In the swing of things

What does Donald Trump's victory tell us about America?

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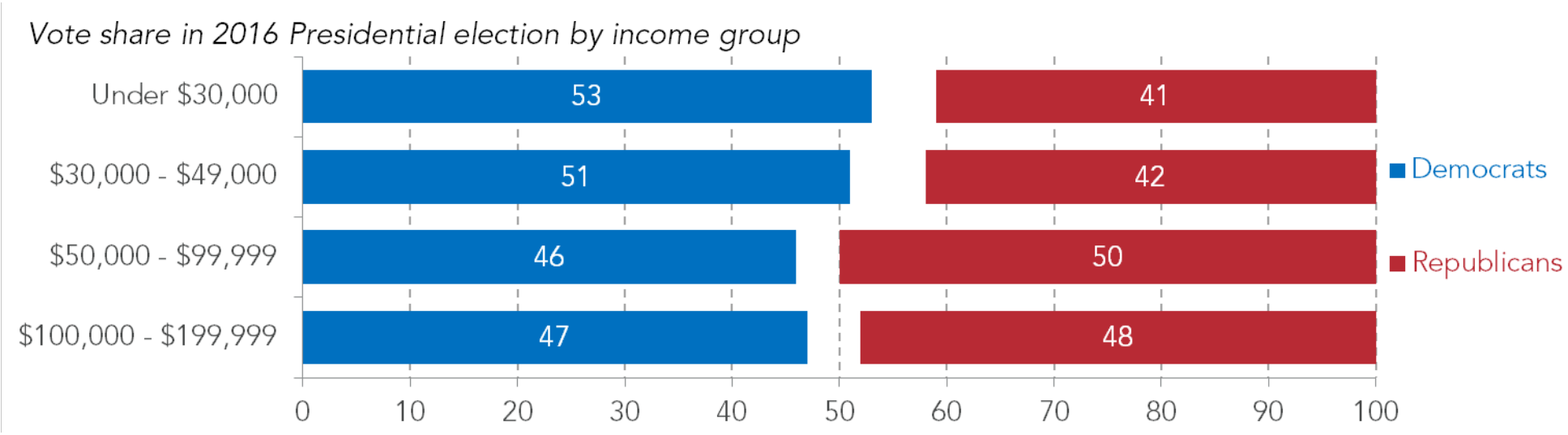
"IT'S NOT THE ECONOMY, STUPID"

REALLY?

Income was not a strong predictor of an individual's vote…
…leading some to say economics didn't matter

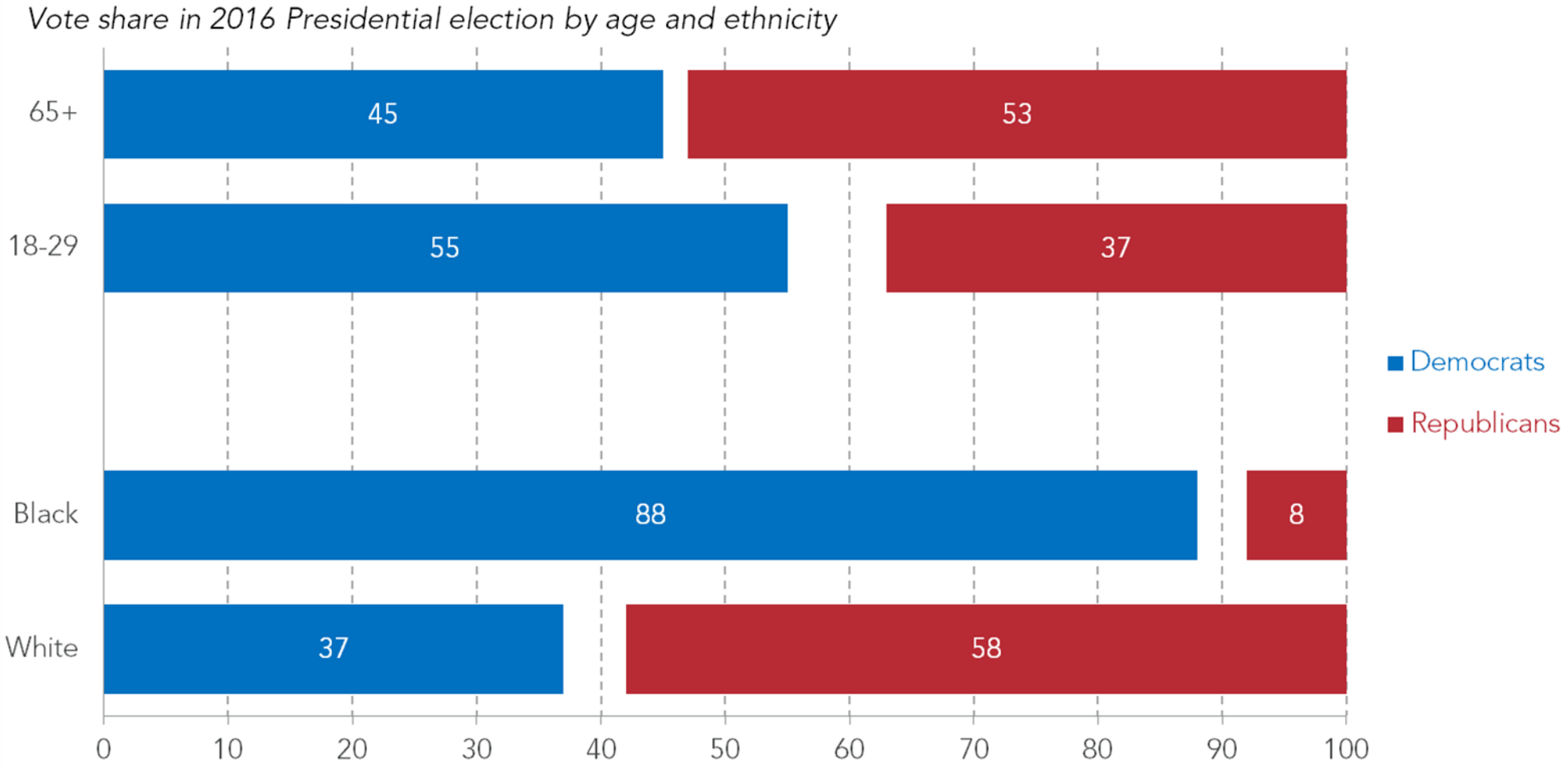


Trump and Brexit: why it's again NOT the economy, stupid

Time to admit Donald Trump won because of racism, not the left-behind underclass

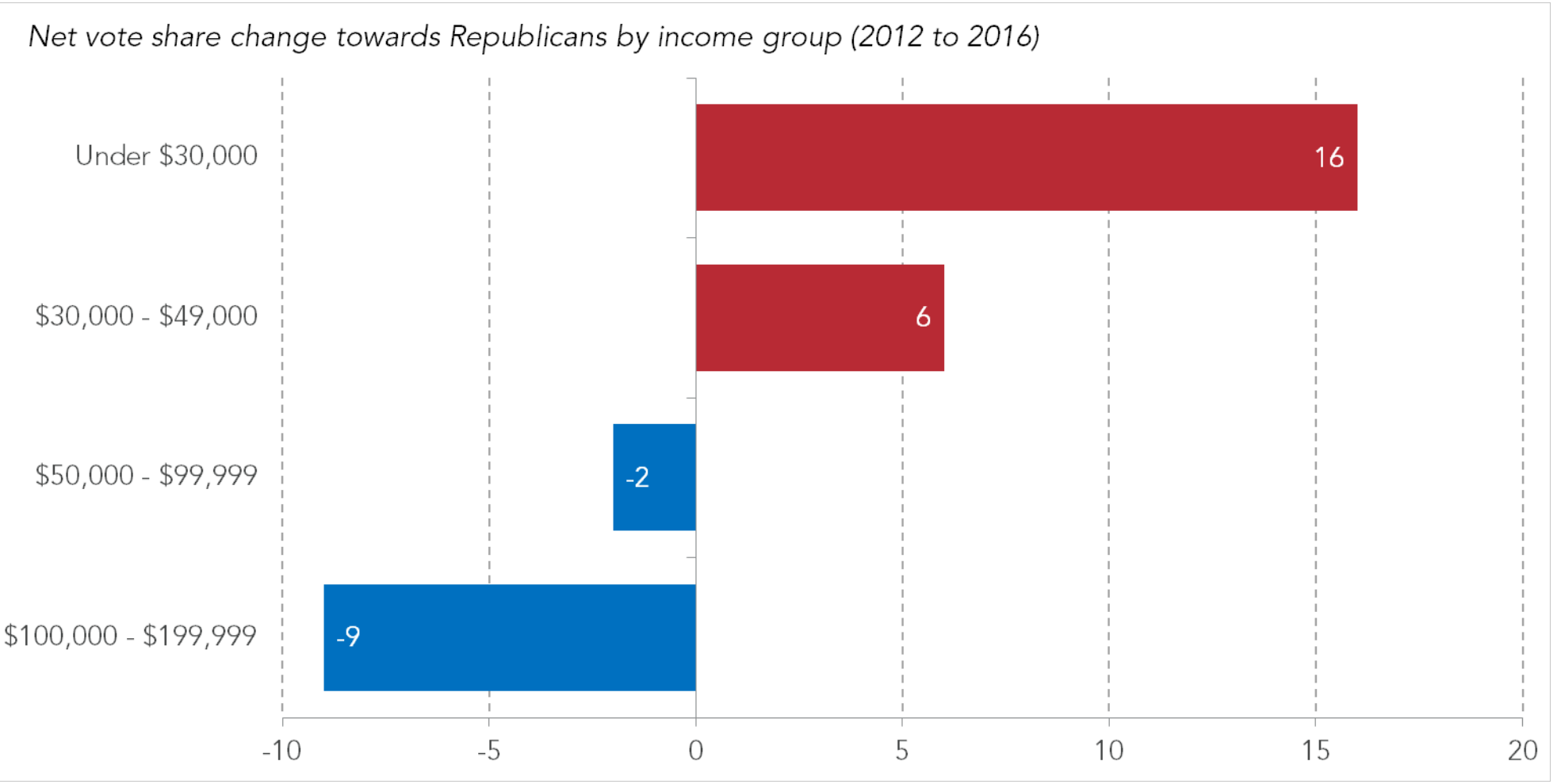
Source: 2016 Presidential election exit poll, The Daily Record, LSE Blog

But while other factors were clearly very important…



Source: 2016 Presidential election exit poll

...differential swing towards the Republicans among low and middle income voters suggests that writing off the economy is premature



Source: 2016 Presidential election exit poll

A DEEPER DIVE INTO

THE IMPORTANCE OF PLACE

In analysing the swing towards the Republicans, geography matters

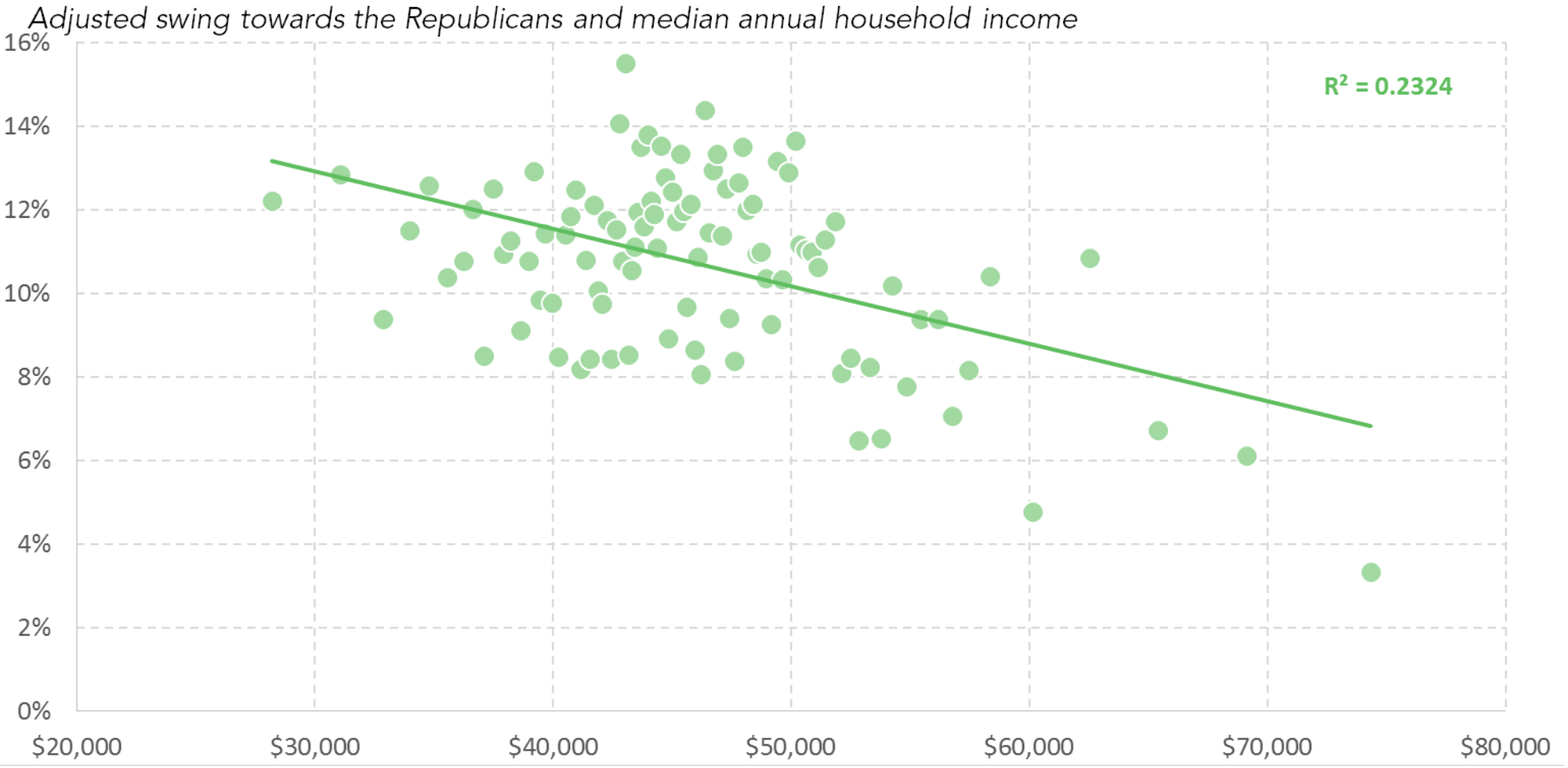
- Post-election analysis has highlighted the importance of demographic, economic and cultural factors
- In this note, we consider why different parts of America voted as they did. We look across 93 per cent (2,932 of 3,143) of US counties spread across 46 states including the 11 battleground states
- We test the strength of the relationship between the relative change in the Republican margin of victory (or defeat) and various economic, demographic and cultural factors, while holding all else constant (using a series of regression models)
- We explore ***economic factors*** in Section 1; add ***demographic factors*** into the analysis in Section 2; and bring in **cultural issues** in Section 3
- Section 4 looks at the differences between ***Donald Trump's victory and the Leave vote*** in Britain's EU referendum
- Section 5 includes a full description of the ***regression results***

A few important reminders

- ***Don't forget the baggage*** – this was not a one-off Brexit style referendum, but rather the latest in a long line of two-party contests after eight years of a Democrat presidency
- ***This was close*** – Hilary Clinton won the popular vote and Donald Trump won Pennsylvania, Wisconsin, and Michigan (the states that got him over the winning line) by around 100,000 votes (out of a total of over 120 million votes cast)
- ***This was as much about Hilary Clinton as about Donald Trump*** – that's why we're measuring relative improvement in Republican vote share

1. THE ECONOMY DID PLAY A ROLE

Areas with lower levels of household income swung more towards Trump than richer areas



Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16); *ACS, US Census Bureau*
Notes: Each dot represents 300 counties. Scatter plot adjusts for a range of economic indicators (labour force participation, employment in manufacturing, share of rural area in county).

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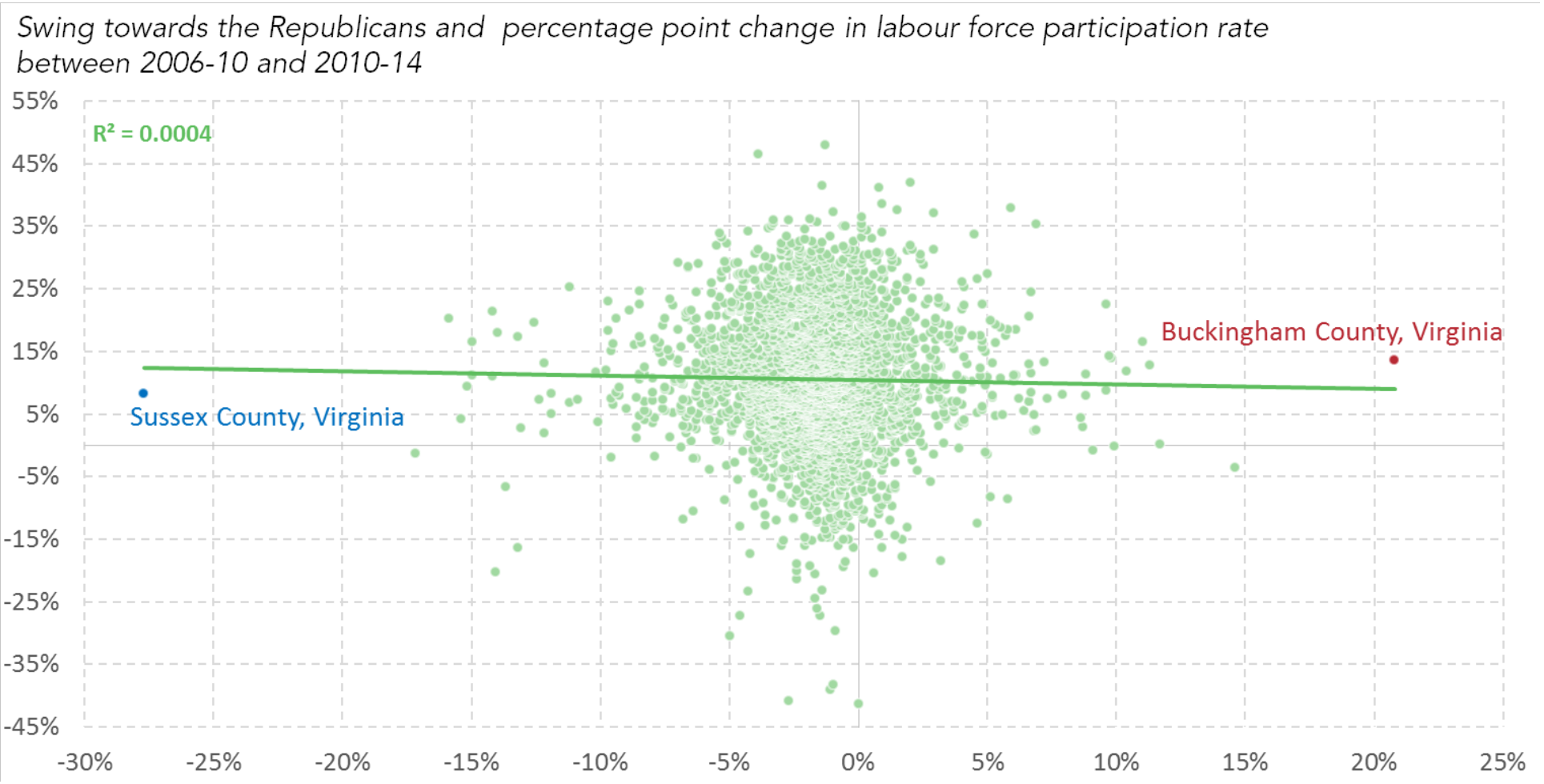
Areas with higher shares of workers in the manufacturing sector also recorded bigger swings to Trump

As did those with lower labour force participation rates

But short-run economic changes had little effect on the swing towards the Republicans: this is not about recent economic performance



Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16); *ACS, US Census Bureau*
Notes: Each dot represents a county.

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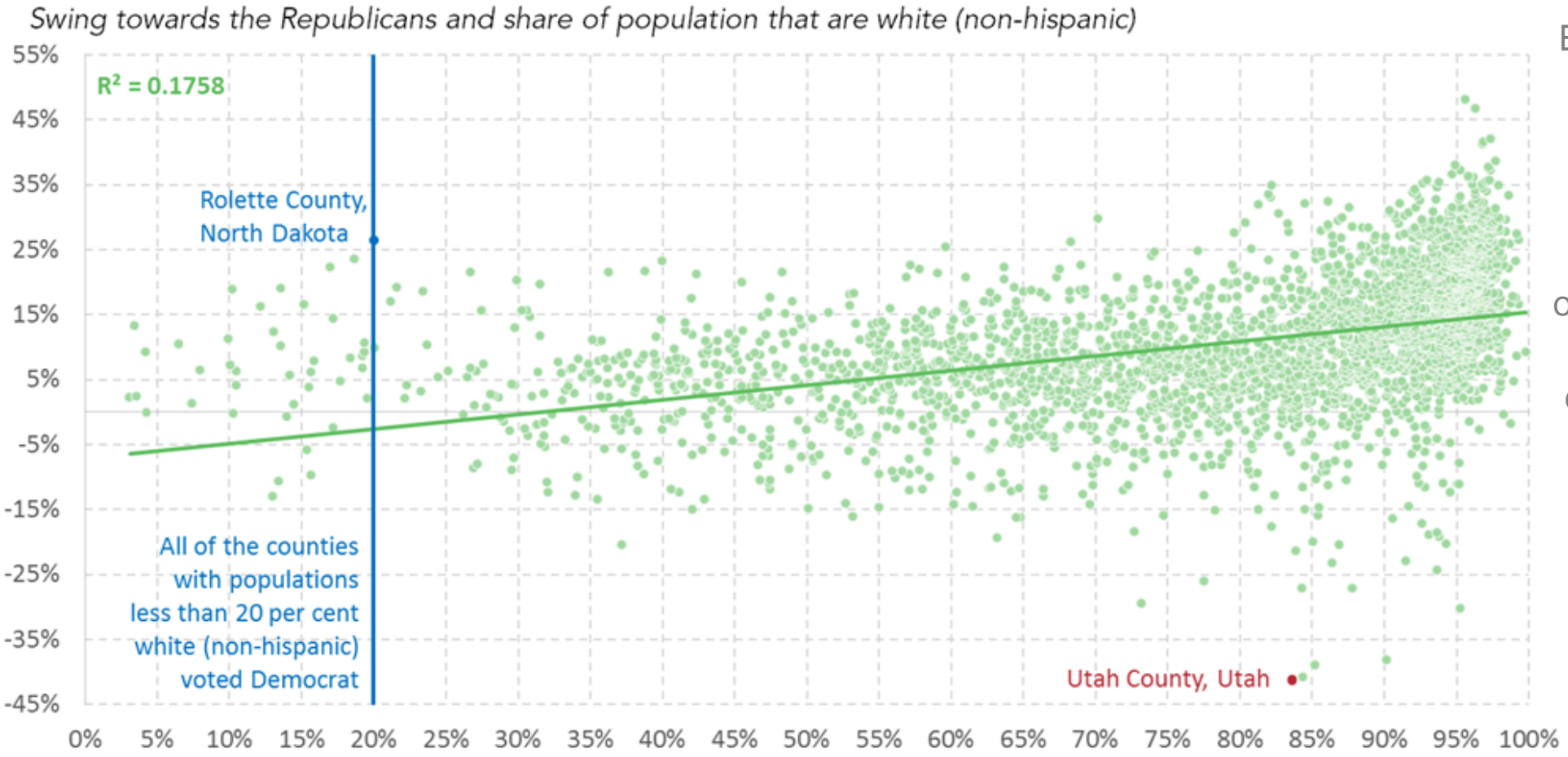
There was no relationship between change in labour force participation rate and swing towards Trump. For example, Sussex County and Buckingham County, near-neighbours, recorded the same swing to the Republicans despite wildly different recent economic experiences

Similarly, there was no relationship between change in share of people employed in manufacturing and Republican swing

2.BUT IT'S ALSO DEMOGRAPHICS

There was a swing to Trump in areas with larger white populations (although with lots of exceptions)



Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16); *ACS, US Census Bureau*
Notes: Each dot represents a county.

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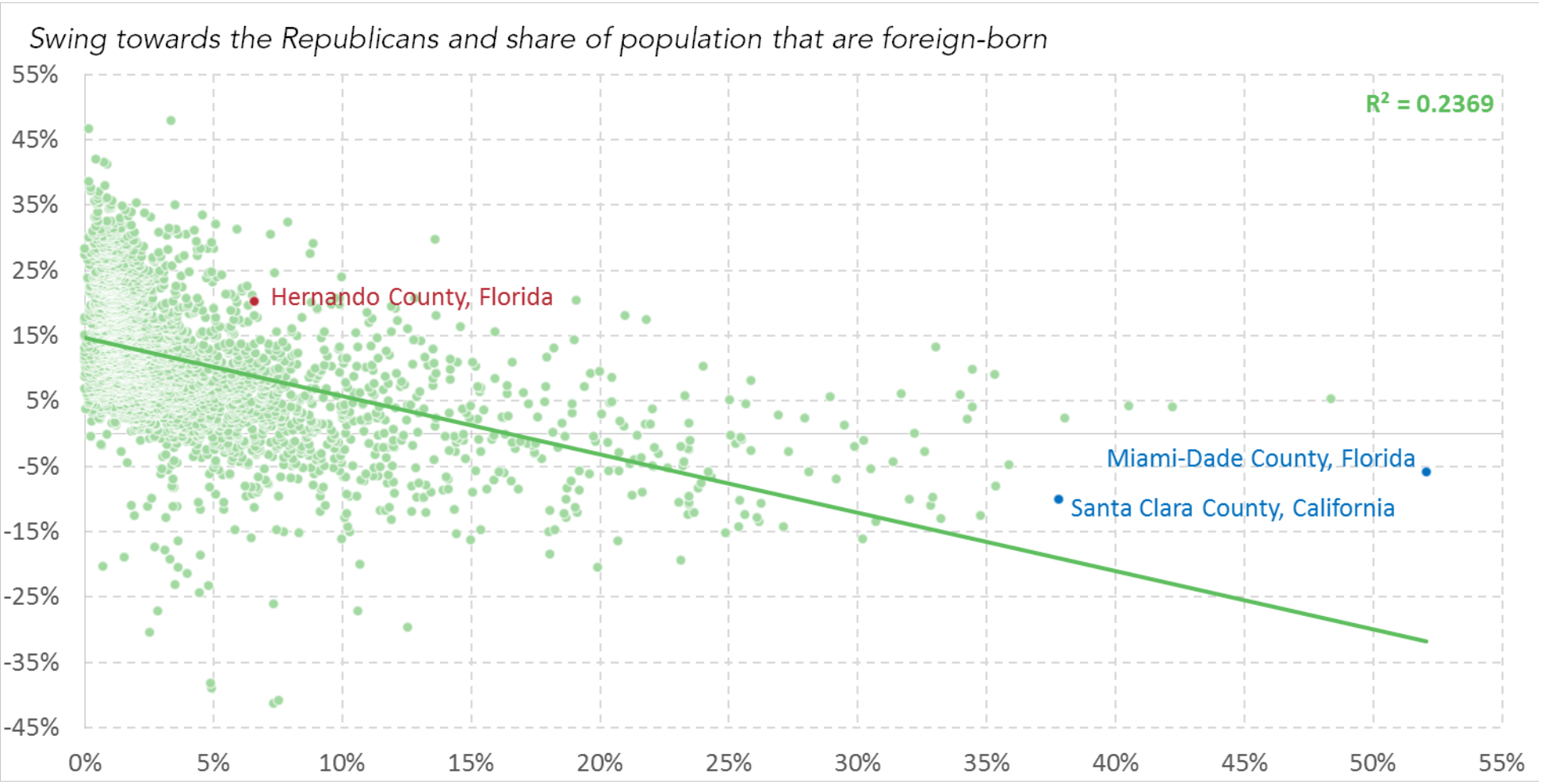
Biggest swing away from Trump was in Utah County – 84 per cent white (and 88 per cent Mormon)

Many places with a small share of whites swung towards Trump, but still voted Democrat. For example, Rolette County (77 per cent Native American) saw a 26 percentage point increase in Republican vote share.

In fact, all counties with population less than 20 per cent white voted Democrat; half of those counties are in Republican voting Texas

But bigger swings *away* from the Republicans in areas with higher shares of people born outside of the US



Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16)*; ACS, US Census Bureau*
Notes: Each dot represents a county. This includes naturalised and non-naturalised US citizens

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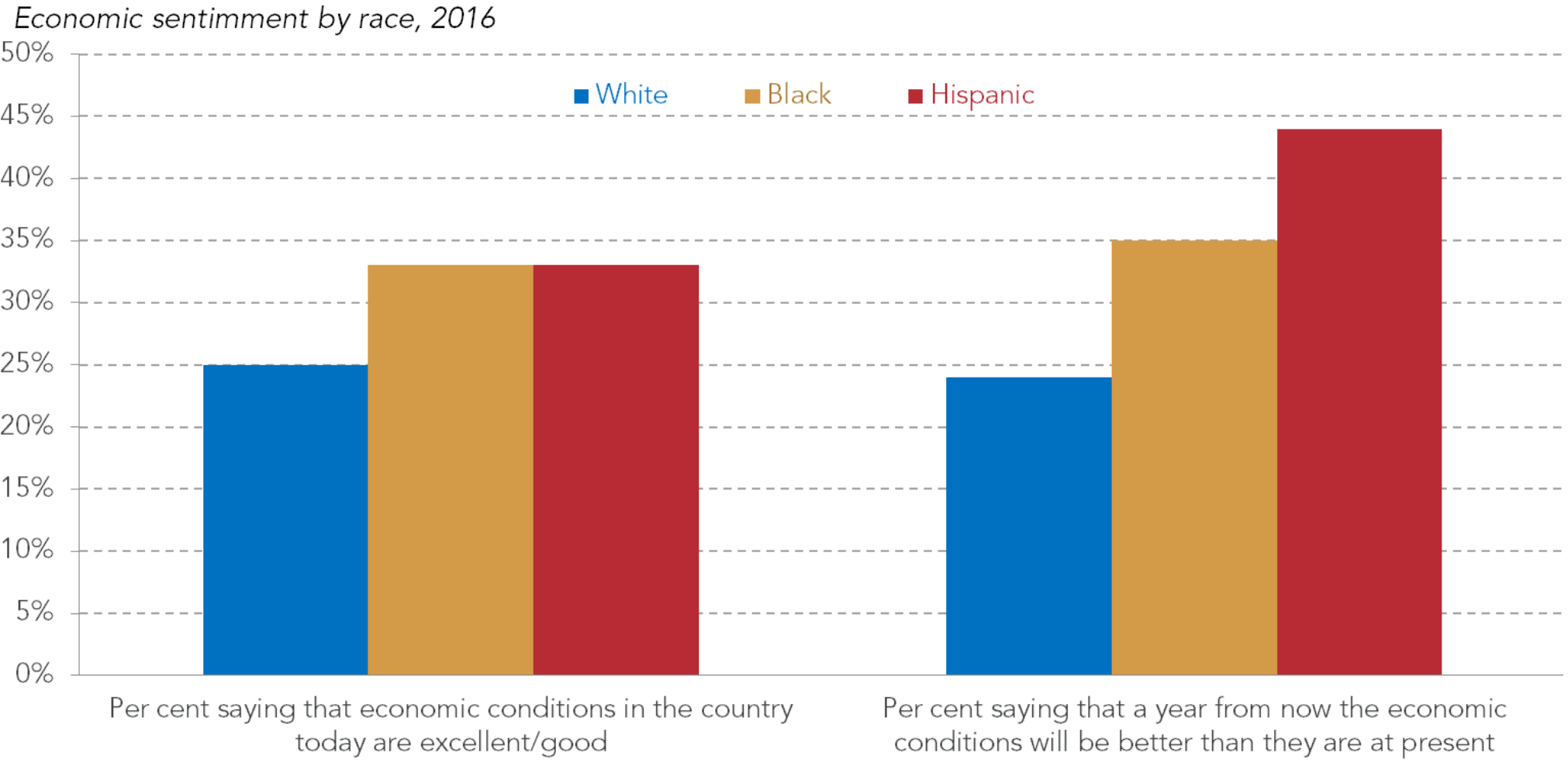
Counties like Santa Clara swung to the Democrats – but didn't help Clinton in the electoral college

Miami-Dade County also swung to the Democrats, bucking the trend in Florida where 80 per cent of counties (e.g. Hernando County) swung to the Republicans

Areas with higher shares of people 60 years and older were also more likely to vote for Donald Trump

The drivers of demographic differences will be complex and varied, but worth noting differing views on the health of the American economy by race



Source: Pew Research Centre. Polling carried out June 15-26 2016

3. EDUCATION, EDUCATION, EDUCATION

Areas with higher shares of people with only a high school education – capturing both economic and cultural trends – swung towards the Republicans

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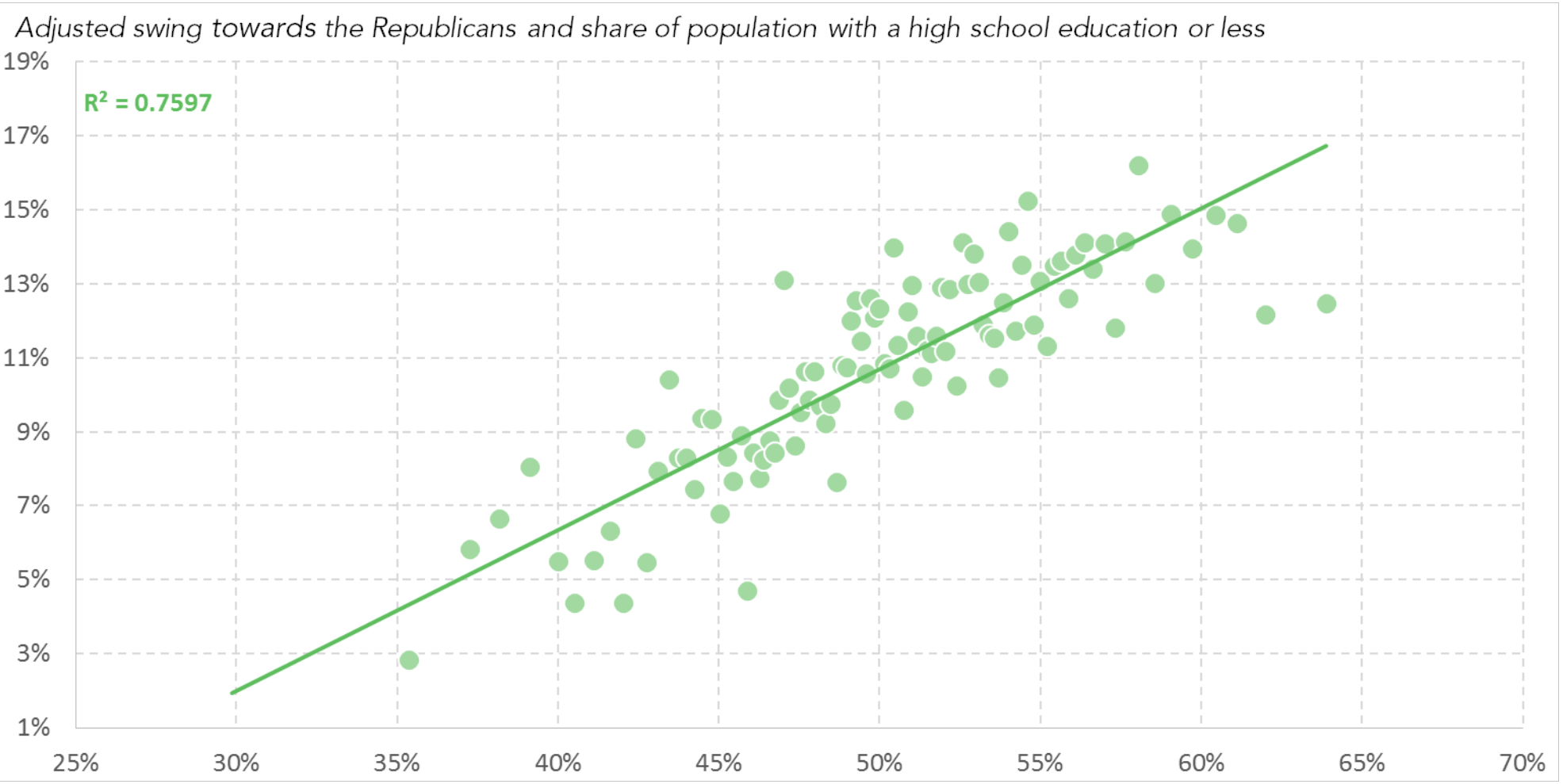

Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16)*; ACS, US Census Bureau*
Each dot represents 300 counties. Scatter plot adjusts for a range of indicators (labour force participation, employment in manufacturing, share of rural area in county, race and share of population foreign-born).

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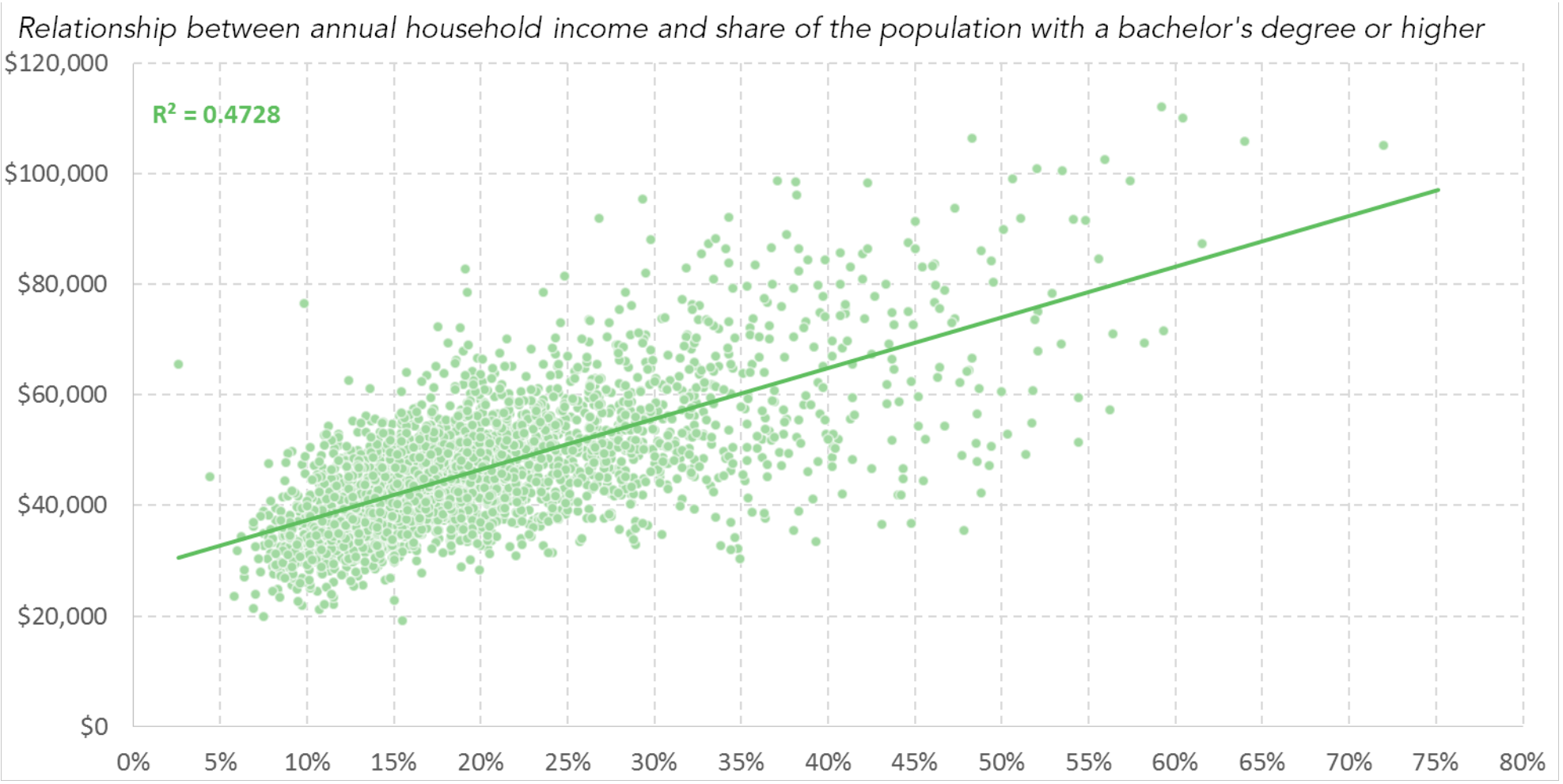
The strongest predictor of how much a county swung towards the Republicans is the share of people with only a high school education

It is such a powerful predictor that its inclusion in the analysis means that labour force participation becomes the only economic indicator which still has a separate effect on swing in the battleground states

Education appears to explain more than the economic variables, but it is closely linked to the strength of the local economy



Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16)*; ACS, US Census Bureau*
Notes: Each dot represents a county.

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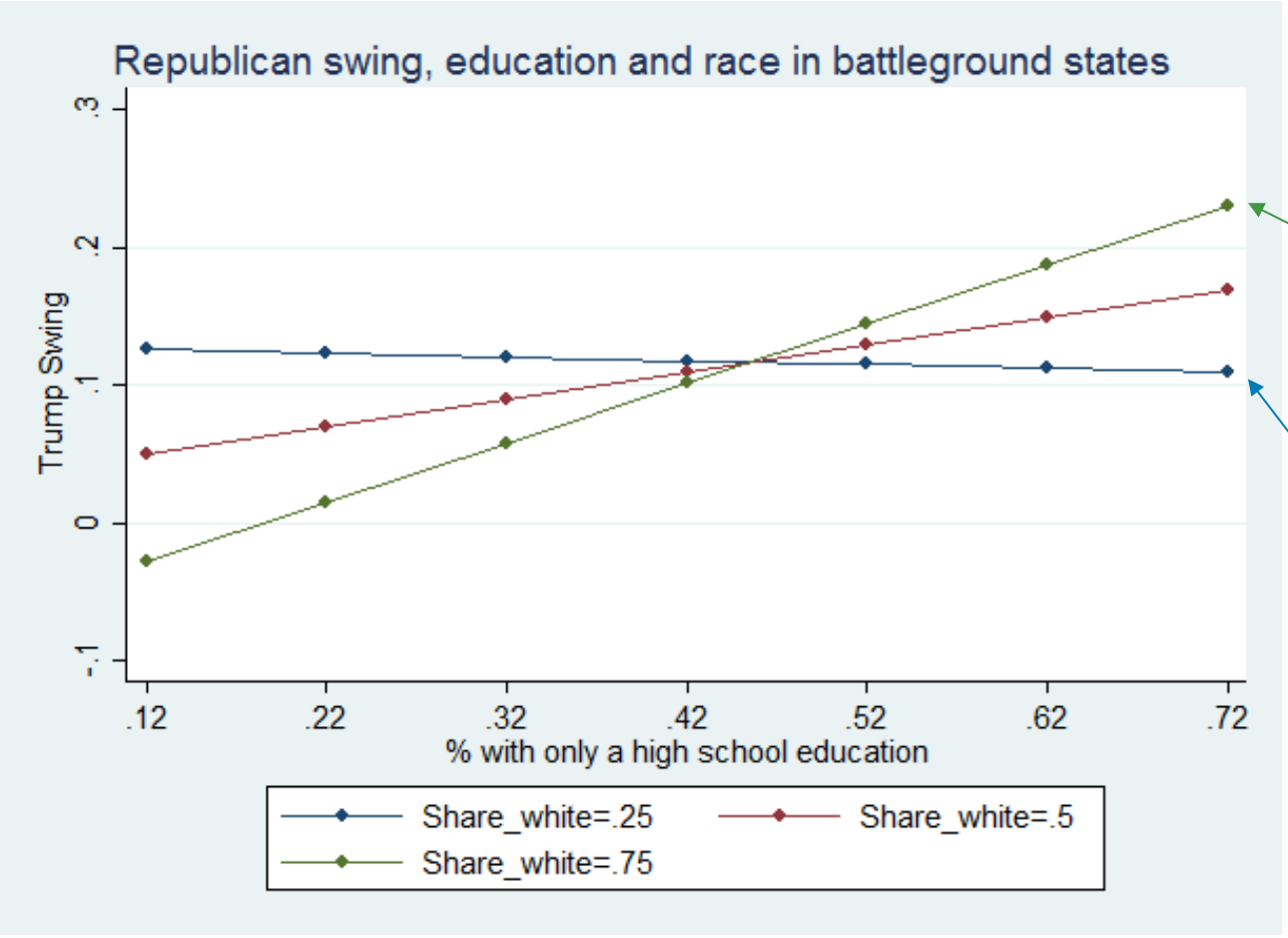
Counties with higher annual household income tend to have a higher share of the population with a bachelor's degree or higher

As such, including an education variable in the analysis of the vote reduces the explanatory power of the income measure

The explanatory power of the education variable is strongest in areas with larger white populations



In the battleground states, the swing towards Trump was greater in counties with both a high share of white residents and a high share of people with only a high school education

The swing towards Trump was over 20 ppts in counties where 70-75 per cent of the population is white and has only a high school education

By contrast educational levels had no effect in counties where only 25 per cent of residents are white. Though these areas still swung towards Trump

Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16)*; ACS, US Census Bureau*

Even after controlling for all these factors, state level factors played a big part in how counties voted

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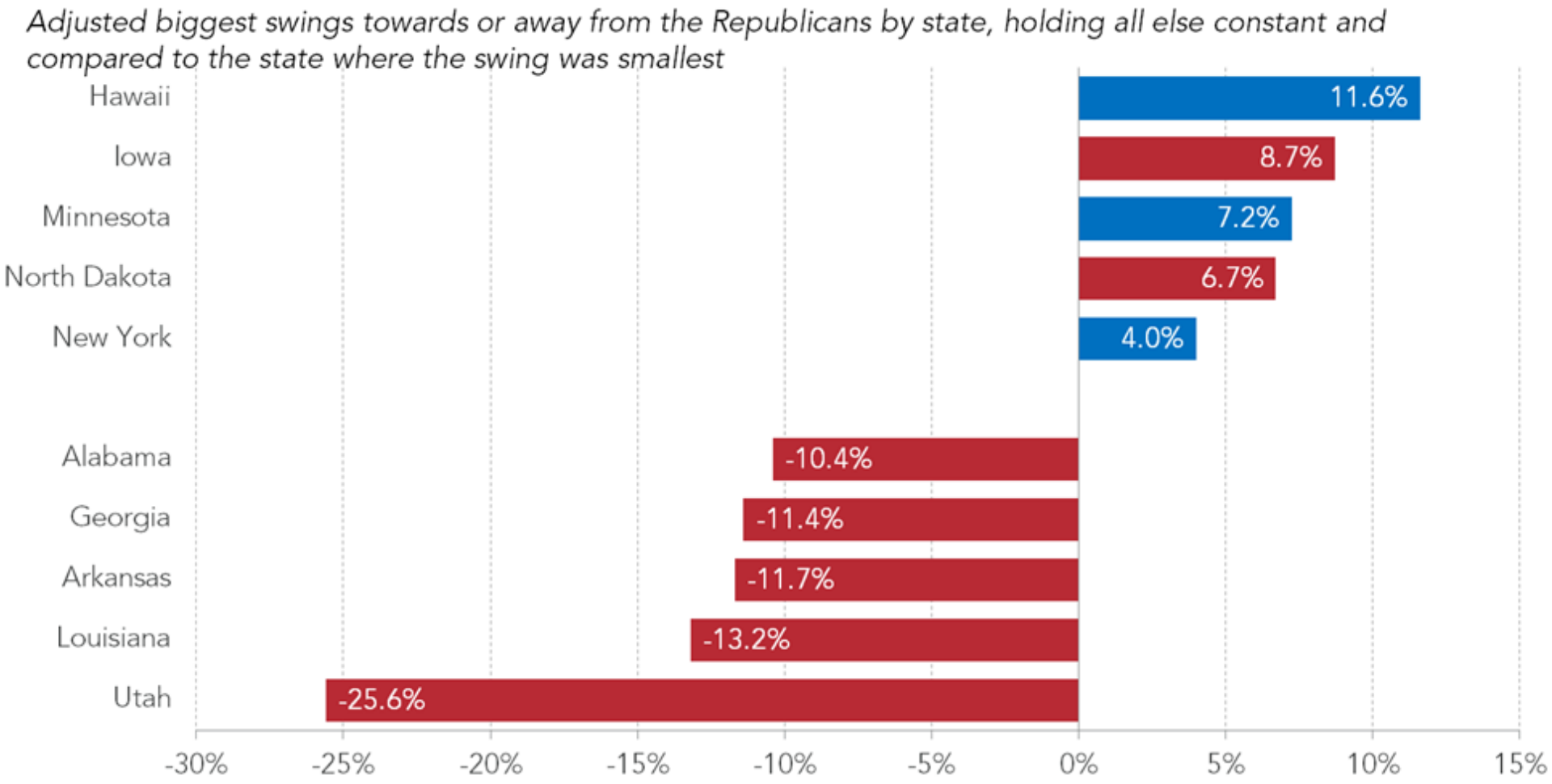

Holding all else constant Hawaii recorded the biggest swing towards Trump (Obama likely had birth state advantage there)

North Dakota also swung strongly to Trump (possibly related to its oil industry)

Utah recorded the biggest swing *away* from the Republicans (Romney's Mormon advantage fading)

36 of 46 states (78%) tested swung away from the Republicans once we control for economic and demographic differences between states

Source: Leip, David. *Dave Leip's Atlas of U.S. Presidential Elections*. http://uselectionatlas.org (15/11/16); *ACS, US Census Bureau*

Notes: These are the percentage point swings after controlling for the economic and demographic factors we tested in our regression model. Swings are relative to the state where the swing was smallest which was Colorado

4. PART OF A WIDER STORY?

Assessing the similarities and differences between the US Presidential election and the EU Referendum in the UK

There are similarities between the swing towards Donald Trump and the vote to leave the European Union…

Donald Trump

Economy

Poorer areas swung towards Trump

Areas with lower labour force participation rates more likely to swing to Trump

But recent changes in economy didn't affect the vote

Education

Counties with a higher share of people with only a high school education tended to swing towards Trump – the single most important variable

Demographics

Counties with a higher share of those 60 and over tended to swing towards the Republicans

Brexit*

Economy

✓ Poorer areas more likely to vote for Brexit

✓ Areas with lower employment rates more likely to vote for Brexit

Recent change in income didn't affect likelihood of vote for Brexit

Education

✓ Areas with a higher share of people with degrees less likely to vote for Brexit – the single most important variable

Demographics

✓ Areas with a higher share of older residents more likely to vote for Brexit

*For detail on the drivers of the vote to leave the European Union see S. Clarke and M. Whittaker, The importance of place, Resolution Foundation

...but there are important differences too

Donald Trump

Economy

Poorer areas swung towards Trump

Areas with lower labour force participation rates more likely to swing to Trump ✓

But recent changes in economy didn't affect the vote

Education

Counties with a higher share of people with only a high school education tended to swing towards Trump – the single most important variable ✓

Demographics

Counties with a higher share of those 60 and over tended to swing towards the Republicans ✓

Race

Areas with a higher share of black residents were much more likely to swing away from Trump, even after controlling for other differences ✗

Turnout

Turnout in the presidential election is estimated at 58.1 per cent, down from 58.6 per cent in 2012 and 61.6 per cent in 2008 – this was not an enthusiastic vote ✗

Nationality and migration

Areas with a higher share of non-US born citizens tended to swing away from the Republicans ✗

Brexit*

Economy

Poorer areas more likely to vote for Brexit ✓

Areas with lower employment rates more likely to vote for Brexit

Recent change in income didn't affect likelihood of vote for Brexit

Education

Areas with a higher share of people with degrees less likely to vote for Brexit – the single most important variable ✓

Demographics

Areas with a higher share of older residents more likely to vote for Brexit ✓

Race

Ethnic minorities were no more likely to vote to Remain once you controlled for other personal characteristics ✗

Turnout

Turnout in the EU referendum was 72.2 per cent, compared to 66.4 per cent in the 2015 General Election – this was an enthusiastic vote ✗

Nationality and migration

There was no relationship between the share of non-UK born people in an area and the vote for Brexit, although areas that saw a large recent increase in immigration tended to vote for Brexit ✗

*For detail on the drivers of the vote to leave the European Union see S. Clarke and M. Whittaker, The importance of place, Resolution Foundation

5. FULL REGRESSION RESULTS

Our regression models

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- We construct six regression models. In each our dependent variable is the relative improvement in the Republican margin of victory (or defeat) compared to the 2012 presidential election measured at the county level.

- We test the relationship between the swing towards the Republicans and various economic, demographic and educational variables.

- The first model includes economic variables (in both level* and change**), the second introduces demographic variables and the third introduces our educational variable. All three models are run with a control for the share of the county that is classified as rural and with state dummies. We also cluster standard errors by county. State dummies control for unobservable differences between states and the clustered standard errors address the collinearity of county results within a state.

- The fourth model analyses the battleground states.

- Models five and six introduce an interactive term between the share of white residents and the share of residents with only a high school education, first across all states (model five) and then across the battleground states (model six)

* Variables in levels are averages taken between 2010 and 2014 produced by the ACS.

** Change variables measure the change between 2006-2010 and 2010-2014. They therefore reflect short-run changes.

Regression results: models 1 & 2 (economics & demographics)

	Models					
	1	2	3	4	5	6
	Economics	Demographics	Education	Battleground	Interaction	Battleground interaction
Rural	0.0805***	0.0599***				
Median annual houshold income	-0.0727***	-0.0800**				
Change in median income	0.0505**	0.0554***				
Share of employment in manufacturing	0.267***	0.261***				
Change in share of employment in manufacturing	-0.00432	-0.000189				
Labour force participation rate	-0.303***	-0.233***				
Change in labour force participation rate	0.0252	0.0296				
Share of population that is foreign born		-0.327***				
Change in share of foreign born population		0.000455				
Share of population that is 60 and over		0.0181				
Share of population that is white		0.0185				
Share of population with a high school education or less						
Interaction between high school educated and white population						
Constant	0.992***	1.041***				
Observations	2,932	2,918				
R-squared	0.628	0.648				

Economic variables
Demographic variables
Education variable

* significant at the 10% level
** signficant at the 5% level
*** sigificant at the 1% level

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The majority of *change variables* have no effect. The one exception is that in models 1 and 2, changes in household income in an area are associated with a swing towards Trump. This is primarily driven by traditionally Republican areas (for example, 22 of the top 50 counties ranked in terms of recent income growth are in North Dakota)

All economic *levels variables* have an effect, as does the share of the population that is foreign born

Regression results: models 3 & 4 (adding education and battleground focus)

	Models					
	1	2	3	4	5	6
	Economics	Demographics	Education	Battleground	Interaction	Battleground interaction
Rural	0.0805***	0.0599***	0.00959	-0.00143		
Median annual houshold income	-0.0727***	-0.0800**	0.00180	0.0219		
Change in median income	0.0505**	0.0554***	0.0277	0.0529		
Share of employment in manufacturing	0.267***	0.261***	0.0688	0.0142		
Change in share of employment in manufacturing	-0.00432	-0.000189	0.000126	0.00348		
Labour force participation rate	-0.303***	-0.233***	-0.105	-0.210**		
Change in labour force participation rate	0.0252	0.0296	0.00958	0.0289		
Share of population that is foreign born		-0.327***	-0.412***	-0.355*		
Change in share of foreign born population		0.000455	0.00004	0.00178		
Share of population that is 60 and over		0.0181	0.116*	0.176**		
Share of population that is white		0.0185	0.0431	0.0702*		
Share of population with a high school education or less			0.440***	0.478***		
Interaction between high school educated and white population						
Constant	0.992***	1.041***	-0.0872	-0.282		
Observations	2,932	2,918	2,918	775		
R-squared	0.628	0.648	0.699	0.680		

Economic variables
Demographic variables
Education variable

* significant at the 10% level
** signficant at the 5% level
*** sigificant at the 1% level

The variable with the greatest impact on the Republican swing was the share of residents in a county with a high school education or less. A 1 per cent increase in this share is related to a 0.44 percentage point increase in the swing towards Trump

When this variable is included, almost all economic variables (aside from labour force participation, in battleground states) lose their significance

Demographic variables (though not the share of population that is foreign born) become more significant when education variable included

Regression results: models 5 & 6 (adding an interaction term)

	Models					
	1	2	3	4	5	6
	Economics	Demographics	Education	Battleground	Interaction	Battleground interaction
Rural	0.0805***	0.0599***	0.00959	-0.00143	0.00964	0.00652
Median annual houshold income	-0.0727***	-0.0800**	0.00180	0.0219	0.00113	0.0226
Change in median income	0.0505**	0.0554***	0.0277	0.0529	0.0289	0.0312
Share of employment in manufacturing	0.267***	0.261***	0.0688	0.0142	0.0654	0.0142
Change in share of employment in manufacturing	-0.00432	-0.000189	0.000126	0.00348	0.00171	0.00643
Labour force participation rate	-0.303***	-0.233***	-0.105	-0.210**	-0.108	-0.205**
Change in labour force participation rate	0.0252	0.0296	0.00958	0.0289	0.00904	0.0233
Share of population that is foreign born		-0.327***	-0.412***	-0.355*	-0.437***	-0.410**
Change in share of foreign born population		0.000455	0.00004	0.00178	0.000308	0.00113
Share of population that is 60 and over		0.0181	0.116*	0.176**	0.124*	0.200**
Share of population that is white		0.0185	0.0431	0.0702*	-0.179*	-0.416***
Share of population with a high school education or less			0.440***	0.478***	0.135	-0.255
Interaction between high school educated and white population					0.402**	0.912***
Constant	0.992***	1.041***	-0.0872	-0.282	0.0931	0.0931
Observations	2,932	2,918	2,918	775	2,918	775
R-squared	0.628	0.648	0.699	0.680	0.703	0.695

Economic variables
Demographic variables
Education variable

* significant at the 10% level
** signficant at the 5% level
*** sigificant at the 1% level

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The positive coefficients on the interaction term (0.402 and 0.912) indicate that as the share of the white population in a county increases so does the effect of the share of people with only a high school education

In short, counties with a high share of white residents with only a high school education swung heavily towards the Republicans