

# Fates of indebted households during the Corona crisis

Survey results from Slovakia



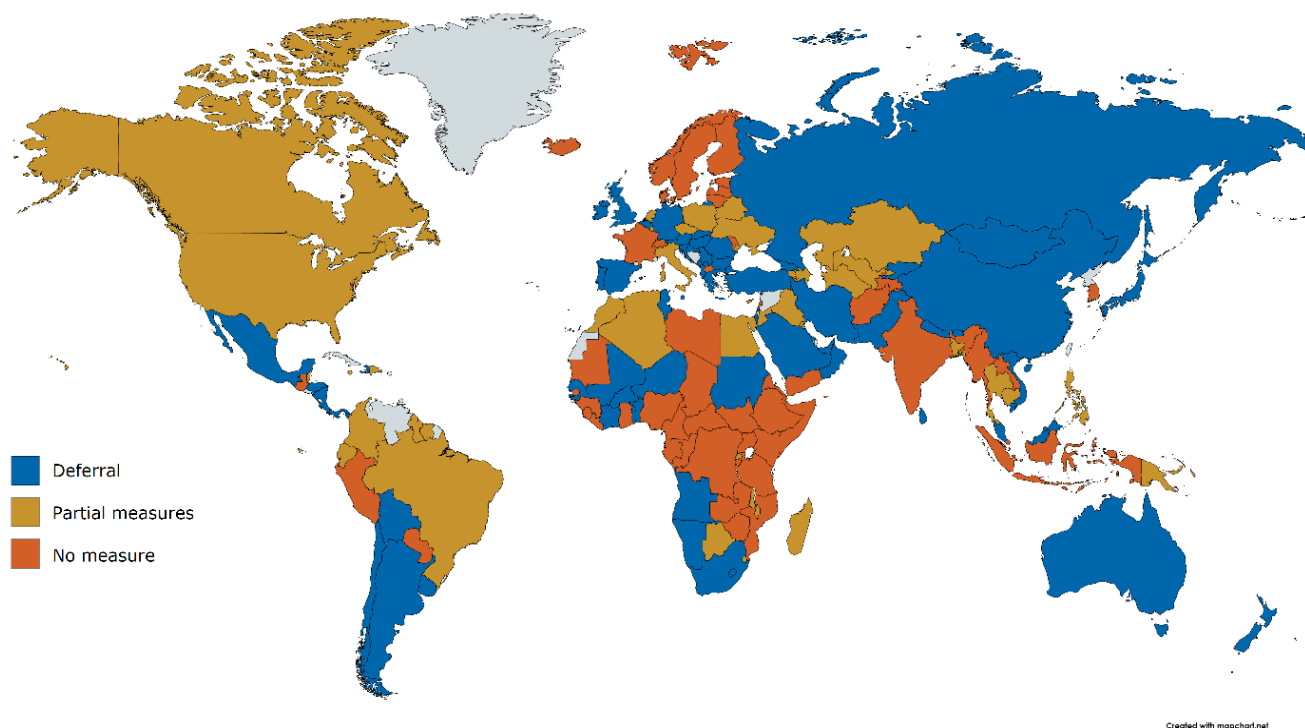
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88th East Jour Fixe, OeNB  
12 October 2021

# Why to study debt payment moratorium?

- One of the most widespread measures across countries
- Banks, CBs and supervisors have no information about the ability of debtors to repay their obligations



# Survey design

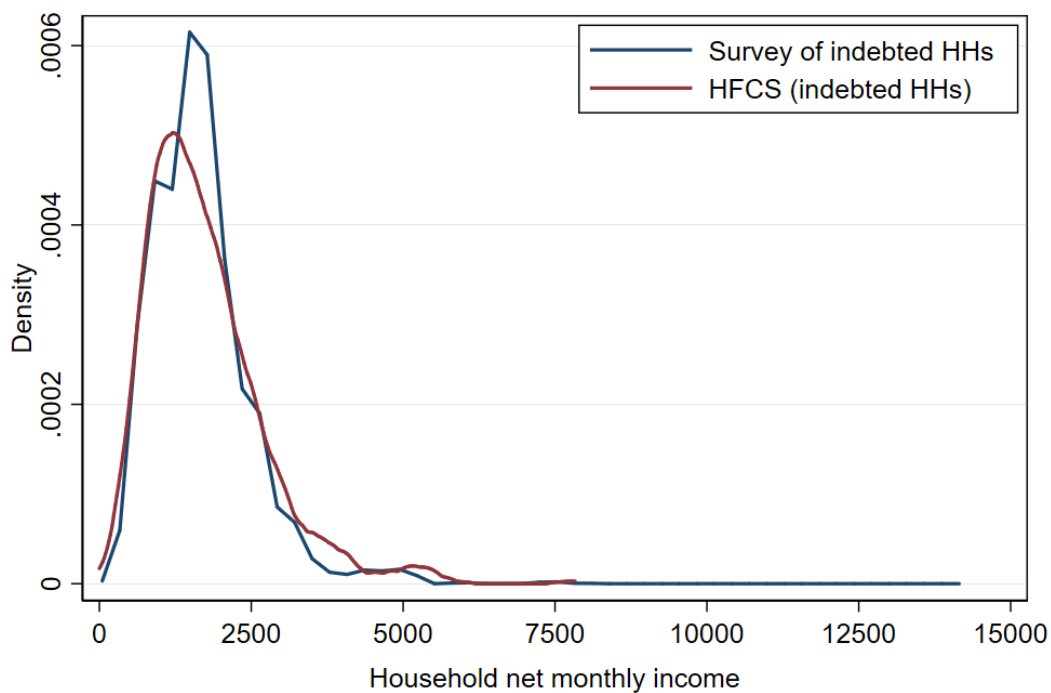
- Indebted HHs from the 3 largest banks (~ 2/3 of the retail loan portfolio)
- Non-probabilistic quota sampling with predetermined quotas; CATI interview mode
- Oversampling of HHs opting for deferral; weights calibrated to margins: income source, education, age categories, the level of monthly instalment, opting for a loan deferral
- 6 monthly waves from July – December 2020
- Response rate ~ 20%; 1000 cross-sectional HHs; 179 HHs in all 6 waves

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
<b>Number of respondents</b>	<b>991</b>	<b>995</b>	<b>1 004</b>	<b>1 007</b>	<b>1 007</b>	<b>1 004</b>
Of which: negative expectations	34	35	22	31	27	21
Of which: household with one adult	147	167	132	144	144	155
Of which: household with more adults	844	828	872	863	863	849
Of which: employed	563	563	586	639	632	640
Of which: self-employed	279	271	240	213	204	200
<b>Respondents with deferral</b>	<b>611</b>	<b>610</b>	<b>505</b>	<b>410</b>	<b>388</b>	<b>363</b>
Of which: negative expectations	30	31	20	25	25	16
Of which: household with one adult	98	112	73	67	61	60
Of which: household with more adults	513	498	432	343	327	303
Of which: employed	327	317	271	241	229	217
Of which: self-employed	185	187	141	101	86	81

# Survey design

**Table: comparison of the distribution of HH income**

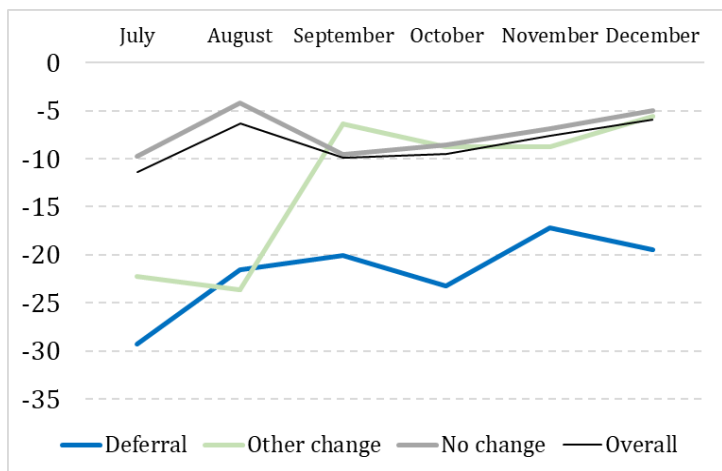
	Mean	p5	p10	p25	p50	p75	p90	p95
Survey (unweighted)	2 044	750	1 000	1 400	1 800	2 500	3 500	4 300
Survey (weighted)	1 675	700	800	1 100	1 500	2 000	2 500	3 000
HFCS (weighted)	1 735	587	696	1 042	1 561	2 210	2 920	3 694



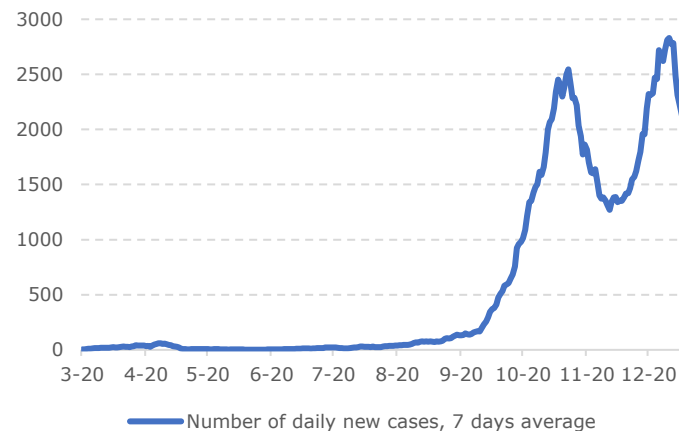
kernel = epanechnikov, bandwidth = 151.6217

# Survey results – stylized facts (1)

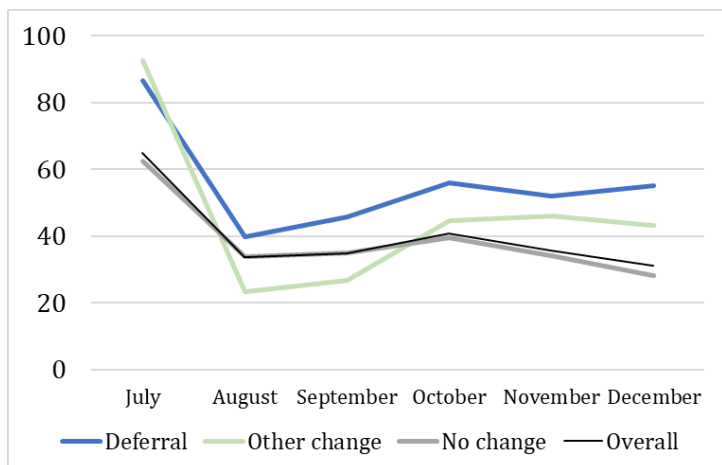
a) HHs income change compared to March 2020 (in %)



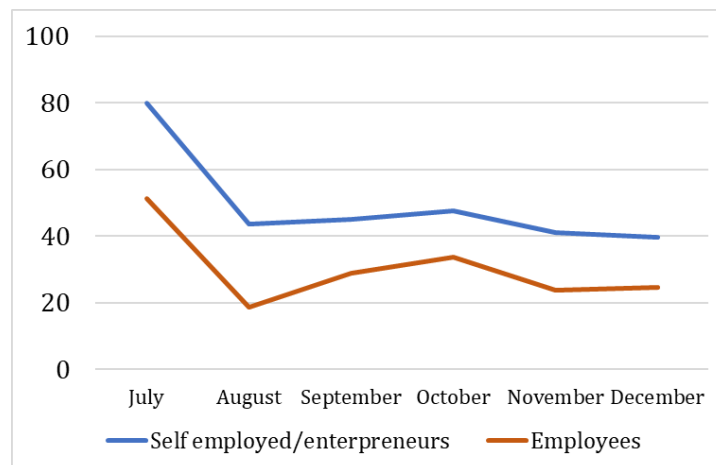
b) Number of new coronavirus cases



c) At least 1 HH member negatively affected

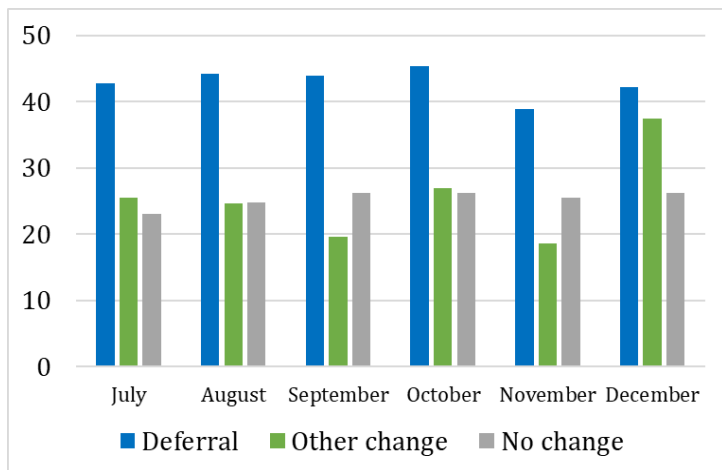


d) Negative impact by type of work

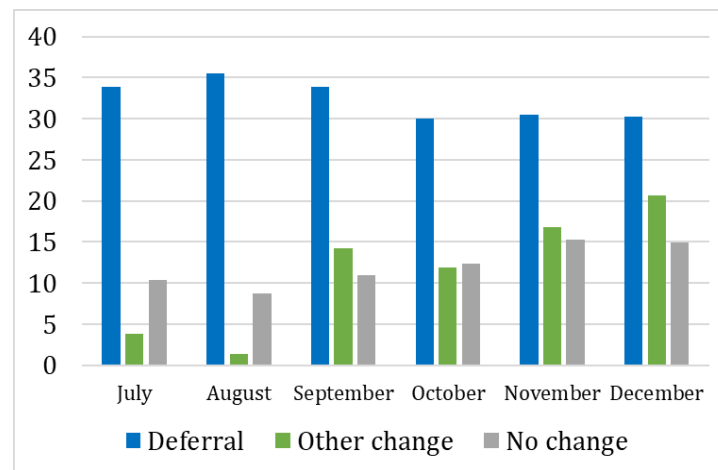


# Survey results – stylized facts (2)

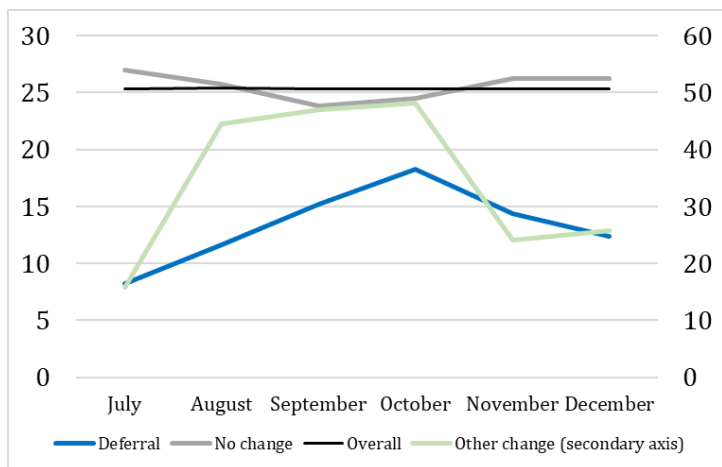
a) DSTI median



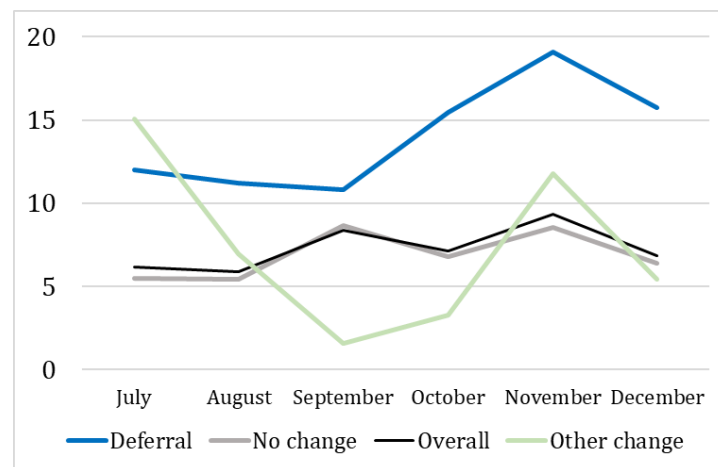
b) Share of HHs with DSTI over 60 % or under 0 %



c) Share of debtors with university education



d) Share of debtors working in sensitive sectors



# Factors explaining the use of deferral

- Estimations based on the 1<sup>st</sup> (July) wave

- Weighted probit regression

$$Pr(Y = 1) = F(\beta_0 + \beta_1 X + \beta_2 Z)$$

$$Y = \begin{cases} 1 & \text{if the household opted for deferral} \\ 0 & \text{otherwise} \end{cases}$$

**Table: Probit estimates of determinants of deferral (first round)**

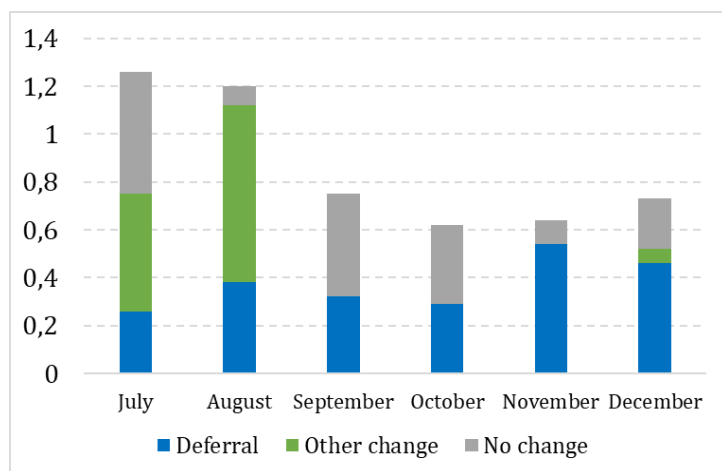
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Some household members report changes in economic status	0.030***			0.029***	0.012		0.012	0.012
	(0.011)			(0.011)	(0.012)		(0.012)	(0.010)
All household members report changes in economic status	0.039***			0.035**	0.014		0.011	0.011
	(0.014)			(0.014)	(0.015)		(0.015)	(0.012)
Work in a sensitive sector		0.026*		0.020		0.019	0.018	0.015
		(0.014)		(0.014)		(0.013)	(0.013)	(0.011)
Income change (IHS transformed)			-0.006***		-0.005***	-0.006***	-0.005***	-0.003**
			(0.001)		(0.002)	(0.001)	(0.002)	(0.001)
Expenditure change (IHS transformed)								-0.005***
								(0.001)
Before-crisis DSTI (Arctangent)	0.114***	0.117***	0.098***	0.113***	0.100***	0.099***	0.099***	0.091***
	(0.020)	(0.021)	(0.019)	(0.020)	(0.019)	(0.019)	(0.019)	(0.018)
University education	-0.032***	-0.032***	-0.025**	-0.031***	-0.025**	-0.023**	-0.024**	-0.025***
	(0.011)	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)
Age	-0.001**	-0.001***	-0.001**	-0.001**	-0.001*	-0.001**	-0.001**	-0.001**
	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	-0.017	-0.019*	-0.015	-0.016	-0.015	-0.015	-0.014	-0.012
	(0.010)	(0.011)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.008)
Region and bank FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R2	0.19	0.18	0.21	0.20	0.21	0.21	0.21	0.25
N obs.	974	974	973	974	973	973	973	973

Note: Marginal effects are evaluated at the mean of variables. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

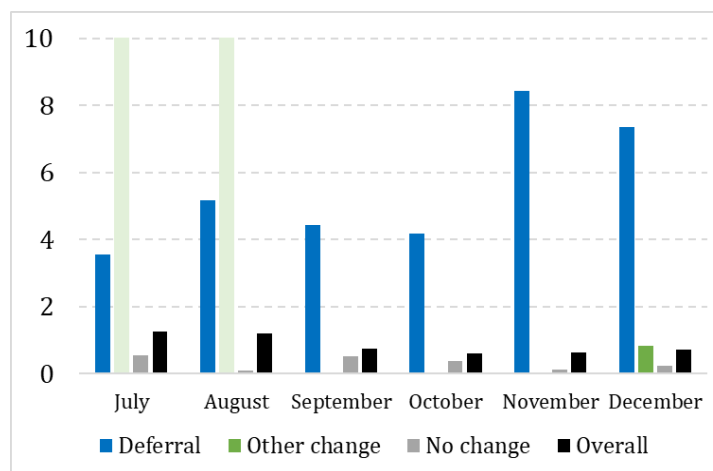
# Households' expectations

- Expectations of HHs with deferral estimated using probit regression
  - Cross-sectional data, panel analysis not feasible due to the low number of obs.
  - Both weighted and unweighted
- Key determinants of negative expectations:
  - Drop in income / negative change in the employment status
  - High pre-crisis DSTI / adverse development in the DSTI
  - 1<sup>st</sup> wave: self-employed respondents had higher probability of having negative expectations

a) Share of negative expectations among all HHs



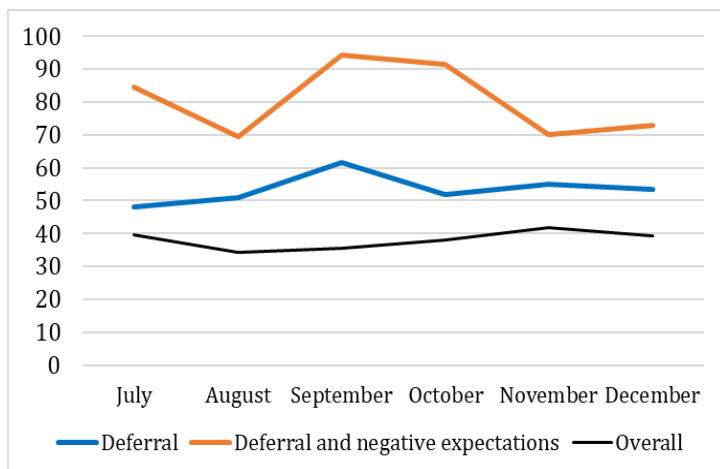
b) Share of HHs with negative expectations by type



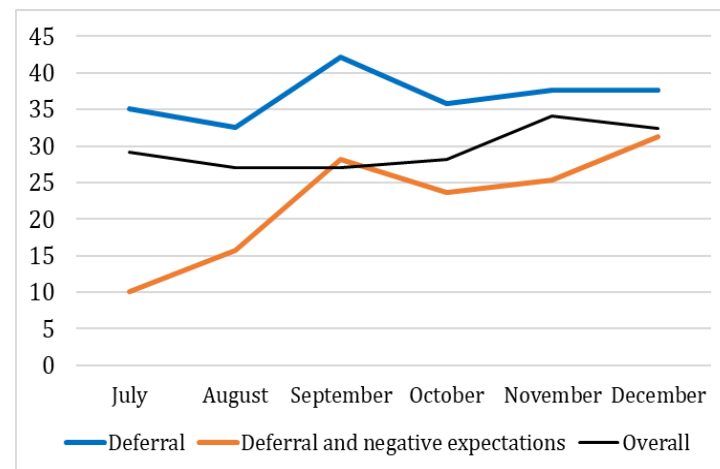


# Planned changes in financial behavior

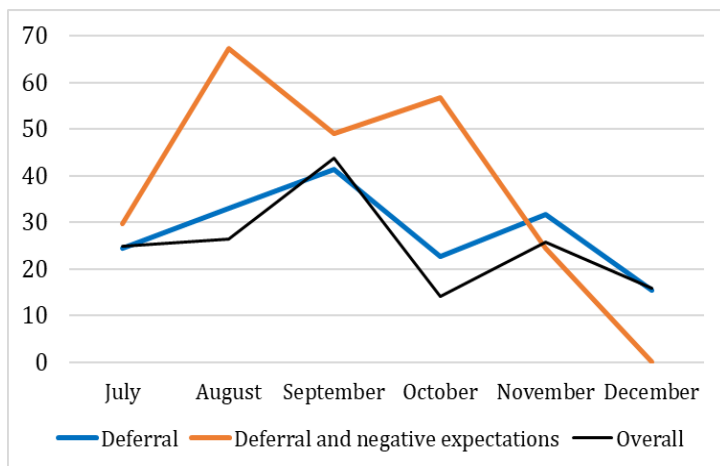
a) Any change



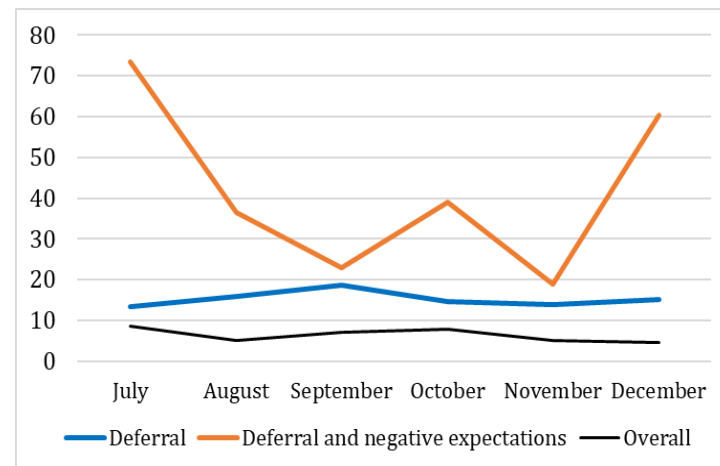
b) Higher financial reserve



c) Better diversified self-emp. business



d) Changing employment to a less sensitive sector



# Conclusions

- The moratorium helped the indebted households, as many of them were strongly hit by the pandemic
- HHs suffering from a drop in economic resources and stressed HHs (high DSTI) have higher propensity to opt for a deferral
- Results confirm the importance of timely and well calibrated macroprudential measures
- Demographic factors play a role as well: e.g., education and age
- The situation of most of those households has normalized over the survey (pandemic) period
- Less than 1% of indebted households do not expect an orderly repayment of their debt
- HHs plan to reconsider their financial behavior: keep higher financial buffer and work in safer sectors
- The collected data offer many interesting research questions to be analysed

Thank you for your attention!

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