

INSTITUTO BRASILEIRO DE ECONOMIA

The pandemic effect in the Production of Statistics in Brazil – The FGV case

Aloisio Campelo Jr. (FGV/Brazil) Pre-Conference Workshop of the 35th CIRET conference

September, 14 2021



- Data Collection after the pandemic: problems and opportunities
- Brazilian economic context
- Surveys: testing questions after the pandemic



Impact of the Covid Crisis on the

Production of Statistics



Statistical institutes permanently seek to use the latest technologies and technologies. The covid-19 pandemic challenged all methods used before.

The key point to be considered in the modern production of price statistics is the access to larger and digitalised databases granting:

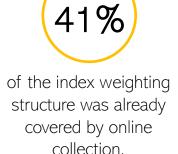
- More reliability
- More agility
- Access to quantity information

The pandemic accelerated the movement towards this new paradigm



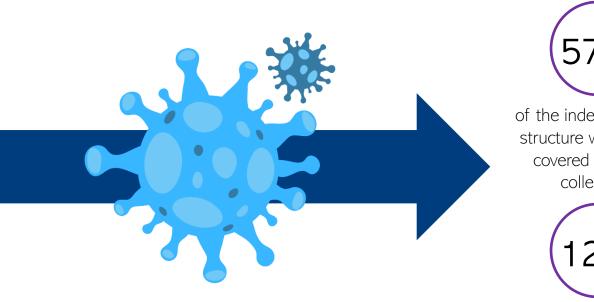
Challenges 1 - Online collection of price data after the pandemic

Before the Pandemic:





of the index weighting structure already had online prices incorporated into the index' calculation



During the Pandemic:

57%

of the index weighting structure was already covered by online collection.



of the index weighting structure already had online prices incorporated into the index' calculation Future:

Maximum expansion of collection via:

- Scanner Data
- Web Scraping



Sectors Covered by Web Scraping Collection

<u>BEFORE</u> the Pandemic:

RENT

Dec/18



FLIGHT TICKETS 14.076.248 Sept/18



NEW AND USED CARS 22.963.825 29.641.311 Dec/18



ELECTRONICS 4,997,164 Dec/18



FOOD 20.874.334 Apr/19

FUEL

334.637

Apr/19



PHARMACY

15,576,333

Sept/19

RIDESHARING APPLICATION 95.064 fev/20

Started being covered DURING the Pandemic:





Challenges 2 – Survey data Collection during the pandemic

2200

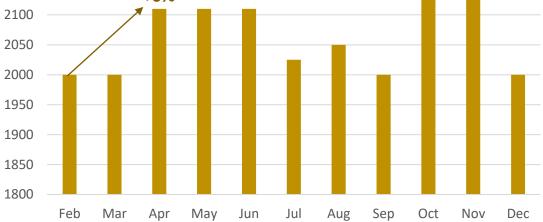
2150



Business Surveys - Number of questionnaires

+6%

Consumer Survey - Number of questionnaires



Web (mainly) and telephone

Telephone



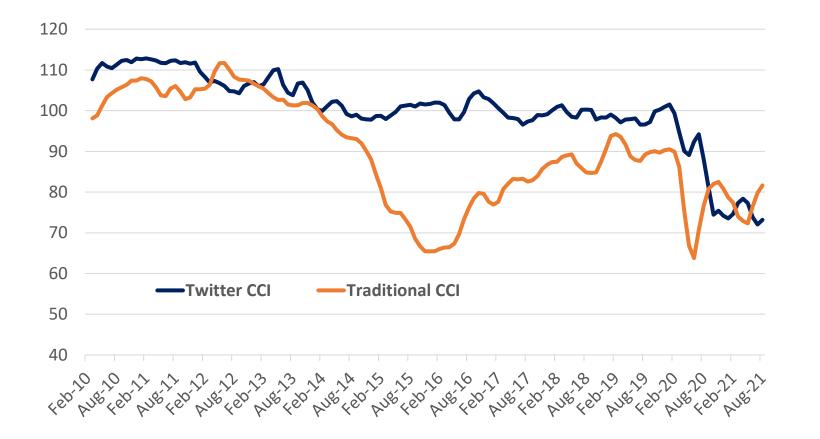
Challenges 3 – Demand for more (and faster) survey information

Changes...

- FGV started to produce **flash versions** of all surveys
- Investment in producing alternative methods for generating statistical information:
 Twitter CCI
- Additional timely questions were added to the surveys: quite popular but not all of them are related to the *core* topic of the tendency surveys (economic cycles) Guidelines



Opportunities 1 – Twitter CCI: results to be improved





Opportunities 2 – New Questions

- Questionnaires had been reduced to the core questions two year prior to the pandemic
- Questions related to the questionnaire of the EU Harmonised System were kept
- Monthly choice of subjects and questions are determined as part of an agenda:
 - t-21 days: topics are defined after discussions within the Institute
 - t-14 days: first version of questionnaire
 - t-7: revised version of questionnaire
- Some questions may remain as quarterly topics



Brazilian Macro Context



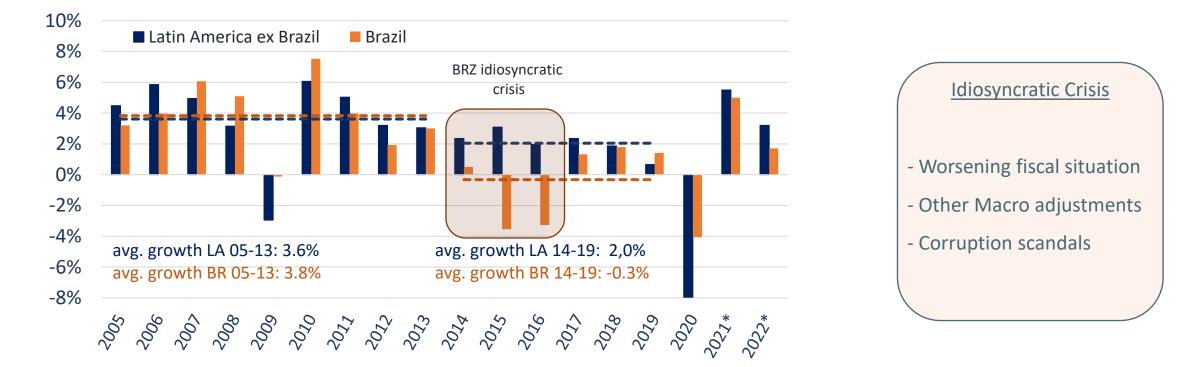
The Brazilian dream and fall

Real anual GDP growth (%) and average growth



2009

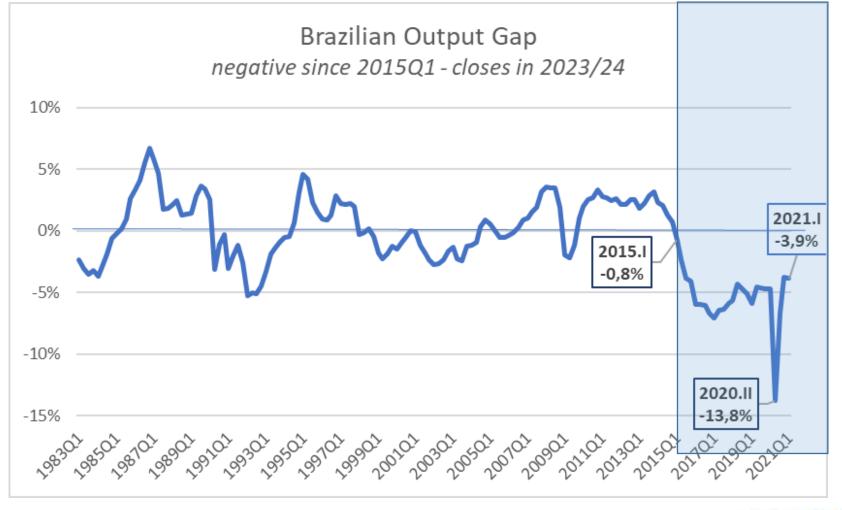
2013





Output Gap may reach 10 Years in negative territory

Real anual GDP growth (%) and average growth



FGV IBRE

Source: FGV IBRe

Present situation has worsened (again) in the short term

Favourable factors

* Terms of Trade

* Vaccination has accelerated

Unfavourable

- * Political Uncertainty
- * High inflation: 9,7% in August (12m)
- * High Unemployment (14%)
- * Risk of Energy Rationing
- * Long run: Fiscal situation still unsolved



Manufacturing and Consumer Confidence – Two different tales

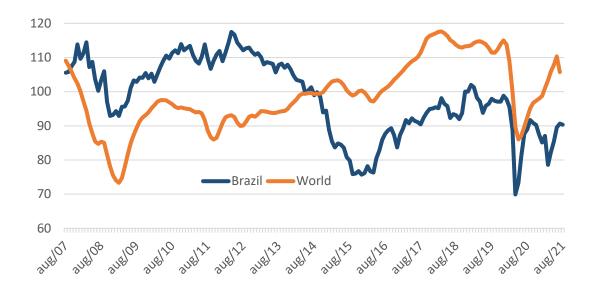
All series converted to average = 100; standard deviation = 10. Base period = 07/2010 to 06/2015

Brazilian Manufacturing Confidence not so far from the World





Brazilian Consumer Confidence far Away from the rest of World



Factors influencing lower Consumer Confidence:

- Unemployment
- Inflation
- Uncertainty (capturing non economic factors)



Business Surveys - Questions introduced after the pandemic:

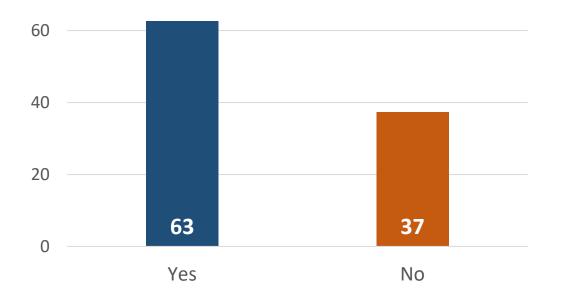
- Emergencial measures to protect employment and income
- Credit
- Problems related to Inputs and/or Raw Materials
- E-commerce



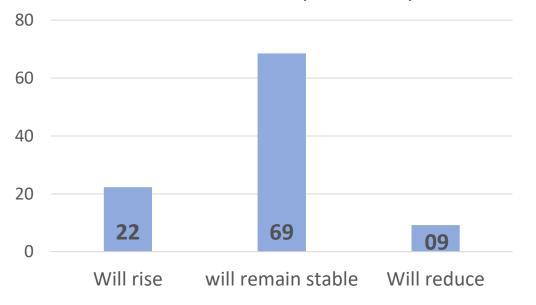
Questions related to the firm's workforce

December/2020, as % of total

Has the firm resorted to any government employment or income maintenance programme?



....What do you expect to happen with the firm's work force six months after the quarantine period* ?



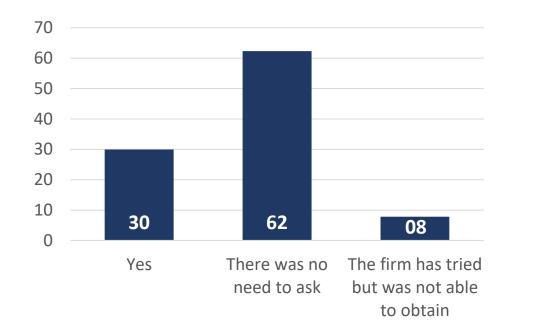
• Quarentine refers to the period in which firms that resorted to the employment/income maintenance Programmes wouldn't be able to fire employees.



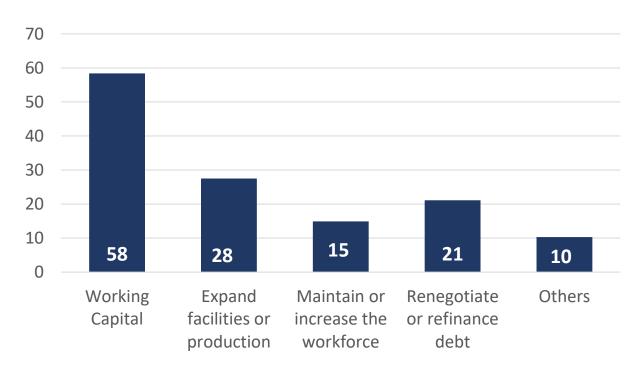
Questions about credit

Mar/2021, as a % of the total

Has the company obtained credit in the last 6 months?



In March 2021, 62.3% of companies did not need to obtain credit and almost 30% answered yes.



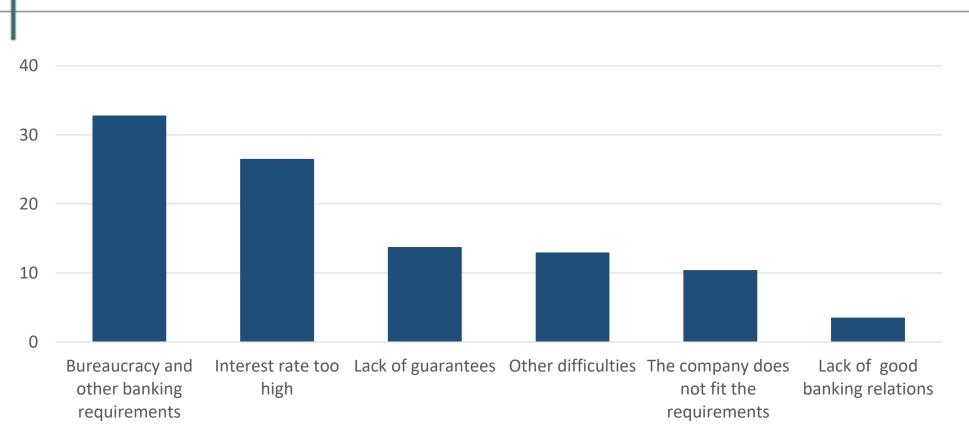
For the 30%, the main purpose was working capital



For what purpose?

Main reasons for not obtaining credit





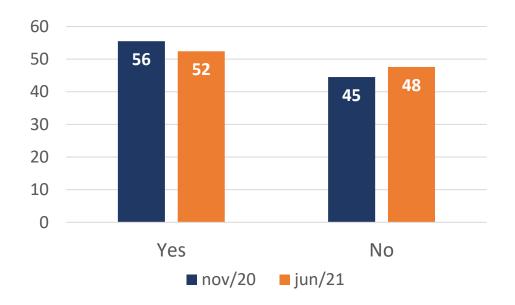
In March 2021, 65.7% of companies had no difficulties obtaining credit



Difficulties in obtaining inputs and/or raw materials

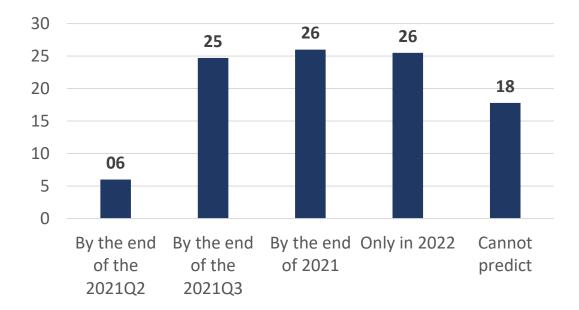
November/20 & June/2021, as % of total

Is the company facing difficulties in obtaining inputs and/or raw materials needed for production at the moment?



In the end of 2020, over half the (weighted) firms was having difficulties in obtaining inputs and/or raw materials. The result practically didn't change in 2021.

When does the firm believe that the provision of raw materials and intermediate goods will normalise ?



In jun/21, firms were quite divided on the time that the provision of raw materials and intermediate goods will occur.

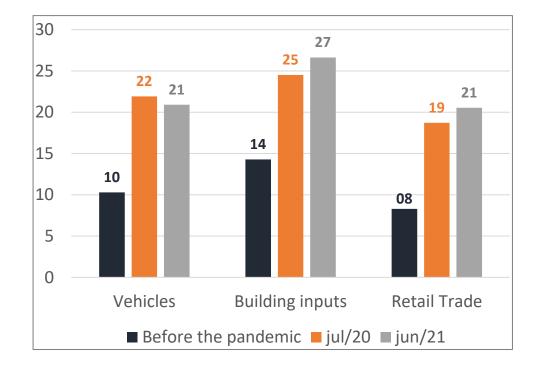


* There was also a question on the reasons for the difficulties in obtaining inputs and raw materials

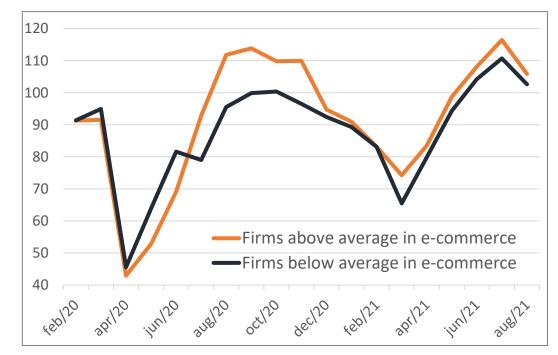
Understanding E-commerce (may turn into continuous question)

November/20 & June/2021, as % of total

E-commerce sales as percentage of total sales



Present Situation Index for firms according to the use of e-commerce (e-commerce sales as % of total sales in the trade sector)



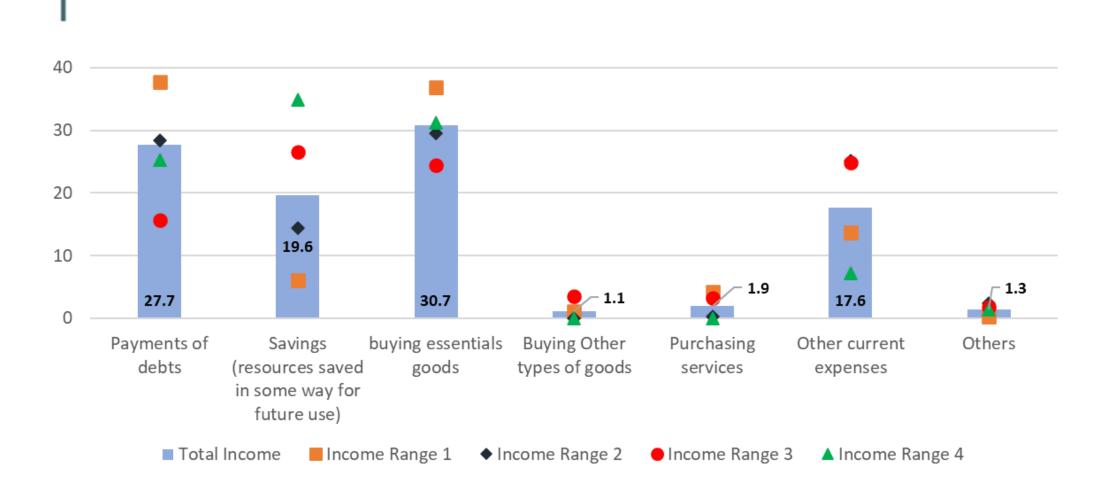


Consumer Surveys - Questions introduced after the pandemic

- Household spending, debt, default
- Emergencial transfers
- Precautionary savings



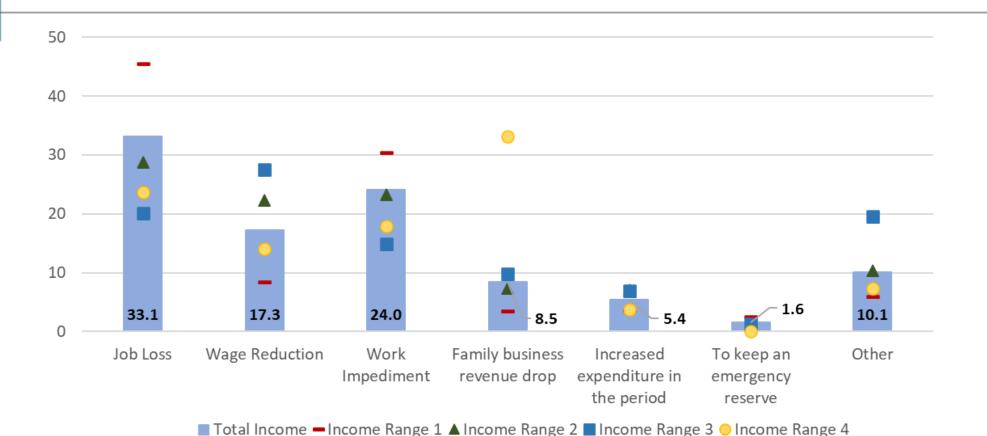
Ad Hoc Question: How emergencial (direct) transfers have been used? September/2020



Consumers used additional income transferred by the government to buy essential goods and pay off debts



Ad Hoc Question: Main reason for delaying debt payments during the crisis

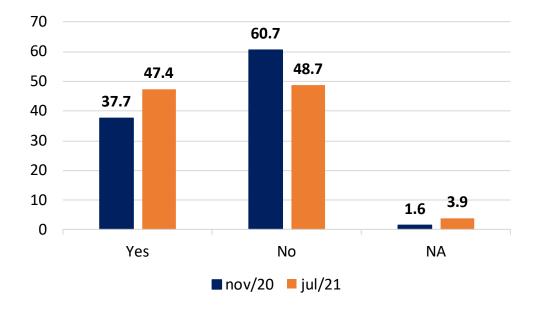


45% of the lowest income families had their family finances worsened due to unemployment. Among high income families, over 30% showed a drop in revenue from family businesses.



Income range 1: families with monthly income up to R\$ 2.1 thousand; Range 2: between R\$ 2.1 and 4.6 thousand; Range 3: between R\$ 4.8 and R \$ 9.6 thousand; Range 4: above R\$ 9.6 thousand

Ad Hoc Repeated Question: Spending destination of precautionary savings November/20 and July/21



Have you been saving due to fear of the pandemic ?

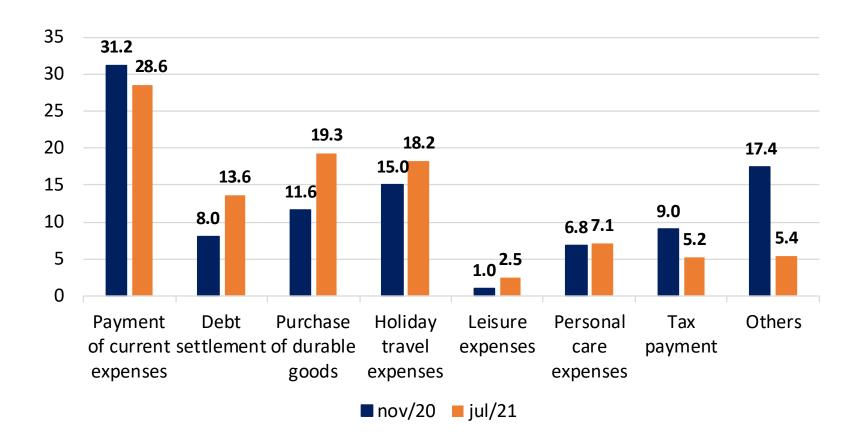
80 73.0 69.2 70 60 50 40 25.6 27.9 30 20 10 2.9 0 Spend partially Spend all Continue to save nov/20 jul/21

What do you intend to do with the saved resources?

Between late 2020 and mid-2021, more consumers started to save



Ad Hoc Repeated Question: Main destination of precautionary savings November/20 and July/21



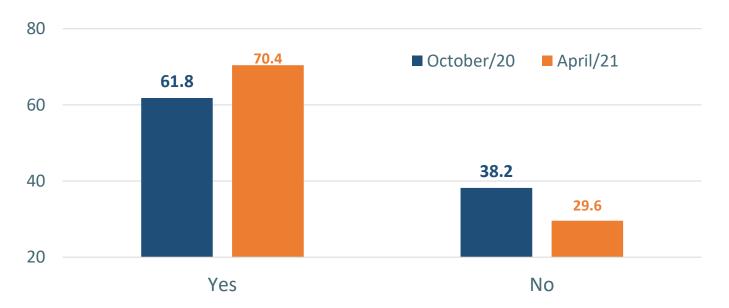
Payment of current expenses continue to be the main destination of precautionary savings. *Purchase of durable goods, holiday travel expenses* and *debt settlement* increased in 2021.



Ad Hoc Repeated Question

October/20 & April/21

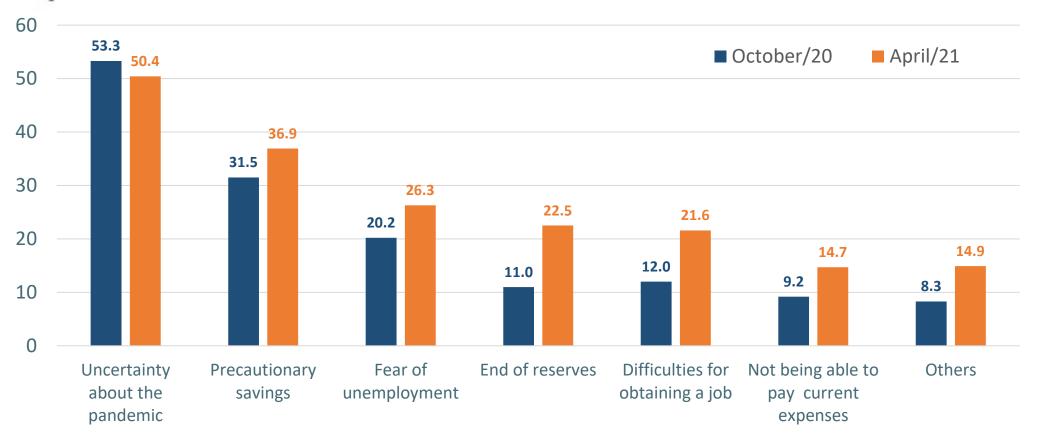
Have you been postponing purchases because of the pandemic ?





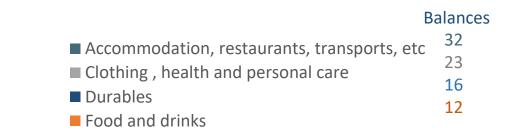
Ad Hoc Repeated Question October/20 & April/21

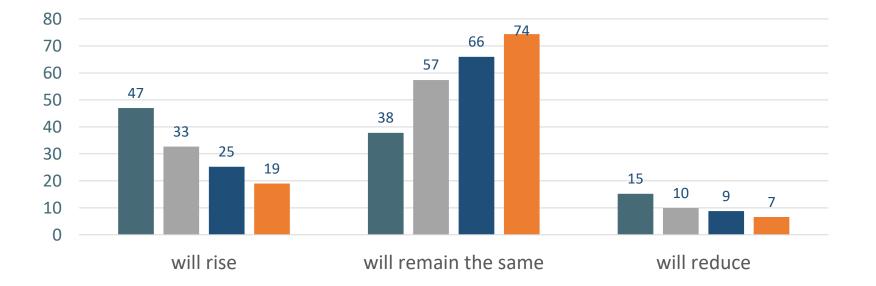
Which factors are leading to the postponement of purchases of goods and services ?





By the time the majority of Brazilians are already vaccinated against covid-19 what do you expect will happen to your consumption of.....







Thank you !





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