### "People's indebtedness in the Lagos Region of Chile before and during the period of health crisis Covid-19"

sanitaria "COVID 19")

(Endeudamiento de las personas de la Región de

Los Lagos, antes y durante el periodo de crisis



Universidad Austral de Chile

Escuela de Ingeniería Comercial

Sede Puerto Montt

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# **Introduction**

01

#### **Research Objectives and Questions**



General Objective





Research Questions

"Identify how people of Lakes Region adjust their patterns of indebtedness under the health crisis scenario (COVID 19)" 1. Assess the level of indebtedness of the people of the Region, when they are involved in a health crisis.

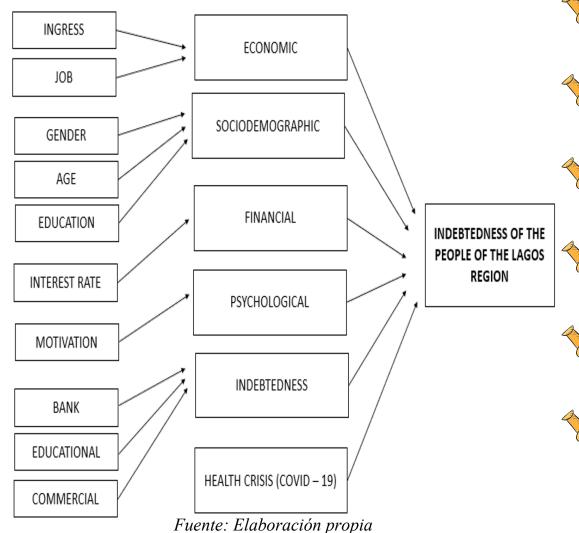
2. Identify the factors that influence the decision of debt people are.

3. Knowing the indebtedness of people before and during health crisis Covid-19.

1. What is the level of indebtedness of the people in the Los Lagos Region?

2. What factors explain the substantial difference between the levels of indebtedness, before the crisis period and during the Covid-19 health crisis in individuals in the Region?

## Variables and Hypotheses



#### <u>Hypotheses</u>

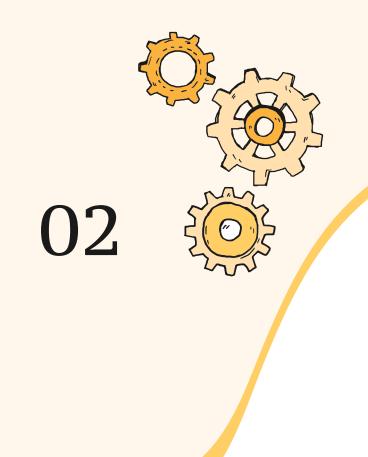
- HYPOTHESES 01: "The health crisis is a factor that significantly affects the level of debt that people have in the Lagos Region"
- <u>HYPOTHESES 02:</u> "Economic factors have a significant impact on the level of indebtedness that people present in the Lagos Region"
- <u>HYPOTHESES 03:</u> "Sociodemographic factors have a significant impact on the level of indebtedness that people present in the Lagos Region"
- <u>HYPOTHESES 04:</u> "Psychological factors have a significant impact on the level of indebtedness that people present in the Lagos Region"
- <u>HYPOTHESES 05:</u> "Financial factors significantly affect the level of indebtedness that people present in the Lagos Region"
- HIPÓTESIS 06: "The entities that significantly affect the level of indebtedness that people present in the Lagos Region are mainly banking, commercial and educational."

The investigation knowledge gap is defined as:

"Lack of knowledge of the factors that determine the level of indebtedness of people in the Lagos Region before the crisis period and during the health crisis (COVID 19)".

" Falta de conocimiento de los factores que determinan el nivel de endeudamiento de las personas en la Región de Los Lagos antes del periodo de crisis y durante la crisis sanitaria (COVID 19)".

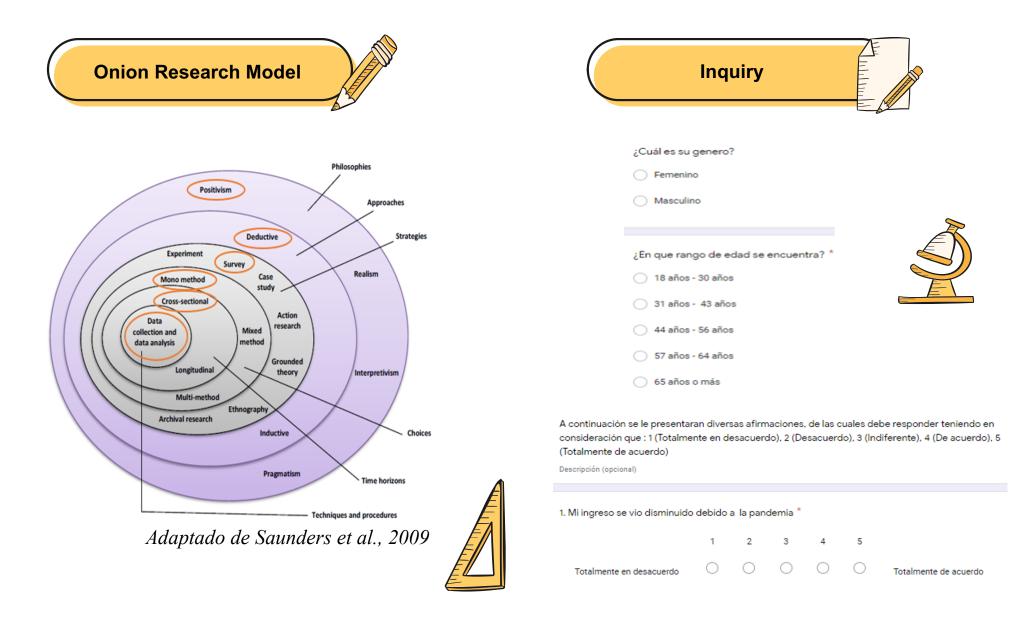
## INVESTIGATION GAP



## Frame of reference

FACTORS	REFERENCES
<b>Types of Debt:</b> Commercial houses Bank debts Educational debts	(Montero & Tarjizán, 2010; Johnson, 2005) (Chichaibelu & Waibel, 2018; SERNAC; Banco central, 2017) (Banco Central, 2017)
<u>Economic:</u> Ingress Job	(Del Río y Young, 2005; Cox et al., 2006) (Ruiz-Tagle, et al, 2013; Ine, 2020; Banco central, 2020)
<u>Sociodemographic:</u> Education Age Gender	(Denegri; 2007; Dwyer, et al., 2011; Álvarez & Ruiz-Tagle, 2016) (Dwyer et al., 2011; SBIF, 2017) (Campos et al., 2016; Superintendencia de Bancos e Instituciones Financieras)
Psychological: Consumer motivations	(Chatterjee et al., 2007)
<u>Financial:</u> Interest Rate	(Joo y Grable, 2004; Beal y Delpachitra, 2003; Dwyer et al., 2011; Awanis y Cui, 2013: Banco central, 2019-2020)
Health Crisis	(Banco Mundial, 2020; Banco central, 2020)
<u>Over - indebtedness</u>	(Chichaibelu & Waibel, 2018)







#### Sample profile

Preguntas de selección Opción		Número encuestado		Porcentaje	
Género	Femenino	151		39.10%	
	Masculino	235		60.90%	
Edad	18 años - 25 años	157		40.70%	
2000	26 años - 35 años	92		23.80%	
	36 años - 50 años	75		19.40%	
	51 años - 64 años	35		9.10%	
	65 años o más	27		7.00%	
Escolaridad	Ed. Básica incompleta	12		3.10%	
Littindu	Ed. Básica completa	28		7.30%	
	Ed. Media incompleta	30		7.80%	
	Ed. Media completa	79		20.50%	
	Ed. Superior incompleta	132		34.20%	
	Ed. Superior completa	105		27.20%	
		Antes P.			Durante P.
Ingreso mensual	\$ 0 - \$50.000	92	116	24%	30%
	\$51.000 - \$ \$320.500	105	139	27%	36%
	\$321.000 - \$459.999	89	63	23%	16%
	\$500.000 - \$999.999	78	51	20%	13%
	\$1.000.000 o más	22	17	6%	4%
Situación laboral	Empleado	236	168	61%	44%
	Desempleado	127	193	33%	50%
	Jubilado	23	25	6%	6%
Entidades que posee/ia deuda	Bancaria	114	148	25%	29%
	Educacionales	64	85	14%	16%
	Comerciales	135	150	29%	29%
	Ninguna	139	105	30%	20%
	Otra	7	29	2%	6%
Monto de deuda	\$0	148	111	38.3%	28.8%
	\$1 - \$ 399.999	128	107	33.2%	27.7%
	\$400.000 - \$1.599.999	68	113	17.6%	29.3%
	\$1.600.000 - \$6.999.999	23	31	6.0%	8.0%
	\$7.000.000 o más	19	24	4.9%	62%
Principal Motivación de					
deuda	Consumo	129	91	33.4%	23.6%
	Inversión	74	58	19.2%	15.0%
	Pagar deudas	47	104	12.2%	26.9%
	Salud	15	32	3.9%	8.3%
	Educación	41	36	10.6%	9.3%
	Otra	80	65	20.7%	16.8%

#### Multiple Linear Regression

#### Coeficientes modelo regresión lineal múltiple

Variable		Coeficientes		
Variable dependiente "Endeudamiento de las personas"	0.92	***	(9.20)	
Crisis sanitaria (COVID-19)	0.03	***	(3.54)	
Tasa de interés y terminologias financieras	0.02	**	(2.89)	
Motivaciones (obligaciones médicas, familiares, educacionales				
y el estrés)	0.03	***	(4.90)	
Nivel de escolaridad es ed. Superior incompleta	-0.13	**	(-2.52)	
Ingreso mensual de \$51.000 - \$ \$320.500	0.12	**	(2.27)	
Ingreso mensual de \$500.000 - \$999.999	0.30	***	(3.68)	
Ingreso mensual de \$1.000.000 o más	0.24	*	(1.94)	
Situación laboral Empleado	-0.16	**	(-3.14)	
Deudas con entidades Educacionales	-0.15	*	(-1.83)	
Deudas con entidades Comerciales	-0.11	*	(-1.67)	
No posee deudas con Entidades	-0.35	***	(-5.42)	
Deudas con otras Entidades	-0.52	***	(-3.8)	
R-squared	0.47			
adjusted R-squared	0.46			
Sum squares resid	73.73			

Fuente: Elaboración propia

#### **Model Assumptions**

#### Modelo de Regresión Lineal

Variable	Coefficient	Std.Error	t-Statistic	Prob.
(Constante)	0.921155	0.100038	9.208031	0.0000
FAC1_2	0.026382	0.007446	3.543049	0.0004
FAC1_3	0.020150	0.006975	2.888794	0.0041
FAC1_4	0.034752	0.007079	4.909088	0.0000
DE5	-0.129286	0.051240	-2.523141	0.0120
DIDP2	0.117117	0.051672	2.266559	0.0240
DIDP4	0.303403	0.082470	3.678923	0.0003
DIDP5	0.239526	0.123382	1.941327	0.0530
DLD1	-0.164074	0.052218	-3.142122	0.0018
DED2	-0.149570	0.081733	-1.829984	0.0681
DED3	-0.112592	0.067411	-1.670227	0.0957
DED4	-0.348256	0.064239	-5.421277	0.0000
DED5	-0.516152	0.134859	-3.827355	0.0002
R-squared	0.471800	Mean dependent var		1.572621
adjusted R-squared	0.454807	S.D. dependent var		0.602119
S.E. of regression	0.444588	akaike info criterion		1.249761
Sum squares resid	73.72658	Schwarz criteri	1.382988	
Log likelihood	-228.2038	Hannan-Quinn criter		1.302594
F-statistic	27.76430	Durbin-Watson stat		2.042444
Prob(F-statistic)	0.000000			

Series: Residuals	
Sample 1 386	
Observations 386	
Mean	8.85E-17
Median	-0.014443
Maximum	0.923327
Minimum	-1.402723
Std. Dev.	0.437604
Skewness	-0.258214
Kurtosis	2.989782
Jarque-Bera	4.291082
Probability	0.117005

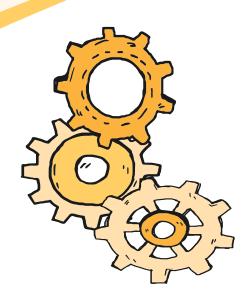
#### Heterocedasticidad Test: White

Null hypothesis : Homoscedasticity

F-statistic	1.508.308	Prob. F (69,316)	0.0102
Obs R-squared	9,563,161	Prob. Chi-Square(69)	0.0186
Scaled explained SS	8,884,235	Prob. Chi-Square(69)	0.0542

Fuente: Elaboración propia

## Conclusions



## thank you very much for your attention!



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