

Household Spending and Fiscal Support
During the COVID-19
Pandemic:
Insights from a New
Consumer Survey



ECB NY FED conference on Expectations Surveys
12 November 2021

Dimitris Georgarakos (ECB) and Geoff Kenny (ECB)

Disclaimer

The views expressed in this presentation are those of the authors and do not necessarily reflect the views of the European Central Bank or of the Euro system.

Motivation

- COVID-19 pandemic: complex and multi-facetted shock with heterogeneous impact on economic agents
- Need for financial support varies across countries, sectors of employment, the nature of employment, type of employment contract, demographics (incl. family status)

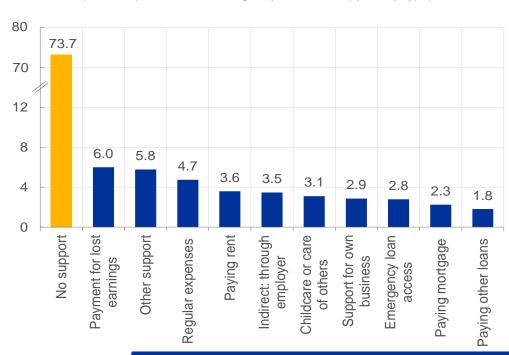
Challenges:

- the logistics of channelling fiscal support in a manner that was targeted,
 effective and efficiently allocated through different channels
- assess effectiveness of fiscal support

Government support during the pandemic; >70% did not receive any support

Types of COVID-19-related government support

(% of respondents indicating they received support, by type)



This paper

 Measure directly every household's perceptions about the adequacy of fiscal interventions in ensuring own financial wellbeing

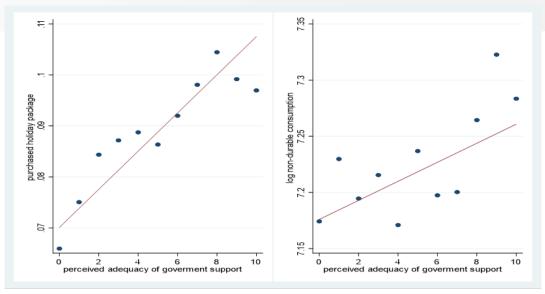
- Do public perceptions about adequacy of fiscal support affect household spending?
 - Empirical challenge
 - What are the channels?
 - Do perceptions of non-recipients (majority in population) matter, too?

HH perceived adequacy of Fiscal Support

Governments are taking financial support measures in response to the coronavirus (COVID-19) outbreak. How do you rate the adequacy of these measures for your household's financial situation?

```
0 (very poor) ..... 10 (very good)
```

Empirical challenge



- Raw data: strong positive association between public perceptions about fiscal interventions and household spending
- Identifying a causal effect of such perceptions is challenging and likely cannot be addressed by panel data techniques (e.g., panel FE's): reverse causality; correlations with time-varying unobservables

Possible channels

Households that view government interventions as adequate...

- expect own income prospects to be little affected in response to the pandemic or even improved
- anticipate that future economic conditions will facilitate access to credit (i.e., unlikely to be liquidity constrained)
- form a more positive outlook about future own financial situation (and country's prospects)
- perceive that there is sufficient public insurance and a safety net against the COVID-19 shock
- expect increases in future taxation

What We Do

- RCT: induce exogenous variation to household perceptions about fiscal support
- Estimate the effect of public perceptions about fiscal support on:
 - **Spending** on big ticket items
 - Non-durable spending and budget shares
- Shed light on **channels** by estimating the effect on various expectations (e.g. future household income, access to credit, financial situation, future tax burden)
- Estimate heterogeneous treatment effects of FS for recipients and nonrecipients

What We Find (Preview)

- Wide heterogeneity in perceived adequacy across countries, households and over time
- Simple and factual information about pandemic-related actual fiscal support and their aims affects household perceived adequacy (esp. for those with a negative prior)
- Public perceptions matter: causal effect on household spending on big ticket items and some discretionary goods
- More positive assessment about fiscal interventions: improves household expectations about own income, future credit access, financial sentiment; no effects on future tax burden; inflation expectations; growth expectations
- Perceptions important for the broader population; can incentivize spending among non-recipients

Literature

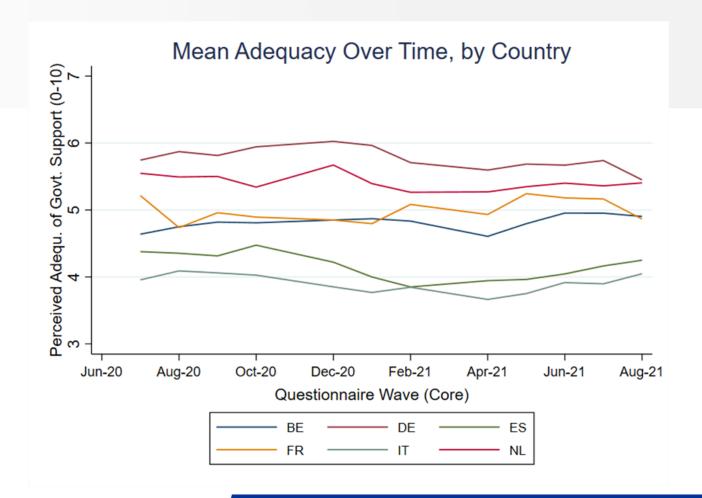
- Widely held view that expansionary fiscal interventions can boost consumer and business confidence, which in turn can trigger private spending and investment (Carroll et al. 1994 and Ludvingson 2004)
- Wide dispersion of public perceptions and support about policies (e.g., tax, trade, health-care, social mobility), see, e.g., Stantcheva (2020); economists and the broader public hold starkly different views on most economic issues (Sapienza and Zingales, 2014); important role for ideology and communication channels (Blinder and Krueger, 2004)
- Role of effective communication in influencing economic outcomes (e.g., Coibion et al. 2019 on CB communication; Coibion et al. 2020: info on fiscal outlook and inflation expectations)
- **Impact of tax rebates**: Coibion et al. (2021): <20% used to increase spending; Sahm, Shapiro and Slemrod (2010); and Shapiro and Slemrod (2003)
- Christelis et al. (2020): **euro area households with high** pandemic-induced **financial concerns more** reluctant to spend out of a (hypothetical) income transfer
- Final verdict on the overall effectiveness of the pandemic-related government support: more time, more data, more research!

Consumer Expectations Survey (CES)

- Internet panel; DE, FR, ES, IT, BE, NL; ~ 10,000 households; pilot started January 2020 (January 2021: +5 EA countries; 19,000 households)
- Sample: PS (via RD) & NPS (via existing online panels); sample weights: nationally representative for <70 years old
- Household perceptions, expectations and behavior (incl. consumption, saving/ investing, borrowing)
- Mixed-frequency modular approach (background; monthly, quarterly, annual topical modules; special-purpose ad hoc surveys)

Consumer Expectations Survey (CES)

- **November 2020**: 10 min special-purpose survey following the regular survey wave (also utilize December 2020 February 2021 waves)
- Consumption of larger items (extensive margin): house, cars, durables, holidays, luxury items (incl. gadgets)
- Non-durable consumption; January 2021; 10 items; follow-up checking screen and monthly running sum
- For a description see: this paper (2021) and ECB Evaluation Report (2021)



Higher perceived adequacy of fiscal support correlates with...

- (+) male
- (+) income
- (+) expected financial situation
- (-) age
- (-) self-employed
- (-) liquidity constrained

An RCT Approach to the Question

Elicit prior perceived adequacy of FS and planned decisions



Information treatment



Measure **posterior** perceived adequacy of FS



Measure ex-post decisions consumption



Control group (no information)



Measure perceived adequacy of FS



Measure ex-post decisions consumption

Treatments

T1: "In order to help <country name> to recover from the coronavirus (COVID-19) outbreak, the Government has recently agreed on a comprehensive package of measures worth <**€XX>**. This is a very substantial package that, in terms of size, corresponds roughly to <**€ZZ>** per person in <your country>. A large part will support investment, employment and economic recovery."

BE: 68 billion (6,000); FR: 522 billion (8,000); DE: 1,400 billion (17,000); IT: 670 billion (11,000); NL: 107 billion (6,000); ES: 216 billion (4,500)

T2: "In order to help the EU to recover from the coronavirus (COVID-19) outbreak, EU leaders have recently agreed on a comprehensive package of measures worth €1,8 trillion. This is a very substantial package that, in terms of size, corresponds roughly to € 4,000 per person in the EU. A large part will support investment, employment and economic recovery."

T3: T1 & T2

Treatments

T1: "In order to help <country name> to recover from the coronavirus (COVID-19) outbreak, the Government has recently agreed on a comprehensive package of measures worth <€XX>. This is a very substantial package that, in terms of size, corresponds roughly to <€ZZ> per person in <your country>. A large part will support investment, employment and economic recovery."

BE: 68 billion (6,000); FR: 522 billion (8,000); DE: 1,400 billion (17,000); IT: 670 billion (11,000); NL: 107 billion (6,000); ES: 216 billion (4,500)

T2: "In order to help the EU to recover from the coronavirus (COVID-19) outbreak, EU leaders have recently agreed on a comprehensive package of measures worth €1,8 trillion. This is a very substantial package that, in terms of size, corresponds roughly to € 4,000 per person in the EU. A large part will support investment, employment and economic recovery."

T3: T1 & T2

Treatments

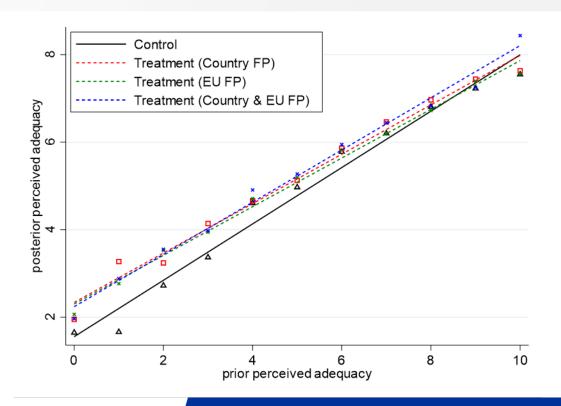
T1: "In order to help <country name> to recover from the coronavirus (COVID-19) outbreak, the Government has recently agreed on a comprehensive package of measures worth <€XX>. This is a very substantial package that, in terms of size, corresponds roughly to <€ZZ> per person in <your country>. A large part will support investment, employment and economic recovery."

BE: 68 billion (6,000); FR: 522 billion (8,000); DE: 1,400 billion (17,000); IT: 670 billion (11,000); NL: 107 billion (6,000); ES: 216 billion (4,500)

T2: "In order to help the EU to recover from the coronavirus (COVID-19) outbreak, EU leaders have recently agreed on a comprehensive package of measures worth €1,8 trillion. This is a very substantial package that, in terms of size, corresponds roughly to € 4,000 per person in the EU. A large part will support investment, employment and economic recovery."

T3: T1 & T2

Treatment Effects on Perceived Adequacy of Fiscal Support



Post-Treatment Behavior: spending

```
\begin{aligned} &PurchDur_i^k = \alpha_1^{(k)} Post_i^{adequacy} + \alpha_0^{(k)} Prior_i^{adequacy} + \gamma(PlanDur_i^k) + Controls + \\ &error_i^{(k)}, \\ &Post_i^{adequacy} \colon I\{Treat\ j\} + I\{Treat\ j\} \times Prior_i \end{aligned}
```

- 'Big ticket' items (extensive margin): house, car, durables, holidays, luxury goods [December 2020, January 2021, February 2021 waves]
- **Non-durables** 1) food, beverages, groceries, tobacco, restaurants, cafes, canteens; 2) housing (incl. rent), utilities, furnishing, housing equipment, small appliances and routine maintenance of the house; 3) clothing, footwear; 4) health care and personal care products; 5) transport; 6) travel, recreation, entertainment and culture; 7) education and other. [**January 2021 wave**]

Effects of perceived adequacy of government support on actual purchases of durable goods and services (1m PT)

	Home	Durable	Car	Holiday	Luxury
_	(1)	(2)	(3)	(4)	(5)
Posterior: perceived adequacy	0.030***	0.060	0.047***	0.047***	0.037**
	(0.008)	(0.040)	(0.014)	(0.013)	(0.015)
Plan to buy a given durable	0.110***	0.226***	0.068***	0.040***	0.230***
	(0.022)	(0.014)	(0.012)	(0.007)	(0.026)
Observations	8,542	8,558	8,542	8,542	8,542
1 st -stage F stat	16.14	14.45	16.69	15.95	15.17
Over-id (p-value)	0.746	0.575	0.558	0.698	0.886

Similar effects 2m & 3m PT

Effects of perceived adequacy of government support on budget shares for nondurable consumption

	Food	Housing, utilities, furniture, home Clothing equipment		Healthcare	Transport	Recreation	Education and other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Posterior: perceived adequacy	0.025	-0.015	0.013**	0.014*	0.003	0.008***	0.015*
	(0.017)	(0.018)	(0.005)	(0.007)	(0.005)	(0.003)	(0.008)
Observations	8,154	8,159	8,154	8,155	8,157	8,152	8,156
1 st -stage F stat	11.53	14.36	13.88	12.86	14.86	15.01	13.76
Over-id (p-value)	0.803	0.321	0.361	0.040	0.426	0.418	0.926

Effects of perceived adequacy of government support on expected: **household** income; access to credit; financial situation; and tax burden

	Expected household income growth	Expected access to credit	Expected financial situation to improve	Expected tax burden
	(1)	(2)	(3)	(4)
Posterior: perceived adequacy	0.654*	0.145**	0.068**	0.061
	(0.378)	(0.074)	(0.030)	(0.118)
Observations	7,552	7,912	8,554	8,401
1 st -stage F stat	17.07	13.03	13.78	12.72
Over-id (p-value)	0.434	0.287	0.091	0.409

No effects on: inflation expectations; expected GDP growth

Effects of perceived adequacy of government support on actual purchases of durable goods and services for households that **have not** received government support

	Home	Durable	Car	Holiday	Luxury	
	(1)	(2)	(3)	(4)	(5)	
Posterior: perceived adequacy	0.028***	0.107*	0.046***	0.052***	0.027	
	(0.010)	(0.058)	(0.017)	(0.017)	(0.017)	
Plan to buy a given durable	0.093***	0.244***	0.059***	0.041***	0.218***	
	(0.027)	(0.018)	(0.013)	(0.008)	(0.031)	
Observations	6,317	6,320	6,313	6,312	6,313	
1st-stage F stat	8.667	7.526	8.270	8.685	8.333	
Over-id (p-value)	0.181	0.992	0.675	0.567	0.896	

Effects of perceived adequacy of government support on actual purchases of durable goods and services for households that **have** received government support

	Home	Durable	Car	Holiday	Luxury	
	(1)	(2)	(3)	(4)	(5)	
Posterior: perceived adequacy	0.039**	0.001	0.049**	0.039**	0.060**	
	(0.015)	(0.055)	(0.024)	(0.020)	(0.030)	
Plan to buy a given durable	0.116***	0.170***	0.094***	0.035**	0.269***	
	(0.035)	(0.024)	(0.027)	(0.016)	(0.047)	
Observations	2,220	2,233	2,224	2,225	2,224	
1 st -stage F stat	9.119	8.823	10.93	8.761	7.944	
Over-id (p-value)	0.165	0.225	0.177	0.270	0.785	

Conclusions

- Simple and factual information about government support policies and their aims can help improve consumer perception about the adequacy of fiscal interventions
- Strong and persistent positive causal effect on household spending (esp. on big ticket items like holidays and cars)
- Households with a more positive assessment about fiscal interventions are also more optimistic about own income prospects, future access to credit and own financial situation
- No effect on expectations about future taxes (i.e., no evidence of a Ricardian channel that would attenuate the stimulatory effects of fiscal policy), inflation or GDP growth

Conclusions

- Effectiveness of fiscal support: key role of public perceptions
- Value of effective communication about fiscal policies
- Fiscal interventions and the related communication can have broader consequences as they influence the behaviour of household groups beyond the immediately targeted ones

Thank you!