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Financial Literacy and Economic Behavior in Curaçao

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Introduction- A bit about Curaçao?



The Dutch Caribbean Islands (formally known as The Netherlands Antilles)

Introduction- Background



“Curaçao already had an 'enormous poverty problem' - and corona makes it even bigger.”



The cost-of-living-crisis puts a magnifying glass on issues that were already there, such as poverty.

- Prior- 1 in 3 was already living below poverty line
- Especially relevant for retirees, the unemployed, female-parented single families, and the lowly educated
 - These households more often make unsound financial decisions placing them at a further financial disadvantage. (Lusardi & Mitchell, 2011; Lusardi, Schneider & Tufano, 2011; Wiersma et al., 2020).

Introduction- Background

PAIS: 'aandacht voor schuldenproblematiek'

Geplaast op 8 april 2013 door redactie_curacao | [Een reactie plaatsen](#)

Attention for debt problems

Antilliaans Dagblad
HOOFDPUNTEN - NIEUWS MENU - VACATURE ADVERTENTIES - ABONNEES -
Het laatste nieuws - Welkom bij Antilliaans Dagblad - De beste manier om te lezen

'ONGEZONDE LEENCULTUUR'

Stijgende lijn in schulden huishoudens

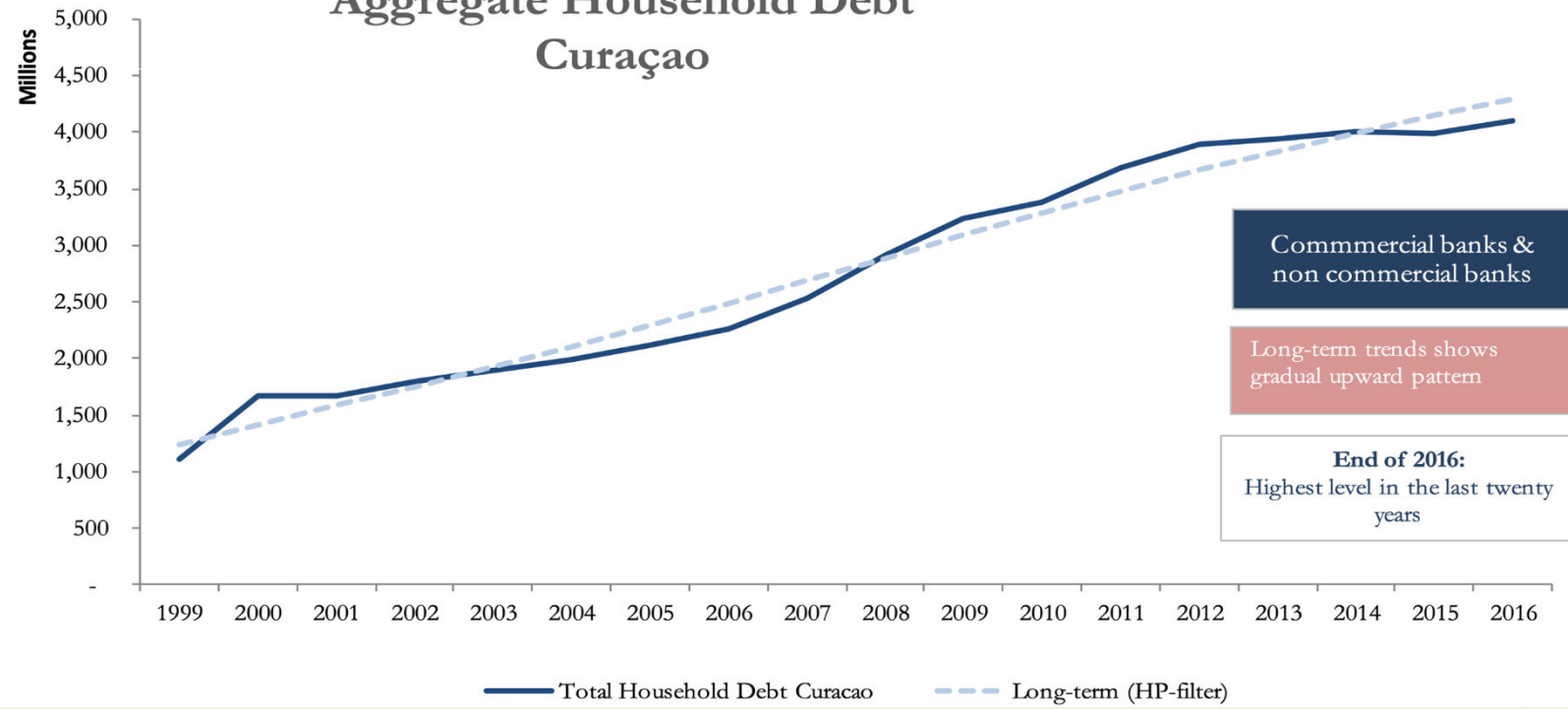
Van een onzer verslaggevers

Willemstad - Onderzoek heeft uitgewezen dat de schulden van huishoudens ('households debt') op Curaçao een stijgende trend vertonen. Dit komt door de negatieve groei van de economie, maar ook door een 'ongezonde leencultuur'.

Unhealthy lending culture



Aggregate Household Debt Curaçao



Introduction- Financial Literacy Matters

- It has been long understood that financial literacy can increase a household's financial resilience. Especially in times of economic crises.
- **The more financial savvy** are ceteris paribus (even after controlling for educational attainment):
 1. more likely to participate in the stock market (e.g. Van Rooij et al, 2011);
 2. more likely to undertake retirement planning (e.g. Lusardi and Mitchell (several papers));
 3. yield higher returns on their saving accounts (e.g. Geogarakos et al. (2016));
 4. less likely to use high cost borrowing including payday loans, pawn shop, credit card debt (see e.g. Lusardi and Bassa Schereberg, 2013).

Despite growing evidence > Data Gap in Curaçao

Garcia et al. (2013): to build evidence-based, efficient financial education programs or strategies, policymakers, and program designers must comprehensively understand the population's degree of financial knowledge, their financial behaviors, and how these are related.

Research Questions

- How well-equipped are the citizens of Curaçao to make informed financial decisions?
- What is their level of financial literacy, and who knows the most and the least?
- Are financial literacy measures associated with savvy financial behavior?

Main question:

What and Who should be targeted through policy initiatives?

- Telephone survey fielded in the summer/fall of 2020 in the SONORO Community
 - *a panel of households in Curaçao where members are consulted on questions related to finance and health.*
- 225 completed interviews- response rate of 57%
- Demographic and socio-economic data stems from the member recruitment interviews held in 2018 and 2019 (mainly in the fall of 2019 (around 1,700 respondents)
- Vis et al. (2021) observe that the sample is representative of the population in terms of gender, income, and place of birth.
- Surveys were available in all 4 languages spoken on the islands

Measure of Financial Literacy

Both objective and subjective financial literacy are critical elements in understanding differences in financial behavior (Allgood and Walstad, 2013; Anderson et al. 2017; Huston, 2010).

Subjective Financial Literacy:

"How is your understanding of financial matters? Good, average, or not that good".

Objective Financial Literacy:

- Questions stem from the the S&P Global FinLit Survey- the world's largest, most comprehensive global measurement of financial literacy
- Similar to the "Big Three" questions by Lusardi and Mitchell (2006).
- *Measure the knowledge of fundamental* concepts that lie at the root of saving and investment decisions

What is level of Financial Literacy?

Summary Statistics Subjective and Objective Financial Literacy in percentages (Correct answers are in bold)

Interest: You borrow NAf. 100, and you need to pay it with interest within a year. Which is more to pay back: NAf. 105 or NAf. 100 plus 3% interest?

NAf. 105
58.7

NAf. 100 plus 3% interest?
28

Don't Know/ Refusal
13.3

Inflation: Suppose over the next 10 years the prices of the things you buy double, and your income also doubles. Will you be able to buy more, less, or the same?

Less
16.9

The same
76

More
4

Don't Know/ Refusal
3.1

Risk diversification: What do you think is safer: investing in 1 business or multiple businesses?

One business
40.9

Multiple businesses
45.3

Don't Know/ Refusal
13.8

Objective Financial Literacy

Shares of correct answers

0

10.7

1

25.8

Mean= 1.8

2

36.4

3

27.1

Subjective Financial Literacy

Not that good

11.1

Average

58.2

Good

30.7

Who knows the most and the least? - Part of the model

- caveat: number of observation small

OLS and linear probability regressions explaining (self-assessed) financial literacy and correct answer to individual questions

Variables	Dependent Variable:	(1) FL Index	(2) FL Index	(3) Inflation Correct	(4) Inflation Correct	(5) Interest Correct	(6) Interest Correct	(7) Diversification Correct	(8) Diversification Correct	(9) SAFL= good	(10) Number of DK's	(11) Number of DK's
Female		-0.187 (0.124)	-0.189 (0.122)	1.089 (6.070)	1.411 (6.052)	-15.895** (6.693)	-16.206** (6.637)	-3.921 (6.783)	-4.072 (6.827)	4.586 (6.241)	0.095 (0.077)	0.095 (0.072)
Age (Reference= Younger than 35)												
35-50		0.051 (0.223)	0.075 (0.224)	1.968 (9.593)	2.664 (9.574)	-0.806 (11.683)	0.480 (11.516)	3.975 (12.106)	4.356 (12.278)	1.562 (11.007)	0.094 (0.060)	0.042 (0.082)
51-64		-0.158 (0.202)	-0.177 (0.204)	-10.994 (9.477)	-11.171 (9.306)	3.354 (10.669)	2.081 (10.466)	-8.206 (11.254)	-8.645 (11.393)	3.646 (10.137)	0.275*** (0.083)	0.312*** (0.086)
Older than 65		-0.279 (0.202)	-0.262 (0.205)	2.244 (9.674)	2.831 (9.578)	-6.384 (10.875)	-5.476 (10.677)	-23.787** (11.218)	-23.530** (11.407)	2.079 (10.429)	0.521*** (0.094)	0.482*** (0.097)
Educational Level (Reference= Elementary or pre-vocational education & do not know)												
Secondary Education, first level		0.381* (0.199)	0.376* (0.195)	11.346 (9.710)	11.681 (9.697)	26.252*** (9.970)	25.609*** (9.845)	0.543 (9.576)	0.270 (9.558)	6.133 (9.144)	-0.430** (0.176)	-0.423*** (0.155)
Secondary Education, second level		0.536*** (0.187)	0.516*** (0.185)	13.981 (9.265)	13.941 (9.196)	27.414*** (9.490)	26.010*** (9.334)	12.193 (9.419)	11.691 (9.546)	5.582 (8.579)	-0.432*** (0.159)	-0.395*** (0.138)
College or graduate education		0.592** (0.248)	0.545** (0.250)	14.061 (9.970)	15.286 (9.980)	23.024* (12.451)	18.754 (12.752)	22.159* (12.204)	20.468 (12.438)	30.622*** (11.271)	-0.586*** (0.164)	-0.511*** (0.147)
Net Monthly Household Income (in NAF.) (Reference= < NAF. 2,000)												
NAF. 2001-3000		-0.250 (0.162)	-0.247 (0.163)	-9.395 (8.334)	-9.484 (8.335)	-13.573 (8.425)	-13.253 (8.481)	-2.056 (8.077)	-1.929 (8.115)	-2.263 (7.488)	0.037 (0.103)	0.031 (0.097)
NAF. 3001- 5000		0.123 (0.170)	0.098 (0.169)	9.837 (7.104)	9.083 (7.297)	-10.013 (9.608)	-11.364 (9.402)	12.493 (9.366)	12.095 (9.361)	-1.869 (8.872)	-0.056 (0.089)	-0.001 (0.088)
> NAF. 5000		0.250 (0.240)	0.201 (0.243)	8.858 (10.275)	10.133 (10.418)	13.474 (11.805)	9.052 (12.317)	2.666 (13.817)	0.914 (14.311)	31.771** (12.369)	-0.148* (0.078)	-0.070 (0.086)
Self-Assessed Financial Literacy (Reference= Good)												
Average			-0.391* (0.221)		-1.749 (10.748)		-27.602** (11.584)		-9.765 (11.400)			0.751*** (0.199)
Not that good			-0.107 (0.144)		5.163 (6.827)		-11.183 (7.023)		-4.665 (7.724)			0.143** (0.063)
Constant		1.648*** (0.258)	1.774*** (0.279)	66.211*** (12.077)	62.665*** (13.339)	51.816*** (13.276)	63.360*** (13.928)	46.812*** (13.526)	51.412*** (15.164)	14.838 (12.481)	0.358** (0.159)	0.161 (0.152)
N		224	224	224	224	224	224	224	224	224	224	224
R ²		0.129	0.141	0.062	0.066	0.105	0.129	0.110	0.113	0.116	0.244	0.344

*We also estimate regressions including labor market status, place of birth, and having received economics education in school as regressors and also controlled for the presence of interviewer and language effects. However, the results were not significant and not presented for brevity.

Descriptive Evidence- Financial Behavior

	%
Do you or a member of your household have a checking account ?	90.1
Do you or a member of your household have a savings account ?	72.7
Did you save money in the months before the Corona crisis? (Saved before COVID-19)	66.0
Do you or a member of your household have stocks/bonds/mutual funds? (Risky assets)	6.4
Do you or a member of your household have a credit card ?	39.0
Did you, before the Corona crisis, have credit card debt ?	9.8
Did you, before the Corona crisis, have a loan from a bank ?	22.1
Did you, before the Corona crisis have a loan from an institution other than the bank ?	15.8
Did you, before the Corona crisis have a loan from family and friends ?	7.2
Did you, before the Corona crisis purchase something such as furniture, clothes or electronics on credit?	16.0
Did you, before the Corona crisis, have any trouble living of income?	27.9
<i>No, no trouble/ No, no trouble, but you have to pay attention to your expenses or expenditures/ Yes, some trouble/ Yes, great trouble</i>	

Descriptive Financial Behavior and Financial Literacy

Tabulation of asset and debt holdings across subjective and objective financial literacy

	N	Checking account	Savings account	Loan from family and friends	Purchased on credit
Financial Literacy Index (no. correct answers)					
None	24	82.61	54.17	16.67	8.00
1 correct	58	91.23	75.93	7.02	21.00
2 correct	82	84.15	65.00	7.32	20.00
3 correct	61	100	87.93	3.39	10.00
Inflation Correct					
No	54	83.02	68.52	12.96	11.00
Yes	171	92.26	74.07	5.36	18.00
Interest Correct					
No	93	85.71	62.92	8.70	24.00
Yes	132	93.08	79.53	6.15	11.00
Diversification Correct					
No	123	89.26	68.38	9.02	15.00
Yes	102	91	77.78	5.00	18.00
Self- Assessed Financial Literacy= good					
No	156	86.18	65.31	8.50	20.00
Yes	69	98.55	88.41	4.35	7.00

- Objective and Subjective FL are correlated to saving and debt behavior
- Individuals who hold riskier debts have little understanding of interest
- Knowledge of interest seems to be the more prominent factor

Are financial literacy measures associated with savvy financial behavior?

- caveat: number of observation small & no cause-effect relationships
- Other variables included but not shown: Age, Educational Attainment, Net Household Income

Linear probability regressions explaining asset and debt holdings

Variables	Dependent Variable:	(2) Savings account	(6) Purchased on credit	(8) Loans from family and friends
Inflation Correct		-1.699 (7.210)	7.572 (5.513)	-6.084 (4.878)
Interest Correct		11.951* (6.838)	-14.266** (6.012)	0.440 (3.550)
Diversification Correct		1.248 (6.417)	5.416 (5.517)	-2.025 (3.373)
Self- Assessed Financial Literacy= good		16.549*** (5.955)	-9.374** (4.272)	-1.061 (3.472)
Constant		53.489*** (13.919)	19.905* (10.734)	29.600*** (10.526)
N		215	222	221
R ²		0.127	0.117	0.098

- Self-assessed financial literacy is a stronger predictor than the number of correct answers to the quiz-like questions.
- Financial literacy has an independent impact on financial decision-making.
- Interest concept seems to be a strong predictor of having risky debts and savings account ownership. The association remains significant when controlling for education, income, and self-assessed financial literacy.

Sensitivity Analysis

- The robustness of the results is investigated by including **labor market status, place of birth, household composition, and economics education in school as control variables**, but these variables do not contribute to understanding the observed heterogeneity in financial literacy and behavior.
- 3 alternative specifications for the models are considered, including proxies for:
 - **Procrastination:** *procrastinators are more likely to ask family and friends for loans and less likely to purchase on credit*
 - **The influence of social networks:** *if overspending is acceptable among friends and family, a respondent is 42 percentage points more likely to take on risky debt than respondents where overspending is not acceptable.*
 - **The locus of control:** *not significant*
- Despite the inclusion of these proxies and other variables, the coefficients for interest literacy and SAFL have been proven to be robust to the inclusion of additional explanatory variables.

Conclusions

- Less than 1 in 3 show an understanding of basic financial concepts.
 - *The findings on the knowledge of interest are sobering*
- **Who knows the least?** The lowly educated (especially those with elementary education), elders, and low-income individuals score lower on subjective and objective financial literacy.
- Those with **elementary education and females** are significantly less interest literate. This is concerning as this group is often the target of government programs to expand financial inclusion (Klapper & Lusardi, 2020).
- Knowledge and confidence in one's ability are equally crucial in financial decisions
- Investing in financial knowledge appears to be a **particular type of human capital.**

Recommendations

- Focus on addressing gaps in financial literacy
 - Attention should especially be placed on the **workings of interest**
- Provide financial education programs (more research is needed to establish causality)
 - Target financial literacy initiatives to key demographic groups
 - At schools- **the young**
 - In the workplace- **older population**
 - Community Center ("Kas di Bario")- **harder -to-reach groups**
- High dropout rates- **education needs to start as early as possible**
- Can we benefit from international best practices?
- These individual behavior-focused interventions should be complemented by interventions in other areas.

THANK YOU!

QUESTIONS?

