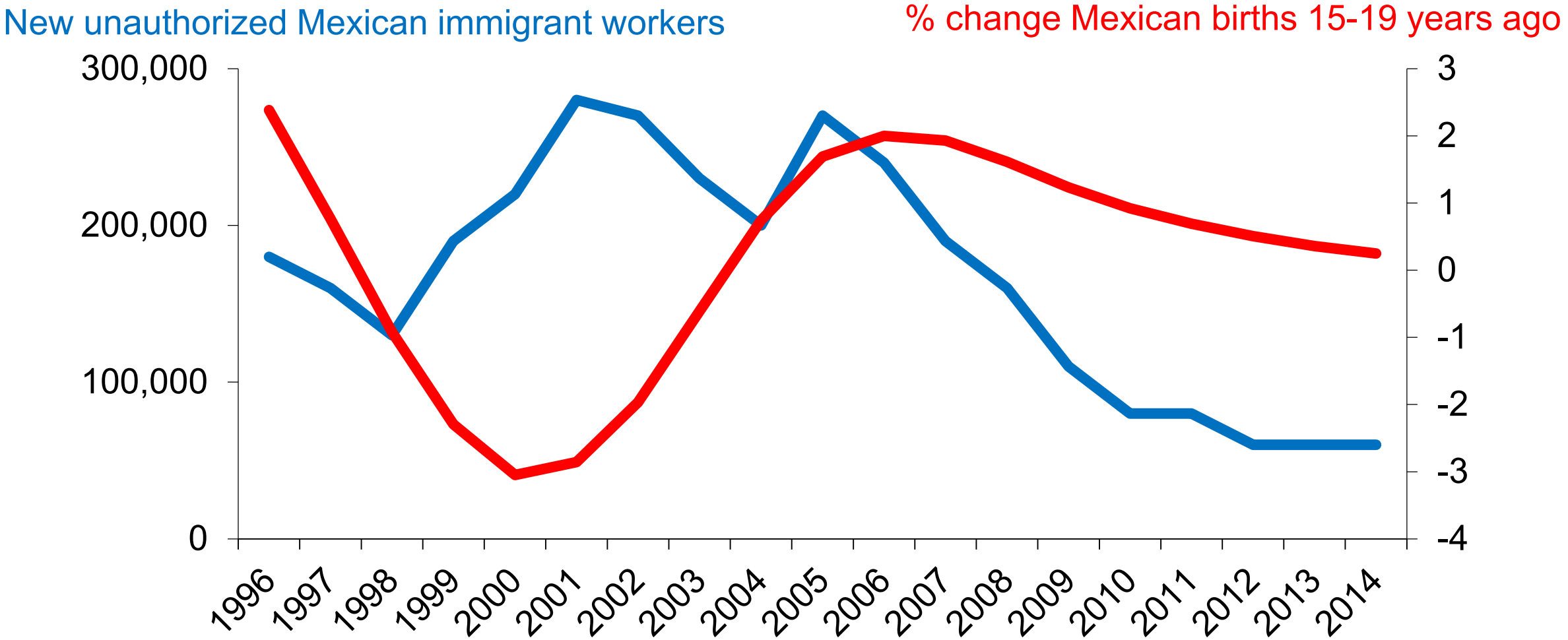
Inflows and Mexican wages



Inflows and U.S. construction activity



Inflows and Mexican cohort size



Regression model

$\log(\text{inflow}_t) = \alpha + \beta_1 \log(\text{US economic conditions}_{t-1}) + \beta_2 \log(\text{Mexico economic conditions}_{t-1}) + \beta_3 \log(\text{Cohort sizes}_{t-15\text{to}19}) + \beta_4 \log(\text{Border enforcement}_t) + \tau_1 * \text{Trend}_t + \tau_2 * \text{Trend}^2_t + \varepsilon_t$

Cochrane-Orcutt AR(1) regression

Cautionary notes:

- Only 18 observations
- Assuming relationships did not change over time

Regression results

	(1)	(2)	(3)	(4)
U.S. average wage	14.18***	14.22***	--	8.47**
Mexican average wage	-3.14**	-3.32*	--	-3.99**
U.S. construction permits	--	-0.05	--	-0.52
U.S. total employment	--	--	9.60**	6.96
Mexican total employment	--	--	-6.17	-5.95
Border enforcement	-1.11***	-1.17**	-1.45**	-2.25**
U.S. births 15-19 yrs ago	-17.42**	-20.47	11.50	-28.32
Mexican births 15-19 yrs ago	21.32***	22.40***	-3.63	18.71**

*** $p < 0.01$; ** $p < 0.05$, * $p < 0.1$

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Possible future flows

- If circa 2014 conditions continue: about 100,00 per year
  - Similar to 2007-2014 flows, well below pre-2007 flows
- If U.S economy strengthens considerably: about 300,000 per year
  - Above 1996-2006 flows of about 220,000 per year
- If Mexican economy weakens considerably: about 160,000 per year
- Caveat: hard to predict!

Policy implications

- Need more, better work visa programs if want employers to use them
  - Spot market is key to employers
  - Visa portability
  - Automatic adjustment over business cycle
  - Allocate visas to employers who want them the most
  - Couple with stricter worksite enforcement
- Legalization program for those already here

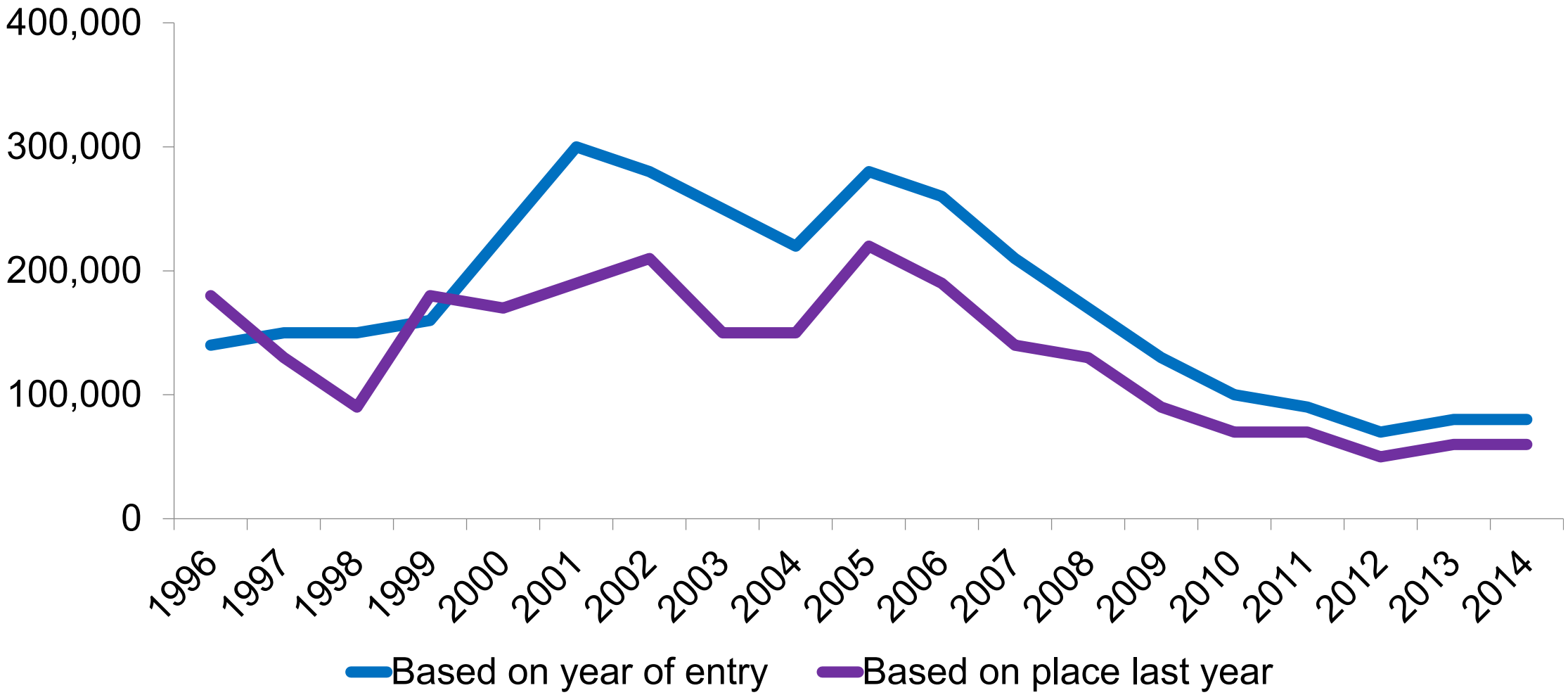
Related questions

- U.S. interior enforcement
- Inflows of authorized Mexican immigrant workers, non-working family members
- Central American inflows

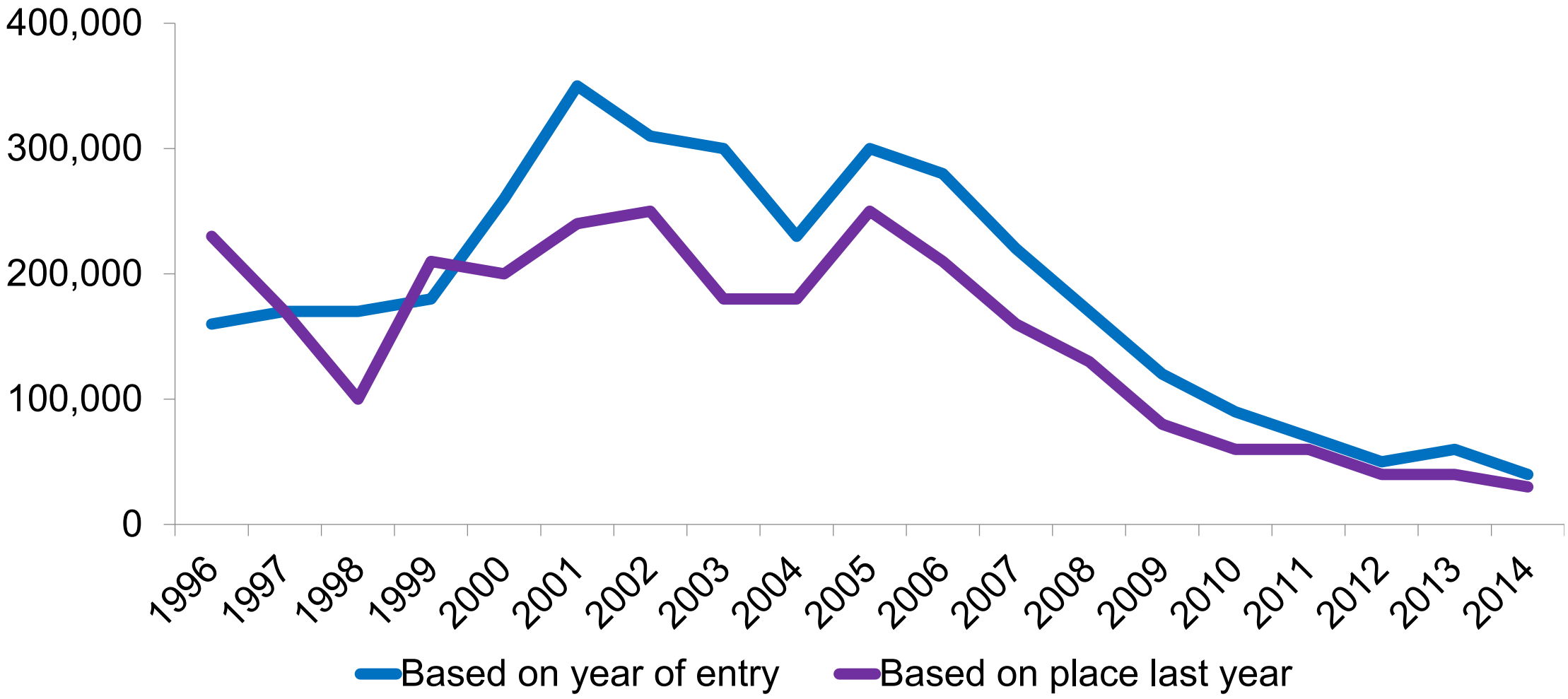
Estimated inflow of unauthorized Mexican workers

Estimation method	1996-2014	1996-2006	2007-2014
SIPP imputation, year of entry	170,000	210,000	110,000
SIPP imputation, place last year	130,000	160,000	80,000
Residual method, year of entry	180,000	240,000	100,000
Residual method, place last year	140,000	200,000	70,000
Less-educated proxy, year of entry	180,000	230,000	110,000
Less-educated proxy, place last year	150,000	200,000	90,000
Logic-based proxy, year of entry	210,000	260,000	130,000
Logic-based proxy, place last year	170,000	220,000	110,000
Average across all methods	**170,000**	**220,000**	**100,000**

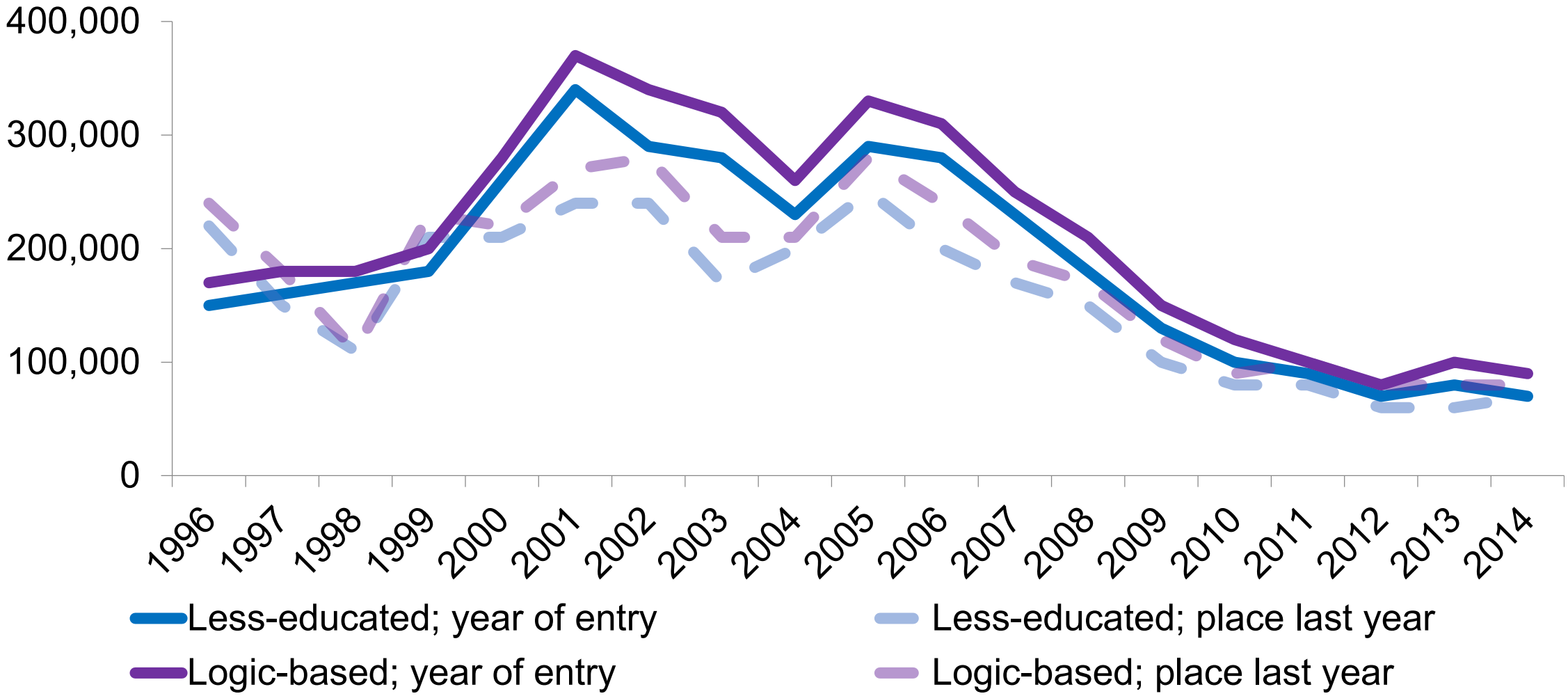
Estimated inflow of unauthorized Mexican workers, imputation method



Estimated inflow of unauthorized Mexican workers, residual method



Estimated inflow of unauthorized Mexican workers, proxy method



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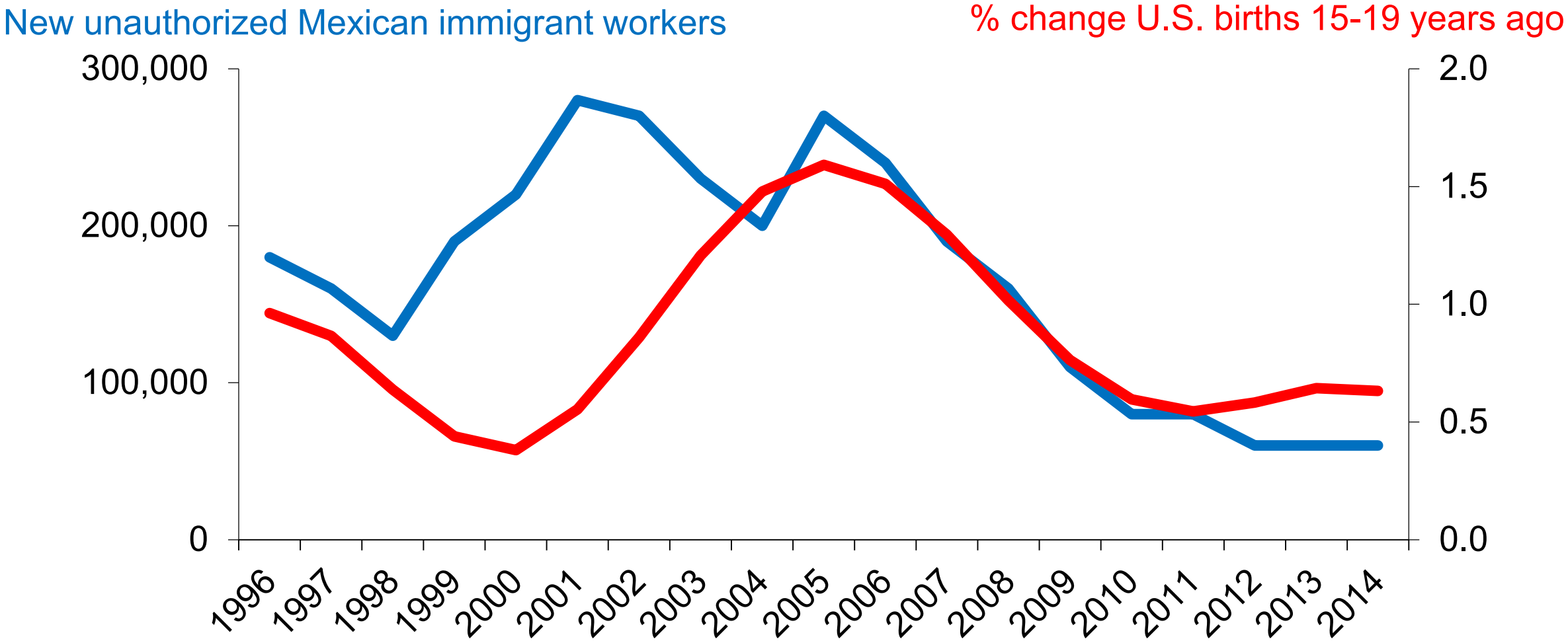

Estimated Probability of Being Unauthorized Immigrant among Mexican and Central American Workers, 2008 SIPP

	Coefficient		Coefficient
Female	-0.261	9th-12th grade, no diploma	0.007
		High school diploma	0.017
Age 25-34	-0.017	Some college	0.139
Age 35-44	0.206	Bachelor's degree or higher	0.015
Age 45-65	0.157	Enrolled in school	-0.570
Age 55-64	0.113		
		In poverty	0.001
Married, spouse absent	-0.055	Family size	0.032
Widowed	0.036	Number of families in household	0.190
Divorced	-0.006	Renter	0.106
Separated	-0.027		
Never married	0.094	Age at migration	-0.025
		Age at migration squared (/100)	0.032
Hispanic	0.132	Number of years since migration	-0.077

Also included but not shown: 14 occupation categories, 11 places of residence