

Access to Financial Services among Middle-aged and Older Blacks and Hispanics

Luisa R. Blanco (Pepperdine University, RAND, RCMAR-UCLA)

Hispanic Economic Issues Conference sponsored by the American Society of Hispanic Economists and the Americas Center at the Federal Reserve Bank of Atlanta, November 2014

Acknowledgement

Luisa Blanco received support from the University of California, Los Angeles, Resource Centers for Minority Aging Research Center for Health Improvement of Minority Elderly (RCMAR/CHIME) under NIH/NIA Grant Number P30-AG021684, and the UCLA Clinical and Translational Science Institute (CTSI) under NIH/NCRR/NCATS Grant Number UL1TR000124. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIH.

Motivation

Lack of access to financial services

- 20 percent unbanked in the EU and UK (Datta, 2009)
 - 10 percent unbanked in the US (Scholz & Seshadri, 2011)
- The costs associated with being unbanked in the US represent around 4 percent of the median household income (Caskey et al. (2006)

Motivation

According to data from the Health and Retirement Study (HRS), lack of participation in the formal financial sector among 51 years and older is the following:

Do not have a checking account (proportion)

	2000	2002	2004	2006	2008	2010	Avg
White Non-Hisp.	0.10	0.08	0.07	0.08	0.08	0.10	0.09
Black Non-Hisp.	0.39	0.35	0.34	0.30	0.31	0.37	0.34
Hispanic	0.34	0.34	0.43	0.38	0.41	0.50	0.40

Motivation

- Older minorities (Hispanics and African Americans) are more likely to be unbanked
- Older African American and Hispanic populations are amongst the fastest growing subgroup in the US
- Access to finance is related to wellbeing
 - Ability to save, liquidity constraints, transactional costs, and retirement planning

Research Question

- We study access to finance among 51 years and older individuals, with a focus on Blacks and Hispanics, using data from the Health and Retirement Study (HRS)
- We aim at understanding what factors contribute to the differences in the access to finance across race and ethnicity

Outline

- Literature review
- Data and Methodology
- Results
- Conclusion

Literature review

Access to finance determined by

- Demand factors

SES, language, culture, financial literacy, cost-benefit calculations, situational barriers

- Supply factors

Financial institutions, financial products

Literature review

Factors influencing the costs and benefits of owning a checking account

1. Individual and household characteristics
2. Individual skills and abilities
3. Income and wealth characteristics
4. Geographic and neighborhood characteristics

(Bohn & Pearlman, 2012, Demirguc-Kunt et al. 2013, Hogarth et al., 2004, 2005, Osili & Paulson, 2008)

Individual and household characteristics

Race/ethnicity

Gender

Education

Age (level and square or use age cohorts)

Language

Legal status (citizenship, residency, etc...)

Place of birth

Marital status

Size of household (number of household members less than 18 years older)

Individual abilities/skills

Planning

Cognition/Numeracy

Financial literacy and economics knowledge

Income and wealth characteristics

Income or income groups (income groups relative to poverty level)

Employment status (working, retired, unemployed looking for job, unemployed not looking for job)

Retirement status

Wealth or wealth groups (wealth quartiles)

Home ownership

Vehicle ownership

Geographic and neighborhood characteristics

Neighborhood socioeconomic conditions

Number of financial institutions

Residency in rural/urban areas

Data and Methodology

- Data from the HRS in 6 waves
2000, 2002, 2004, 2006, 2008, and 2010
- Access to finance - Do you [or your] [husband/wife/partner] have any checking or savings accounts or money market funds?
- Logit model with Random Effects
- Model

$$\textit{Access_to_finance} = \alpha + \delta X_{i,t} + \tau T_t + \varepsilon_{i,t}$$

Data and Methodology

Race and ethnicity of Financial Respondent (FR)

1. Whites
2. Blacks
3. Hispanics

Extension: FR-spouse:

1. White-White
2. Black-Black
3. Hispanic-Hispanic
4. White-Black
5. White-Hispanic
6. Black-Hispanic

Data and Methodology

- Baseline model
 - Race/ethnicity, education, foreign born, and Spanish survey (with other controls)
- Cognition and financial planning
 - Serial 7's subtraction test, total word recall indicator, short term financial planning
- Neighborhood socioeconomic status (NSES) and number of financial institutions (census tract and zip code level)

Data and Methodology

NSES Winkleby-Cubin

1. % without a high school
2. Median family income
3. Median housing value
4. % blue collar workers
5. % unemployed

NSES Diez-Roux

1. Median hh income
2. Median value housing
3. % hh interest, div., or rental inc.
4. % high school
5. % college degree
6. % professionals

Results - Baseline

- Lower access to finance among Blacks and Hispanics and Spanish speaking individuals
- At higher levels of education, there is an increase on participation in the financial sector for Blacks and Hispanics
- Probability of owning a checking account is smaller for a Hispanic foreign born than for a Black foreign born

Results - Baseline

- When estimating model for home owners and non-home owners, we find that Blacks and Hispanics who are not home owners are less likely to own a checking account
- When estimating the model for the 3 racial/ethnic groups using Fixed effects, there are some similarities and differences in the coefficients of the time variant variables

Table 4. Determinants of having a checking account (logistic regression with random effects)

	(1)	(2)	(3)	(4)	(5)
Male	-0.4298***	-0.4285***	-0.4330***	-0.4460***	-0.3694***
Black	-1.2853***	-1.3819***	-1.3268***	-1.2266***	-1.2959***
Hispanic	-1.2053***	-1.2483***	-1.1736***	-1.1058***	-1.3800***
Foreign born	0.0072***	0.0055***	-0.1466***	-0.1194***	0.1544***
Spanish survey	-1.1816***	-1.1741***	-1.0957***	-1.1918***	-1.0699***
High school	0.6415***	0.6016***	0.6449***	0.6359***	0.6253***
College	1.0368***	0.9840***	1.0385***	1.0402***	0.9946***
Age	0.0330***	0.0335***	0.0309***	0.0011**	0.0883***
Age, squared	-0.0001***	-0.0001***	-0.0001***	0.0000***	-0.0005***
Couple	0.0844***	0.0859***	0.0832***	0.0782***	0.0472***
Household size	-0.0657***	-0.0655***	-0.0669***	-0.0651***	-0.0753***
Wealth, quartile 2	0.5976***	0.5978***	0.5974***	0.4350***	1.4113***
Wealth, quartile 3	1.1942***	1.1959***	1.1912***	1.1192***	1.1369***
Wealth, quartile 4	1.6758***	1.6821***	1.6752***	1.6140***	1.1921***
Home ownership	-0.1981***	-0.1991***	-0.1968***		
Home mortgage	0.4242***	0.4261***	0.4245***	0.3587***	-1.4165***
Vehicle ownership	0.8136***	0.8110***	0.8156***	0.7811***	0.9064***
Poverty	-0.5949***	-0.5925***	-0.5946***	-0.6365***	-0.5710***
Working	0.2943***	0.2956***	0.2915***	0.2286***	0.4321***
Receiving SS	-0.0648***	-0.0632***	-0.0643***	-0.1364***	0.1222***
Receiving pension	0.4621***	0.4616***	0.4609***	0.3978***	0.6643***
Income	0.0044***	0.0045***	0.0044***	0.0046***	0.0014***
Black*High school		0.1403***			
Black*College		0.1955***			
Hispanic*High school		0.0479***			
Hispanic*College		0.1333***			
Black*Foreign born			0.8935***		
Hispanic*Foreign born			0.0187***		
Constant	-0.3217***	-0.3100***	-0.2461***	1.0173***	-2.8028***
Observations	59,312	59,312	59,312	44,470	14,842
Number of individuals	18,933	18,933	18,933	14,302	6,496
Log-Likelihood	-6.47E+07	-6.47E+07	-6.47E+07	-4.17E+07	-2.29E+07
Chi-square	1.84E+07	1.84E+07	1.84E+07	1.07E+07	5.09E+06
Obs per individual, min	1	1	1	1	1
Obs per individual, avg	3.133	3.133	3.133	3.109	2.285
Obs per individuals, max	5	5	5	5	5

Table 5

Determinants of having a checking account (logistic regression with fixed effects by racial/ethnic groups)

	(1)	(2)	(3)
Couple	-0.2838*** (0.0021)	0.0579*** (0.0036)	-0.4450*** (0.0042)
Household size	0.0062*** (0.0006)	-0.0201*** (0.0008)	-0.0083*** (0.0008)
Wealth, quartile 2	0.5526*** (0.0016)	0.1828*** (0.0026)	0.1742*** (0.0030)
Wealth, quartile 3	0.9647*** (0.0020)	0.5289*** (0.0038)	0.0677*** (0.0041)
Wealth, quartile 4	1.1300*** (0.0026)	0.8643*** (0.0056)	0.4084*** (0.0056)
Home ownership	-0.3656*** (0.0020)	-0.1500*** (0.0039)	-0.3889*** (0.0041)
Home mortgage	0.0937*** (0.0017)	0.2301*** (0.0028)	0.6993*** (0.0031)
Vehicle ownership	0.4368*** (0.0016)	0.4611*** (0.0026)	0.8282*** (0.0027)
Poverty	-0.1943*** (0.0015)	-0.2582*** (0.0021)	-0.2022*** (0.0023)
Income	-0.0010*** 0.0000	-0.0023*** 0.0000	0.0014*** (0.0001)
Working	0.2128*** (0.0015)	0.3921*** (0.0026)	0.1332*** (0.0031)
Receives pension	0.3836*** (0.0015)	0.4805*** (0.0028)	0.1397*** (0.0036)
Observations	8,960	4,115	2,913
Number of individuals	2,122	1,000	684
Log-Likelihood	-1.23E+07	-3.71E+06	-2.91E+06
Chi-square	879047	260383	398508
Obs per individual, min	2	2	2
Obs per individual, avg	4.222	4.115	4.259
Obs per individuals, max	5	5	5

Results – Cognition & planning

- Poor cognition and short term financial planning have a negative effect on the probability of owning a checking account
- Among those with poor cognition, ownership of a checking account is lower for Blacks than for Hispanics (interaction)
- Among those with short term planning, ownership of a checking account is lower for Blacks than for Hispanics (interaction)

Table 6

*Determinants of having a checking account (logistic regression with random effects) -
Cognition and financial planning horizon*

	(1)	(2)	(3)	(4)	(5)	(6)
Poor cognition	-0.3266*** (0.0007)	-0.2829*** (0.0006)	-0.3090*** (0.0009)	-0.3053*** (0.0008)		
Black	-1.2213*** (0.0009)	-1.2525*** (0.0009)	-1.1276*** (0.0012)	-1.2725*** (0.0012)	-1.3132*** (0.0012)	-1.2820*** (0.0013)
Hispanic	-1.1833*** (0.0014)	-1.2017*** (0.0014)	-1.2523*** (0.0015)	-1.2346*** (0.0016)	-1.1264*** (0.0019)	-1.1161*** (0.0019)
Poor cognition*Black			-0.1897*** (0.0016)	0.0468*** (0.0015)		
Poor cognition*Hispanic			0.1637*** (0.0018)	0.0776*** (0.0017)		
Short term financial planning					-0.0215*** (0.0010)	0.0246*** (0.0013)
Short term*Black						-0.1440*** (0.0024)
Short term*Hispanic						-0.0590*** (0.0027)
Foreign born	0.0169*** (0.0015)	0.0454*** (0.0015)	0.0172*** (0.0015)	0.0475*** (0.0015)	0.1040*** (0.0019)	0.1043*** (0.0019)
Spanish survey	-1.1799*** (0.0021)	-1.2047*** (0.0021)	-1.1919*** (0.0021)	-1.2081*** (0.0021)	-1.0355*** (0.0027)	-1.0347*** (0.0027)
Constant	-0.6567*** (0.0136)	-0.4050*** (0.0137)	-0.6757*** (0.0136)	-0.3715*** (0.0137)	-1.7115*** (0.0186)	-1.6998*** (0.0186)
Observations	56,800	56,800	56,800	56,800	35,017	35,017
Number of individuals	18,319	18,319	18,319	18,319	14,415	14,415
Log-Likelihood	-6.18E+07	-6.18E+07	-6.18E+07	-6.18E+07	-3.55E+07	-3.55E+07
Chi-square	1.78E+07	1.78E+07	1.79E+07	1.78E+07	9.43E+06	9.43E+06
Obs per individual, min	1	1	1	1	1	1
Obs per individual, avg	3.101	3.101	3.101	3.101	2.429	2.429
Obs per individuals, max	5	5	5	5	3	3

Results – NSES and Finc. Inst.

- NSES Winkleby-Cubbin has a negative significant coefficient, while NSES Diez-Roux has a positive significant coefficient
- Both coefficients for the number of financial institutions (actual and lagged) are positive and statistically significant

Table 7

*Determinants of having a checking account (logistic regression with random effects) -
Neighborhood socio-economic status characteristics and number of financial institutions*

	(1)	(2)	(3)	(4)	(5)	(6)
NSES WC	-0.0260*** (0.0005)				-0.0261*** (0.0005)	
NSES DR		0.0229*** (0.0005)				0.0230*** (0.0005)
Black	-1.3450*** (0.0014)	-1.3449*** (0.0014)	-1.2855*** (0.0009)	-1.2851*** (0.0009)	-1.3378*** (0.0014)	-1.3377*** (0.0014)
Hispanic	-1.1042*** (0.0022)	-1.1057*** (0.0022)	-1.1974*** (0.0014)	-1.1967*** (0.0014)	-1.1081*** (0.0022)	-1.1096*** (0.0022)
Number of financ. inst.			0.0037*** (0.0001)			
Number of financ. inst., lag 1				0.0041*** (0.0001)	0.0059*** (0.0001)	0.0059*** (0.0001)
Foreign born	0.2546*** (0.0023)	0.2549*** (0.0023)	-0.0114*** (0.0014)	-0.0118*** (0.0014)	0.2680*** (0.0023)	0.2684*** (0.0023)
Spanish survey	-1.2416*** (0.0032)	-1.2448*** (0.0032)	-1.1614*** (0.0020)	-1.1610*** (0.0020)	-1.2400*** (0.0032)	-1.2431*** (0.0032)
Constant	3.4087*** (0.0233)	3.4175*** (0.0233)	-0.2911*** (0.0132)	-0.2938*** (0.0132)	3.3714*** (0.0232)	3.3803*** (0.0232)
Observations	32,853	32,848	59,127	59,127	32,804	32,799
Number of individuals	8,840	8,839	18,907	18,907	8,836	8,835
Log-Likelihood	-3.07E+07	-3.07E+07	-6.450e+07	-6.450e+07	-3.07E+07	-3.07E+07
Chi-square	7.99E+06	7.99E+06	1.830e+07	1.830e+07	7.98E+06	7.98E+06
Obs per individual, min	1	1	1	1	1	1
Obs per individual, avg	3.716	3.716	3.127	3.127	3.713	3.712
Obs per individuals, max	5	5	5	5	5	5

Results – Spouse race/ethnicity

- Probability of owning a checking account is the lowest among those households where FR and spouse are minorities
- In those households where at least either the FR or spouse is White, participation in the financial sector is expected to be higher
- Interaction of race/ethnicity with foreign born do not provide a clear pattern

Table 8.
*Determinants of having a checking account (logistic regression with random effects) -
 Race and ethnicity at the household level*

	(1)	(2)	(3)
Black-Black	-1.3109*** (0.0009)	-1.3946*** (0.0015)	-1.3503*** (0.0009)
Hispanic-Hispanic	-1.3067*** (0.0014)	-1.3330*** (0.0019)	-1.2979*** (0.0015)
White-Black/Black-White	-0.1577*** (0.0060)	-0.2405*** (0.0125)	-0.1009*** (0.0064)
White-Hispanic/Hispanic-White	-0.4164*** (0.0027)	-0.2067*** (0.0061)	-0.3134*** (0.0029)
Black-Hispanic/Hispanic-Black	-1.0655*** (0.0075)	-1.9523*** (0.0127)	-1.2453*** (0.0079)
High school	0.6363*** (0.0008)	0.6094*** (0.0010)	0.6394*** (0.0008)
College	1.0347*** (0.0012)	0.9757*** (0.0013)	1.0370*** (0.0012)
B-B*High school		0.1133*** (0.0019)	
B-B*College		0.2020*** (0.0029)	
H-H*High school		0.0268*** (0.0023)	
H-H*College		0.0725*** (0.0040)	
W-B/B-W*High school		-0.1879*** (0.0144)	
B-H/H-B*High school		-0.4241*** (0.0069)	
B-H/H-B*College		0.2575*** (0.0089)	
B-H/H-B*High school		1.4818*** (0.0169)	
B-H/H-B*College		1.0409*** (0.0252)	
Foreign born	0.0206*** (0.0014)	0.0190*** (0.0014)	-0.1360*** (0.0020)
B-B*Foreign born			0.8583*** (0.0041)
H-H*Foreign born			0.1011*** (0.0031)
W-B/B-W*Foreign born			-0.5361*** (0.0203)
W-H/H-W*Foreign born			-0.6194*** (0.0076)
B-H/H-B*Foreign born			2.1591*** (0.0332)
Observations	59,312	59,291	59,312
Number of individuals	18,933	18,926	18,933
Log-Likelihood	-6.46E+07	-6.46E+07	-6.46E+07
Chi-square	1.84E+07	1.84E+07	1.84E+07

Conclusion

- Access to finance is different across different racial/ethnic groups – lower access among Blacks and Hispanics
- Differences across race and ethnicity on the access to finance continue to hold even after controlling for a diverse group of factors

Conclusion

- We evaluate the interactive effect of several factors with race and ethnicity
- For further research, focusing on differences across race and ethnicity, we plan to study how access to finance affects health outcomes and wellbeing using the HRS data