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Congressional influence as a determinant of subprime lending

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ABSTRACT

We apply unique loan level data from New Century Financial Corporation, a major subprime lender, to explore whether attributes and committee assignments of Congressional Representatives were associated with access to and pricing of subprime mortgage credit. Research findings indicate enhanced credit access at discounted prices among borrowers represented by Congressional leaders and by members of the House Financial Services Committee. Black borrowers in districts represented by Congressional leaders also were more likely to obtain subprime mortgage credit. We do not find evidence of adverse performance differentials among the politically directed loans. Our results conform to those of Agarwal et al. (2014) in documenting preferential treatment of constituents in congressional districts represented by members of the House Financial Services Committee. Research findings provide new insights into the political geography of the subprime crisis and suggest gains to trade between subprime lenders and targeted Congressional Representatives in the extension and pricing of subprime mortgage credit.

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1. Introduction

Emblematic to the 2000s global financial crisis was the pervasive failure of subprime mortgages. Those loans provided substantially eased credit qualification and homeownership opportunity to low credit-quality borrowers. By 2008, in the wake of downward spiral in house prices, a full 45 percent of subprime borrowers were underwater. Two years later, a similar share of outstanding subprime mortgages were in default.

Even prior to the deterioration in subprime loan performance, lenders appeared to understand the importance of political support for this controversial loan product. To that end, as documented by Mian et al. (2010), lenders became politically sophisticated in making campaign contributions

to elected Representatives in the years leading up to the late-2000s crisis. Another strategy for engendering political support was for lenders to offer more credit and at better terms to borrowers in Districts represented by targeted Congressional Representatives. Improved credit opportunity could serve to raise homeownership attainment, which was viewed as an important bi-partisan goal of federal housing policy and a metric of District economic well-being. To the extent that interests aligned, District-level direction and pricing of mortgage credit could serve the political economic interests of both the lender and the elected official.

This study uses the universe of sub-prime home loans issued by a major subprime lender to explore the role of Congressional political influence on access to and pricing of subprime mortgage credit. By merging several data sets, we seek to implement the following thought experiment. Consider two observationally identical borrowers who live in the same local labor market at the same point in time.

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Assume that the two borrowers live in comparable residential communities in different Congressional districts. If a borrower's Congressional Representative is liberal, of long-standing tenure, a member of the House Finance Committee, or a leader of the House of Representatives, do these Congressional attributes influence the probability that the institution makes a loan to that borrower? Further, are these same attributes associated with higher or lower borrower loan amounts or loan pricing?

The loan level data in our study come from the servicing database of the now defunct New Century Financial Corporation (New Century). Per convention in the literature, we control for borrower, loan, and locational attributes that influence the allocation and risk-based pricing of mortgage credit (see [Deng and Gabriel \(2006\)](#)). Upon controlling for those attributes as well as state/year/month fixed effects, our goal is to assess how attributes of the local Congressional Representative influenced access to and pricing of subprime mortgage credit. The "politics" hypothesis posits that these Congressional Representative attributes mattered because New Century had specific political goals in mind and used implicit subsidies to achieve those objectives.

The eased qualification requirements associated with subprime lending also may have been important to Representatives seeking to promote federal lending goals associated with minority homeownership. Indeed, as a longstanding matter evidenced in numerous studies (see, for example, [Gabriel and Rosenthal \(2005, 2013\)](#)), racial minorities have been largely underrepresented in homeownership attainment. During the years leading up to and including the boom, substantial policy effort was directed at narrowing homeownership racial gaps.¹ Prominent among those efforts were ambitious quantitative goals for financial institution loan origination among minority and other households as embodied in the Community Reinvestment Act (CRA). Accordingly, we test for whether minority borrowers received differential treatment by New Century. In particular, we test whether minority borrowers had a greater probability of receiving subprime loans as a function of their Congressional Representative's attributes. Also, conditional on receipt of a subprime loan, we test whether minority borrowers received more favorable loan terms (as evidenced in loan size or loan pricing) as a function of their Representative's attributes.

Assessment of New Century Financial Corporation loan level data from 2003 to 2006 reveals a political geography of subprime lending. Results highlight differential treatment of borrowers represented by Congressional leaders and by Members serving on the powerful House Financial Services Committee. New Century offered lower mortgage interest rates and larger loan amounts, all else equal, to

households residing in districts represented by Congressional leaders and by members of the House Financial Services Committee. Black borrowers also were more likely to receive loans in districts represented by Congressional leadership. In support of those findings, placebo tests also show that borrowers residing in districts represented by subsequent Congressional leaders (113th Congress) did not receive more favorable loan terms. We do not find evidence of adverse performance differentials among the politically subsidized and directed loans.

This paper contributes to the growing literature investigating the interactions between private industry and the U.S. Congress. [Mian et al. \(2010\)](#) document the voting patterns of Representatives on key pieces of banking legislation in the wake of the 2008 crisis.² Their findings indicate that Representatives from areas where there was more subprime lending activity were more likely to vote for bailouts. [Agarwal et al. \(2014\)](#) show that lenders were less likely to start foreclosure proceedings against delinquent borrowers who lived in congressional districts where the representative served on the House's Financial Services Committee. Our findings conform to those of [Agarwal et al. \(2014\)](#) in documenting New Century's preferential treatment of constituents in congressional districts represented by members of the House Financial Services Committee. On average, this group received lower interest rate loans for larger amounts. This finding is especially strong for black borrowers.

The plan of the paper is as follows. The following section describes the data and sample. Section 3 discusses econometric strategy and results of analysis of the New Century microloan files, including assessment of mortgage origination and pricing. Section 4 provides concluding remarks.

2. Data and sample

Loan level information was obtained from the servicing database of New Century Financial Corporation. New Century was founded in 1995 as a REIT that originated mortgage loans in the U.S. through its operating subsidiaries, New Century Mortgage Corporation and Home 123 Corporation. As of January 1, 2007, New Century was the second largest subprime mortgage lender in the U.S., with 7200 full-time employees and a market capitalization of \$1.75 billion. Based on 2006 HMDA data, New Century issued 11.6% of all subprime mortgages and 1.9% of all mortgages.

¹ Both Presidents Clinton and G. W. Bush sought to address racial and ethnic gaps in homeownership. In a statement dated June 18, 2002, President Bush noted that "The goal is that everyone who wants to own a home has a shot at doing so. The problem is we have what we call a homeownership gap in America. Three-quarters of Anglos own their home, and yet less than 50 percent of blacks and Hispanics own homes. That problem signals that something may be wrong in the land of plenty. And we need to do something about it." See White House News Release from that date.

² Other recent papers further corroborate the importance of political contributions in eliciting Congressional support. [Ansolabehere et al. \(2003\)](#) argue that political contributions appear to yield a very high return, raising the question of why industry does not increase its contributions to the Congress. [Bombardini and Trebbi \(2011\)](#) document the role of the electoral strength of an interest group in support of a Representative's re-election campaign. [Kroszner and Stratmann \(2005\)](#) study repeat contributions of PACs to Representatives and document strategic interactions whereby Representatives build a reputation for taking certain positions that help industry and are rewarded by special interests. [Bronars and Lott \(1997\)](#) and [Stratmann \(2002\)](#) provide evidence that changes in campaign contributions are correlated with changes in roll call voting by members of Congress. In earlier work, [Stratmann \(1992\)](#) presents evidence documenting how farming PAC contributions are targeted to specific Representatives depending on their constituents' attributes.

On April 2, 2007 and in the wake of substantial deterioration in the performance of subprime mortgages, New Century sought Chapter 11 relief. Also that month, New Century filed an 8-K indicating that it had previously over-stated earnings. On March 26, 2008, the bankruptcy court examiner outlined a number of “significant improper and imprudent practices related to its loan originations, operations, accounting and financial reporting processes” (U.S. Congress, 2011). The complete set of New Century loan records became available for academic and research use as a result of the bankruptcy settlement. The comprehensive New Century micro dataset provides an unusual opportunity to investigate the role of Congressional influence in the extension and pricing of subprime mortgages.

We analyze a subsample of loans from New Century’s two operating subsidiaries, including New Century Mortgage Corporation and HOME 123 Corporation. The dataset is comprised of a panel of individual loan records and includes an unusually rich set of borrower, loan, and locational controls. Further, the data provides a rare opportunity to evaluate loan extension and pricing for one of the largest of the nation’s subprime lenders. The Loan database was merged with the Home Mortgage Disclosure Act (HMDA) data in each year to obtain the race and gender of the borrower for sampled loans.³ Borrower controls include age, race, gender, monthly household income, FICO score, borrower combined LTV, zip code of residence, and originated loan rate. We use loans for the years 2003 through the end of 2006. Congressional redistricting took place in January 2003 and the bank shut down in February 2007. Our data cover the 108th and half of the 109th Congress.

Using the MABLE/Geocorr2K Geographic Correspondence Engine, we merged borrower zip code of residence to their Congressional District.⁴ If a zip code crossed a Congressional District, we assigned the Congressional District that had a larger share of the zip code’s total population.⁵ We obtained data on the tenure and political ideology of the Congressional Representative in each zip code from two sources. Information on each Representative’s conservative ideology score (dwnominate’s 1st factor) and a count of Congressional terms that a Representative had served was obtained from the voteview.com database (Poole and Rosenthal (1997)). We also collected information on whether the Congressperson was a member of the House Financial Services Committee and whether the Congressional Representative was a member of the House Democratic or Republican leadership (defined as Speaker of the House, Majority Leader, Minority Leader, Majority Whip or Minority Whip).⁶ Additionally, we coded whether each Representative

received campaign contributions from New Century during the years 2003–2006.⁷

Finally, the data set includes zip code controls from the 2000 Census of Population and Housing. Those controls include attributes of the zip code population including percent black, percent Hispanic, percentage of adults with at least a college degree, and log population density. We used data from US Census County Business Patterns dataset for the years 2003–2006 to compute annual log zip code annual employment. While our key regressions below include state/year/month fixed effects, the zip code/year employment variable provides an additional control for local growth and labor market effects.

The analysis is undertaken using the universe of New Century loans originated over the 2003–2006 period. The spatial distribution of New Century loan originations between 2003 and 2006 is depicted in Figs. 1 and 2. We calculate each Congressional District’s share of loans and these shares sum to 1. To ease the presentation, we partition these shares into five quintiles with the darkest shading representing the areas that receive the greatest shares of New Century loans.

As shown in Fig. 1, New Century origination activity was largely confined to the western United States and Florida. In Fig. 2, we repeat this exercise for California. Here the unit of analysis is the zip code and the zip code shares sum to 1. New Century made 27 percent of its total loans to California. As shown in Fig. 2, California subprime lending was less prevalent among expensive and highly supply constrained coastal markets and instead focused on more affordable, relatively supply elastic markets of the Central Valley and the Inland Empire. The geographic incidence of subprime lending in the San Francisco and Los Angeles metropolitan areas took a similar form. In both those areas, subprime originations were clustered in fast-growing and more affordable districts to the east, relative to the expensive coastal areas. Also notable in Fig. 2 was the high concentration of subprime loans in the minority neighborhoods of eastern Contra Costa County as well as Northeast and South Los Angeles.

As shown in Table 1, the sample is comprised of approximately 891,000 individual subprime loan records.⁸ Of those records, about 63 percent were adjustable-rate mortgages with an average nominal loan amount of \$176,000. Subprime loan origination interest rates averaged 8.13 percent over the study period; average interest rates at origination ranged from 7.60 percent in 2004 to 8.83 percent in 2006. Among sampled New Century borrowers, about 61 percent were male with an average age of about 42. As would be anticipated, average FICO scores among sampled subprime borrowers were relatively low at 620 with mean household incomes of about \$84,000. Further, typical borrower loan-to-value ratio was about 86 percent. As is evident, subprime mortgages were disproportionately originated among minority borrowers and in minority neighborhoods. Blacks and Hispanics each comprised

³ The match was successful for over 80% of the original sample. Non-matched loans do not appear sufficiently different to warrant concerns of selection.

⁴ See <http://mcdc2.missouri.edu/websas/geocorr2k.html>.

⁵ In the results reported below, we have also re-estimated them limiting the sample to households who live in a zip code that is completely located within a Congressional District. We find that our key results are almost identical when we compare our whole sample results to the results based on this subsample of the data.

⁶ In 2006, this set included Blunt, Boehner, Delay, Hoyer and Pelosi. Information on congressional committee assignment is available at <http://financialservices.house.gov/archives/>.

⁷ See <http://www.opensecrets.org/pacs/pacgot.php?cmte=C00369983&cycle=2006>

⁸ We drop observations if no initial interest rate is reported or if the FICO score is missing. We limit the sample to borrowers ages 20–75.

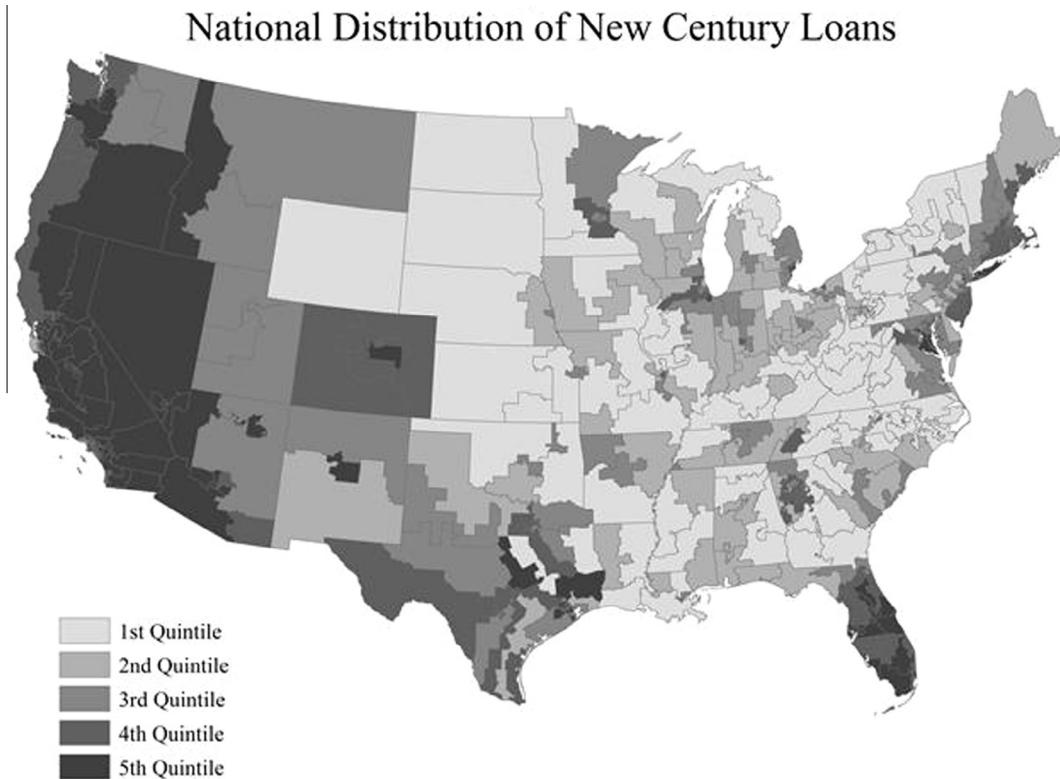


Fig. 1. The figure uses data taken from the servicing database of New Century Financial Corporation on mortgage loan originations from 2003 to 2006, aggregated at the congressional district level.

roughly 20 percent each of total New Century originations. New Century loans were originated in zip codes comprised on average of 13 percent black and 19 percent Hispanic population.

3. Empirical analysis of loan pricing and loan size

Broadly, we hypothesize that in the absence of opportunity for explicit trades, the spatial distribution of New Century subprime mortgage credit access and pricing should vary systematically with the characteristics of Congressional Representatives that New Century was seeking to influence. Accordingly, controlling for the usual borrower, loan, and locational characteristics, we test whether the Congressional Representative's political ideology, tenure in office, committee assignments, and leadership roles were associated with subprime loan size and pricing.⁹

3.1. New Century mortgage pricing

In Table 2, we assess the effects of Congressional political controls on the pricing of New Century mortgages. The analysis is based on the full set of subprime loans originat-

ed by New Century over the 2003–2006 period. The dependent variable is the log of the loan interest rate charged by New Century to person i in state l in year/month t who lives in zip code z located in Congressional District j . We estimate the following equation where X represents person-specific attributes, Z represents a vector of Congressional District Representative attributes and Zip represents a vector of zip code level attributes:

$$\log(\text{price}_{ijlt}) = \alpha_{lt} + \alpha_1 X_{it} + \alpha_2 Z_{jlt} + \alpha_3 Zip_{lzt} + \varepsilon_{ijlt} \quad (1)$$

As suggested above, the OLS regressions include proxies for borrower, loan, and neighborhood attributes. Also, the models include state, year, and month fixed effects to control for time variations in risk-free benchmark rates, locational variations in default and prepayment risk, and the like. Borrower attributes taken from New Century loan records include borrower race, age, gender, log household income, and the FICO score. Also included is the loan-to-value ratio at time of loan origination. Neighborhood controls derive from the 2000 Census and include zip code racial distribution (percent black, percent Hispanic), percent college educated, population density, and log total employment in the zip code in that year. This last variable proxies for local economic activity. We also report results where we stratify the pricing models by borrower race and ethnicity. The standard errors are clustered by congressional district.

⁹ In an earlier version of this paper, see Gabriel et al. (2013) we studied the role of Representative race in mortgage pricing and performance. As those controls were not significant to loan pricing and performance, we exclude them from specifications discussed below.

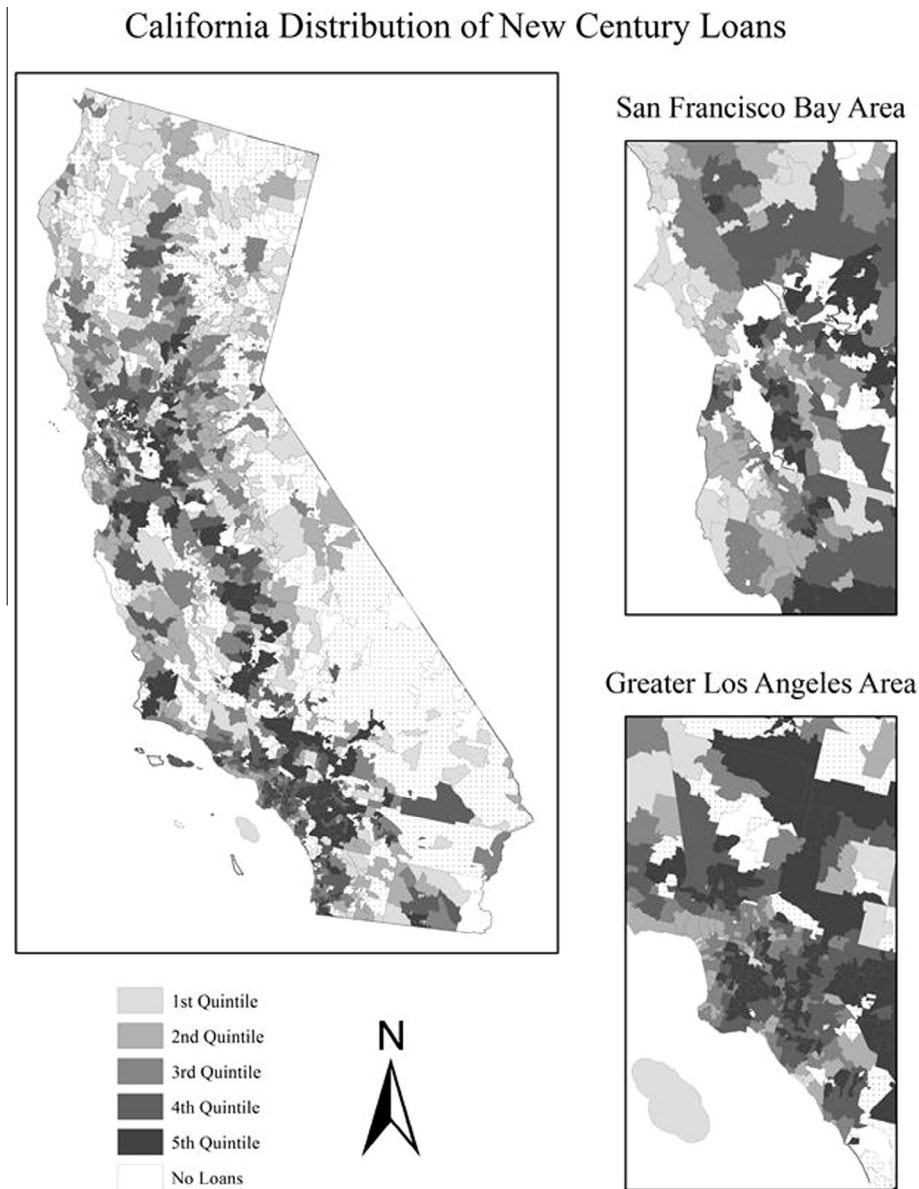


Fig. 2. The figure uses data taken from the servicing database of New Century Financial Corporation on mortgage loan originations in 2006, aggregated at the zip code level.

Findings as regards the effects of borrower and loan characteristics on subprime mortgage pricing were largely as anticipated.¹⁰ Similarly, neighborhood controls largely

¹⁰ In all models, higher LTVs, proxying higher levels of default risk, served to significantly increase loan pricing. Among Hispanics, older borrowers were associated with significantly higher mark-ups in pricing at loan origination, whereas male borrowers were associated with significantly lower loan pricing. In contrast, among black borrowers, perceived default risk and hence risk premia did not significantly vary with age and gender of borrower. Log household income also was associated with significantly higher loan interest rates. As expected, as a primary indicator of borrower credit risk, increases in borrower FICO score were highly significantly associated with lower mortgage loan interest rates. Those results were evidenced for the sample as a whole as well as for the black and Hispanic sample stratifications.

performed as expected. Higher proportions of zip code college graduates, suggestive of higher levels of financial literacy and lower default risk, were associated with significantly lower New Century mortgage prices throughout. Also consistent with established literature, results suggest significantly elevated New Century loan pricing in neighborhoods with higher proportions of black population.¹¹ In marked contrast, increases in neighborhood proportion Hispanic population were associated with significantly lower New Century risk-based mortgage pricing.

¹¹ Among possible explanations for such, note that default propensities and hence default premia have been shown to be elevated in black neighborhoods (see, for example, [Deng and Gabriel \(2006\)](#)).

Table 1
Summary statistics for the New Century data.

Variable	All years		2003		2004		2005		2006											
	Mean	S.d	Mean	S.d	Mean	S.d	Mean	S.d	Mean	S.d										
<i>Congressional attributes</i>																				
Terms in office	5.867		4.023		5.762		4.137		5.600		4.012		5.976		3.995		5.975		3.999	
Conservative ideology score	0.071		0.510		0.048		0.504		0.051		0.502		0.079		0.515		0.085		0.513	
Member of the Finance Committee	0.153		0.360		0.160		0.366		0.160		0.366		0.148		0.355		0.150		0.357	
Congressional leadership	0.013		0.111		0.012		0.107		0.011		0.106		0.013		0.112		0.013		0.115	
<i>New Century variables</i>																				
Original interest rate	8.137		1.643		7.826		1.320		7.607		1.517		7.858		1.592		8.829		1.649	
Loan amount (nominal \$)	176,189		126,767		161,312		100,367		166,912		111,825		178,438		128,031		185,954		142,023	
ARM loan	0.629		0.483		0.669		0.471		0.595		0.491		0.628		0.483		0.634		0.482	
American Indian	0.012		0.107		0.006		0.078		0.015		0.121		0.014		0.118		0.010		0.098	
Asian	0.042		0.201		0.042		0.201		0.046		0.209		0.045		0.207		0.038		0.192	
Black borrower	0.186		0.389		0.175		0.380		0.162		0.369		0.171		0.377		0.217		0.412	
NHPI	0.046		0.209		0.208		0.406		0.041		0.199		0.012		0.108		0.011		0.104	
White	0.701		0.458		0.568		0.495		0.700		0.458		0.750		0.433		0.715		0.452	
Hispanic Borrower	0.199		0.399		0.000		0.000		0.194		0.396		0.249		0.432		0.239		0.427	
Household income	83,814		304,719		71,577		79,257		75,371		80,463		85,792		494,226		92,224		218,845	
FICO score	619.753		60.649		601.062		60.508		621.682		62.602		625.753		59.598		621.064		58.919	
Loan to value ratio	86.261		14.546		81.276		13.773		85.253		14.405		87.172		14.617		88.131		14.358	
Age of borrower	41.909		11.027		43.093		10.650		42.073		10.930		41.490		11.055		41.687		11.176	
Male	0.614		0.487		0.634		0.482		0.626		0.484		0.615		0.487		0.599		0.490	
<i>Zip code variables</i>																				
% College graduate	28.117		13.208		29.030		13.792		28.702		13.405		27.947		13.041		27.539		12.951	
% Black	13.959		21.124		13.579		20.853		12.910		19.925		13.320		20.393		15.305		22.453	
% Hispanic	19.407		21.864		19.753		22.140		20.264		22.151		19.803		21.992		18.400		21.423	
Log(Annual employment)	8.501		1.564		8.269		1.788		8.448		1.630		8.552		1.496		8.594		1.455	
Log(Population density)	6.274		1.654		6.330		1.741		6.340		1.612		6.269		1.633		6.215		1.657	
N	891,361				127,498				185,731				270,098				308,458			

Controlling for these attributes as well as state/year/month fixed effects and the zip code's annual total employment, we focus on the role of Congressional influence in determination of New Century risk-based mortgage pricing.¹² As indicated by the *F*-test at the bottom of Table 2, the coefficients for the political variables are jointly statistically significant at the 1 percent in all regressions. As shown in the left column for the full sample, all else equal, borrowers in districts represented by a Congressional Leader received a 1.7 percent discount on the interest rate.¹³ In results available on request, we have also estimated this specification including county/year/month fixed effects. In this case, the coefficient on the Congressional Leader dummy shrinks to -1% but remains statistically significant. The member of the Finance Committee dummy has a negative and statistically insignificant sign.¹⁴

¹² In column 1, we also control for loan type and borrower's race. These coefficient estimates are suppressed to conserve space but are available on request. All else equal, blacks pay .7% higher interest rates than whites.

¹³ Given that the average loan amount was \$200,000 and the average interest rate was 8 percent, this works out to an annual household savings of roughly \$150.

¹⁴ Surprisingly, the terms spent in Congress variable has a positive and statistically significant coefficient.

To further assess the robustness of the Congressional leader pricing effects, we present a placebo test (column (2)). We estimate the exact same specification using the same data sample as presented in column (1) except that we create a new "placebo leadership" variable that equals one if the borrower's Congressional Representative is Eric Cantor, Kevin McCarthy, Jim Clyburn, Peter Roskan or John Lewis. These five Representatives became leaders of the 113th Congress but in the 2003–2006 period they were not part of the leadership. As shown in Table Two's column (2), borrowers in those Representatives' districts do not receive a loan pricing discount.¹⁵

In further analysis, we exclude the leadership dummy from Eq. (3) and re-estimate the equation including Representative fixed effects for each of the six Representatives who served in the Congressional Leadership during the years 2003–2006. For the six Representatives, we find a negative and statistically significant coefficient for three of the Representatives. In particular, the loan pricing coefficient associated with Hoyer is $-.022$. The mortgage pricing coefficient is $-.019$ in Tom Delay's district and is $-.015$

¹⁵ We thank Sumit Agarwal for suggesting this test.

Table 2
New Century mortgage loan pricing.

Borrower sample	(1)	(2)	(3)	(4)
Explanatory variables	All	All	Blacks	Hispanics
Congressional leadership	-0.0179*** (0.005)	-0.0179*** (0.005)	-0.0253*** (0.007)	-0.0178** (0.008)
Future congressional leadership		0.0015 (0.003)		
Terms in office	0.0002 (0.000)	0.0002 (0.000)	0.0002 (0.000)	0.0002 (0.000)
Conservative ideology score	0.0008 (0.002)	0.0008 (0.002)	0.0006 (0.002)	0.0013 (0.002)
Member of the finance committee	-0.0045* (0.002)	-0.0045** (0.002)	-0.0029 (0.003)	-0.0015 (0.002)
Loan to value ratio	0.0006*** (0.000)	0.0006*** (0.000)	0.0005*** (0.000)	0.0007*** (0.000)
Age	0.0001*** (0.000)	0.0001*** (0.000)	-0.0000 (0.000)	0.0001*** (0.000)
Male	-0.0047*** (0.000)	-0.0047*** (0.000)	0.0010 (0.001)	-0.0074*** (0.001)
Log(Household income)	0.0271*** (0.001)	0.0271*** (0.001)	0.0296*** (0.001)	0.0340*** (0.001)
Fico	-1.6319*** (0.096)	-1.6318*** (0.096)	-0.9847*** (0.192)	-2.1126*** (0.160)
Fico squared	0.1959*** (0.015)	0.1959*** (0.015)	0.0948*** (0.030)	0.2650*** (0.024)
Fico cubed	-0.0079*** (0.001)	-0.0079*** (0.001)	-0.0026*** (0.002)	-0.0111*** (0.001)
% College graduate	-0.0011*** (0.000)	-0.0011*** (0.000)	-0.0012*** (0.000)	-0.0010*** (0.000)
% Black	0.0003*** (0.000)	0.0003*** (0.000)	0.0002*** (0.000)	0.0002*** (0.000)
% Hispanic	-0.0001** (0.000)	-0.0001** (0.000)	-0.0002*** (0.000)	-0.0001 (0.000)
Log (Population density)	-0.0008** (0.000)	-0.0008** (0.000)	0.0001 (0.001)	-0.0016** (0.001)
Log(Zip code annual employment)	0.0000 (0.000)	0.0000 (0.000)	0.0003 (0.001)	0.0009 (0.001)
Constant	6.5163*** (0.207)	6.5160*** (0.207)	5.1152*** (0.407)	7.5254*** (0.348)
Observations	884,161	884,161	164,056	176,203
R-squared	0.659	0.659	0.623	0.732
F-test on political variables	5.64***	5.61***	3.04**	4.72***

State/year/month fixed effects are included in each regression. Standard errors are clustered by Congressional District. The F-test tests for whether the five Congressional attributes are jointly statistically significant. The black borrower regression includes loans between 2003 through 2006 while the Hispanic borrower regression includes loans between 2004 through 2006. These regressions include additional controls for the borrower's income and the loan type. The "all borrowers" regression includes dummies for the borrower's race.

* Robust standard errors in parentheses $p < 0.1$.

** Robust standard errors in parentheses $p < 0.05$.

*** Robust standard errors in parentheses $p < 0.01$.

in Nancy Pelosi's district. These three Representatives received 74 percent (8310 out of 11,167) of all loans originated in Congressional Leadership's districts. Fixed effects associated with the other three representative fixed effects were not statistically significant.¹⁶

Results further show significant mortgage pricing discounts for borrowers residing in the districts of House Financial Services Committee members. The results here

complement those of Agarwal et al. (2014), who show that lenders were less likely to initiate foreclosure against delinquent borrowers residing in congressional districts of House Financial Services Committee members. One possible explanation for these loan discounts is that subprime banks are competing with other lenders to increase the market share of loans and curry favor in districts with powerful Representatives, including Congressional leaders and members of the House Financial Services Committee. This strategic competition lowers mortgage interest rates that marginal borrowers are charged.

In Table 2, we also re-estimate Eq. (1) for the black borrower and Hispanic borrower subsamples. As shown in the middle column, black borrowers receive 2.5 percent reduction in mortgage pricing whereas Hispanic borrowers receive a 1.8 percent pricing reduction if they live in a Congressional Leader's district.

¹⁶ Results of these analyses are available upon request. Dennis Hastert of Ohio offers a suggestive data point. In 2006, he was no longer a member of the Congressional Leadership. In results available on request, we have re-estimated Eq. (1) and allowed for the coefficient for the Hastert fixed effect to vary depending on whether the year the loan was issued was in 2006 or not. We find that the Hastert fixed effect shrinks towards zero when he is not in the Congressional leadership. This coefficient is statistically insignificant though but the Hastert dummy before 2006 and the Hastert dummy in the year 2006 are jointly statistically significant.

Table 3
New Century loan amounts.

Sample	log (loan amount)		
	All	Black	Hispanic
<i>Representative attributes</i>			
Congressional Leadership	0.1164*** (0.036)	0.1721*** (0.050)	0.0864* (0.052)
Terms in Office	-0.0014 (0.002)	0.0005 (0.002)	0.0010 (0.004)
Conservative Ideology Score	-0.0295** (0.014)	-0.0220 (0.016)	-0.0532** (0.022)
Member of the Finance Committee	0.0508*** (0.019)	0.0192 (0.024)	0.0239 (0.028)
<i>Borrower attributes</i>			
Age	-0.0007*** (0.000)	-0.0000 (0.000)	-0.0014*** (0.000)
Male	-0.0138*** (0.001)	-0.0177*** (0.003)	-0.0126*** (0.002)
Log (Household income)	0.4397*** (0.006)	0.4006*** (0.012)	0.4452*** (0.011)
Fico	2.2840*** (0.171)	3.4156*** (0.456)	2.7329*** (0.274)
Fico squared	-0.3290*** (0.027)	-0.5132*** (0.073)	-0.4027*** (0.044)
Fico cubed	0.0159*** (0.001)	0.0257*** (0.004)	0.0200*** (0.002)
<i>Zip code attributes</i>			
% College graduate	0.0090*** (0.000)	0.0096*** (0.001)	0.0081*** (0.001)
% Black	-0.0016*** (0.000)	-0.0010*** (0.000)	-0.0016*** (0.000)
% Hispanic	0.0017*** (0.000)	0.0024*** (0.001)	0.0012*** (0.000)
Log (Population density)	0.0178*** (0.004)	0.0090 (0.006)	0.0321*** (0.007)
Log (Zip code annual employment)	-0.0121*** (0.002)	-0.0128*** (0.004)	-0.0139*** (0.005)
Constant	0.2019 (0.355)	-1.6474* (0.939)	-0.6367 (0.577)
Observations	884,161	164,056	176,203
R-squared	0.793	0.789	0.849
F-test	4.31***	3.22***	2.70**

State/year/month fixed effects are included in each regression. Standard errors are clustered by Congressional District. The F-test tests for whether the five Congressional attributes are jointly statistically significant. The black borrower regression includes loans between 2003 through 2006 while the Hispanic borrower regression includes loans between 2004 through 2006. These regressions include additional controls for the borrower's income and the loan type. The "all borrowers" regression includes dummies for the borrower's race.

- * Robust standard errors in parentheses $p < 0.1$.
 ** Robust standard errors in parentheses $p < 0.05$.
 *** Robust standard errors in parentheses $p < 0.01$.

3.2. New Century loan size analysis

We also assess the effects of Congressional influence on New Century credit provision (loan dollar magnitude) at origination. To do so, we estimate the following equation:

$$\log(\text{loan}_{ijlzt}) = \alpha_{lt} + \alpha_1 X_{it} + \alpha_2 Z_{jlt} + \alpha_3 \text{Zip}_{lzt} + \varepsilon_{ijlzt} \quad (2)$$

The regressions include an identical set of controls as those described above for the pricing analyses. As above, the vast majority of borrower and zip code attribute coefficients were highly significant and of expected sign in determination of New Century loan amounts at origination. Further, as shown in Table 3, controlling for borrower, loan, and neighborhood characteristics and state/month/

year fixed effects, log mortgage loan size is 12 percent larger in Congressional Leadership districts. As shown in column 2, log mortgage loan size is a full 17 and 9 percent larger for black and Hispanic borrowers, respectively. Loan size also was 5 percent larger in districts represented by members of the House Financial Services Committee. In contrast, loan size was significantly reduced in districts represented by members espousing a Conservative political ideology.¹⁷

¹⁷ We also have run loan origination points regressions where the dependent variable is the payment to the bank divided by the value of the initial loan. In those analyses, we fail to reject the null hypothesis that our set of political variables is jointly statistically insignificant. Results of the points analyses are available upon request.

Table 4
New Century linear probability models of minority loan recipient.

	Black Borrower		Hispanic Borrower	
<i>Representative attributes</i>				
Congressional leadership	0.0841 ^{***} (0.032)	0.0857 ^{***} (0.032)	−0.0118 (0.011)	−0.0137 (0.011)
Terms in office	−0.0007 (0.000)	−0.0008 (0.000)	−0.0002 (0.001)	−0.0003 (0.001)
Conservative ideology score	−0.0147 ^{***} (0.005)	−0.0128 ^{***} (0.005)	0.0033 (0.006)	−0.0008 (0.006)
Member of the finance committee	0.0079 (0.006)	0.0066 (0.006)	−0.0009 (0.007)	0.0015 (0.006)
Black representative		0.0195 (0.014)		−0.0225 [*] (0.011)
Hispanic representative		−0.0093 (0.007)		−0.0090 (0.013)
<i>Borrower attributes</i>				
Loan to value	0.0014 ^{***} (0.000)	0.0014 ^{***} (0.000)	0.0009 ^{***} (0.000)	0.0009 ^{***} (0.000)
Age	0.0018 ^{***} (0.000)	0.0018 ^{***} (0.000)	−0.0021 ^{***} (0.000)	−0.0021 ^{***} (0.000)
Male	−0.0465 ^{***} (0.002)	−0.0464 ^{***} (0.002)	0.0282 ^{***} (0.002)	0.0283 ^{***} (0.002)
Log (Household income)	−0.0086 ^{***} (0.002)	−0.0088 ^{***} (0.002)	−0.0467 ^{***} (0.004)	−0.0467 ^{***} (0.003)
Fico	1.3786 ^{***} (0.144)	1.3804 ^{***} (0.144)	−2.5116 ^{***} (0.196)	−2.5100 ^{***} (0.197)
Fico squared	−0.2227 ^{***} (0.023)	−0.2230 ^{***} (0.023)	0.4036 ^{***} (0.031)	0.4033 ^{***} (0.031)
Fico cubed	0.0114 ^{***} (0.001)	0.0115 ^{***} (0.001)	−0.0212 ^{***} (0.002)	−0.0212 ^{***} (0.002)
<i>Zip code attributes</i>				
% College graduate	0.0011 ^{***} (0.000)	0.0011 ^{***} (0.000)	0.0006 ^{***} (0.000)	0.0006 ^{***} (0.000)
% Black	0.0092 ^{***} (0.000)	0.0091 ^{***} (0.000)	−0.0005 ^{***} (0.000)	−0.0004 ^{***} (0.000)
% Hispanic	−0.0005 ^{***} (0.000)	−0.0004 ^{***} (0.000)	0.0090 ^{***} (0.000)	0.0090 ^{***} (0.000)
Log (Population density)	0.0027 ^{**} (0.001)	0.0026 ^{**} (0.001)	0.0027 [*] (0.002)	0.0027 [*] (0.002)
Log (Zip code annual employment)	0.0027 ^{***} (0.001)	0.0028 ^{***} (0.001)	0.0021 (0.001)	0.0021 (0.001)
Constant	−2.7702 ^{***} (0.304)	−2.7717 ^{***} (0.304)	5.6678 ^{***} (0.423)	5.6662 ^{***} (0.423)
Observations	884,161	884,161	758,576	758,576
R-squared	0.328	0.328	0.304	0.304
F-test on political variables	3.89 ^{***}	3.66 ^{***}	0.41	1.12
F-test on representative race and ethnicity		2.39 [*]		2.09

State/year/month fixed effects are included in each regression. Standard errors are clustered by Congressional District. The *F*-test tests for whether the five Congressional attributes are jointly statistically significant. The Black borrower regression includes loans between 2003 through 2006 while the Hispanic borrower regression includes loans between 2004 through 2006. These regressions include additional controls for the borrower's income and the loan type.

^{*} Robust standard errors in parentheses $p < 0.1$.

^{**} Robust standard errors in parentheses $p < 0.05$.

^{***} Robust standard errors in parentheses $p < 0.01$.

3.3. New Century loan origination by race and ethnicity

In this section, we estimate linear probability models to assess the role of Congressional representative attributes in determination of subprime loan origination probabilities among black and Hispanic New Century borrowers. The dependent variable in the analyses equals 1 if the originated loan is to a black [Hispanic] borrower and zero otherwise. We seek to test, conditional on New Century making a loan, whether a minority more likely to receive the loan as a function of Congressional attributes. We estimate equation the following equation:

$$\text{Minority}_{ijlzt} = \alpha_{it} + \alpha_1 X_{it} + \alpha_2 Z_{jlt} + \alpha_3 \text{Zip}_{lzt} + \varepsilon_{ijlzt} \quad (3)$$

Here the notation represents person i in state l in zip code z at time t in Congressional district j . State/year/month fixed effects are included and the standard errors are clustered by Congressional district.¹⁸ The analysis includes a standard set of borrower and loan characteristics including

¹⁸ While we include state/year/month fixed effects in all of the New Century regressions, it is relevant to note that the New Century data are bunched across months. We observe 95% of the loans being recorded in April, August and December.

Table 5
Loan Performance as Function of Congressional Attributes.

	(1)	(2)	(3)	(4)	(5)
Explanatory variables	30 day delinquencies	60 day delinquencies	90 day delinquencies	Foreclosures	90 day delinquencies
Zipcode predicted subsidy	1.067 (3.065)	2.392 (2.485)	10.756*** (4.149)	1.564* (0.842)	
Congressional leader					−0.043 (0.053)
Terms in office					0.015*** (0.005)
Conservative Ideology Score					−0.029 (0.040)
Member of the finance committee					−0.085 (0.054)
Total New century loans in zip/month	0.009*** (0.001)	0.004*** (0.001)	0.007*** (0.001)	0.000*** (0.000)	0.007*** (0.001)
MSA/year/month FE	X	x	x	x	x
Full controls	X	x	x	x	x
Constant	62.633 (147.611)	241.387 (152.529)	158.032 (201.128)	79.670* (46.161)	183.648 (205.106)
Observations	685,662	685,662	685,662	685,662	685,662
R-squared	0.453	0.311	0.473	0.180	0.474

The unit of observation is a loan. The monthly zip code discount is calculated as: Zipcode predicted subsidy = $-0.0179 * (\text{Congressional leader}) + 0.0002 * (\text{Terms in office}) + 0.0008 * (\text{Conservative ideology score}) - 0.0045 * (\text{Member of the Finance Committee})$.

* Robust standard errors in parentheses $p < 0.1$.

** Robust standard errors in parentheses $p < 0.05$.

*** Robust standard errors in parentheses $p < 0.01$.

borrower age, gender, log household income, LTV, and FICO score.¹⁹ The regression also includes the zip code level neighborhood and Congressional representative controls described above.

Table 4 reports results of the New Century subprime loan origination equations.²⁰ As shown in the table, the controls for borrower and loan characteristics performed as expected and were highly significant. All things equal, the probability of loan origination among blacks and Hispanics increased with loan LTV. As expected, increases in borrower income served to significantly diminish the probability of New Century loan originations among blacks and Hispanics.²¹ Higher levels of borrower credit qualification, as evidenced in the FICO score, served to elevate the probability of subprime loan origination among black borrowers. Among Hispanics, higher FICO scores served to

depress the probability of New Century subprime loan origination.

Controlling for borrower, loan, and neighborhood characteristics as well as state/year/month fixed effects, results suggest the importance of controls for congressional leadership and Representative ideology in determination of New Century loan originations among blacks. The probability that a borrower was black was eight percentage points higher in congressional districts in which the Representative was a member of the Congressional leadership.²² That being said, lending to blacks was statistically dampened in districts represented by an ideological Conservative.²³ In columns (2) and (4) we include dummy variables indicating whether the Congressional leader is black or Hispanic. We find all else equal that New Century borrowers were 2 percentage points more likely to be black if the local Congressional leader was black. While this estimate is statistically insignificant, the Hispanic Representative dummy and the black Representative dummy are jointly statistically significant at the 10 percent level.

¹⁹ We include a cubic in the household's FICO score.

²⁰ The New Century data for Hispanic status is not filled in for the year 2003. This fact leads us to limit the sample to 2004 through 2006 for the estimates of econometric models for the Hispanic subsample.

²¹ Results similarly affirm the significance of a broad set of neighborhood socio-economic and race characteristics in determination of New Century subprime loan originations. Findings largely indicate that increases in college graduate population shares, log neighborhood population density, and log neighborhood annual employment serve to significantly elevate New Century originations among blacks and Hispanics. While increases in black neighborhood population share served to raise the probability of loan origination among blacks, increases in Hispanic neighborhood population shares were associated with damped lending probabilities to blacks. In a similar vein, increases in Hispanic neighborhood population share served to raise the likelihood of New Century lending to Hispanics, while increases in black population share had a damping effect. Membership on the Housing Financial Services Committee does not appear to affect lending to racial minorities.

²² To explain our findings based on unobserved borrower quality, one would need to explain why blacks with high unobserved borrower quality self-select to live in the Leader districts. Given the rich set of individual demographics and zip code controls and our state/time fixed effects, we do not believe that this is a credible explanation.

²³ In an earlier working paper version of this paper, we report loan rejection probability models using HMDA data from 2006. While the HMDA data include the universe of loans, such data have a limited set of covariates including income, age and race of the borrower. Controlling for those attributes and census block attributes, we find that black prospective borrowers are less likely to be rejected by a subprime bank to receive a loan if they live in a Congressional leader's district. These complete set of results are reported in the [Web Appendix A](#).

3.4. Loan performance

In a final set of analyses, we investigate whether loans originated to borrowers politically favored by New Century performed differently than others. Indeed, any political benefit derived by New Century could result in certain costs, possibly including elevated future loss owing to higher levels of default on politically favored loans. To assess this hypothesis, we evaluate the default performance of loans issued by New Century from 2004 through its bankruptcy in February 2007. The New Century dataset does not contain loan performance information for the post-bankruptcy period. In Table 5, we report on estimation of five linear probability models where the dependent variable is an indicator of whether a specific loan defaulted or was in delinquency either 30, 60 or 90 days after being issued.²⁴ For each loan issued, we know the zip code of the borrower and thus can merge the attributes of the Congressional Representative. In columns (1–4), we use the results reported in Table 2's column (1) to provide a zip code specific estimate of the interest rate subsidy received by the average New Century borrower residing in that zip code. All borrowers in the same zip code are assumed to have received the equivalent discount. We test whether borrowers who received a larger politically induced subsidy from New Century were more likely to default. Specifically, we test whether the explanatory variable labeled "Zipcode predicted subsidy" has a negative and statistically significant coefficient. This would indicate that borrowers who received a larger subsidy were more likely to default. As shown in columns (1–4), we reject this hypothesis. In fact, as reported in columns 3 and 4, we find that borrowers in high subsidy zip codes were less likely to be in 90 day delinquency and were less likely to be in foreclosure. In column (5) of Table 5, we include all Congressional attributes. Results of estimation of a 90 day delinquency linear probability model show that, all else equal, loans issued in zip codes where the Representative had more seniority were more likely to be delinquent.

4. Conclusion

In this paper, we explore the role of Congressional influence in extension and pricing of subprime mortgage credit. Specifically, we apply loan level data from New Century Financial Corporation, the second largest subprime lender in the U.S., and assess whether attributes of Congressional Representatives were associated with access to and pricing of subprime loans. We find that borrowers represented by both Congressional leadership and members of the powerful House Financial Services Committee received larger loans at discounted mortgage interest rates. Black borrowers also were more likely to receive loans in districts represented by Congressional leadership. In support of those findings, placebo tests also show that borrowers residing in districts represented by subsequent Congressional

leaders (113th Congress) did not receive more favorable loan terms. We do not find evidence of adverse performance differentials among the politically subsidized and directed loans.

New Century may have viewed enhancement of subprime credit access in Districts represented by the leaders of Congress and members of the House Financial Services Committee as consistent with profit maximization, to the extent it helped to buy regulatory forbearance and related Congressional support for widespread proliferation of this controversial lending instrument among less qualified borrowers. At the same time, local direction of mortgage capital may have served to elevate Representative political capital among constituents, given provision of mortgage finance to constituent households previously excluded from homeownership attainment. Research findings add yet another dimension to our understanding of the political geography of the subprime crisis. In so doing, they provide new evidence of the role of Congressional political influence in determination of the direction and pricing of subprime mortgage credit.

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.jhe.2015.01.002>.

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²⁴ The average 30 day delinquent rate was .68%, 60 day delinquent rate was .31% and the 90 day delinquency rate was .89% and the foreclosure rate was .083%.

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