WoW203 Lab 2 Presentation

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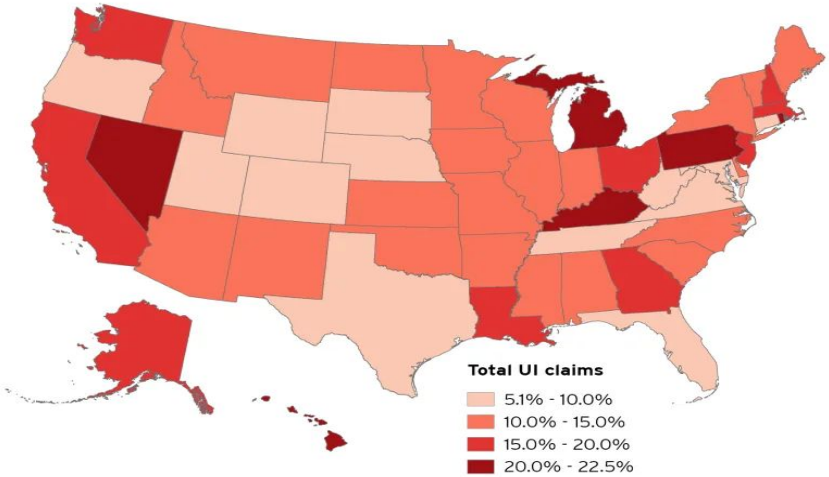
Fall 2020 Tuesday 4:00pm PT
Prof Oleg Melnikov

Research Question-1

How effective was UI and stimulus relief at reducing case rate per 100k across states?

MAP 1

Unemployment insurance claims by state relative to March 2020 employment
March 14 to April 11

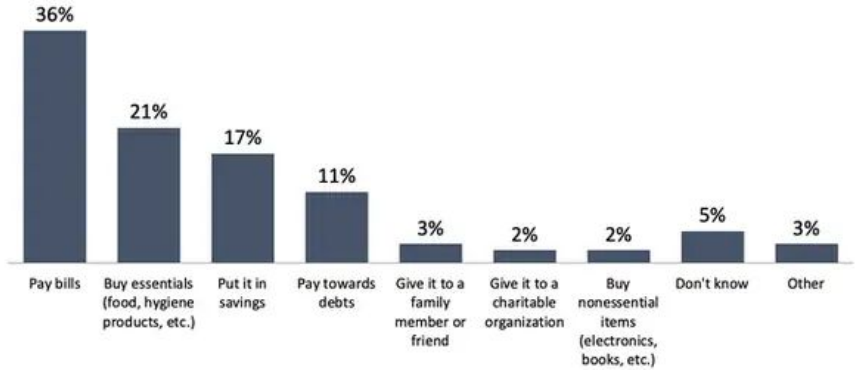


Source: Brookings analysis of Department of Labor and BLS-LAUS data

B | Metropolitan Policy Program at BROOKINGS

How US Adults Would Spend A $1,000 Government Stimulus Payment

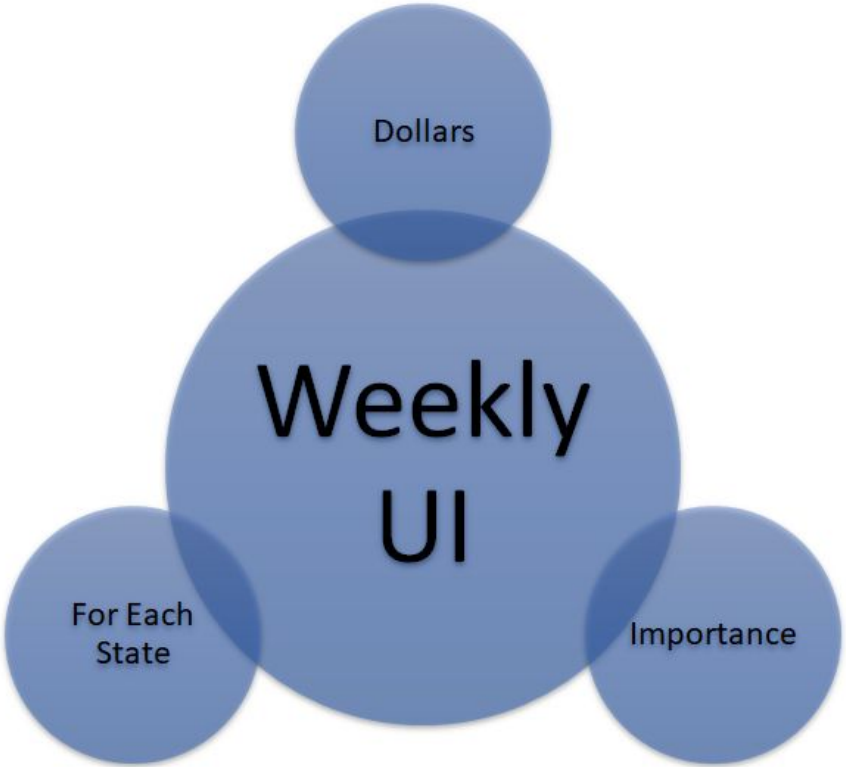
Q: If you were to receive $1,000 from the federal government, what would you be most likely to do with the majority of the funds?

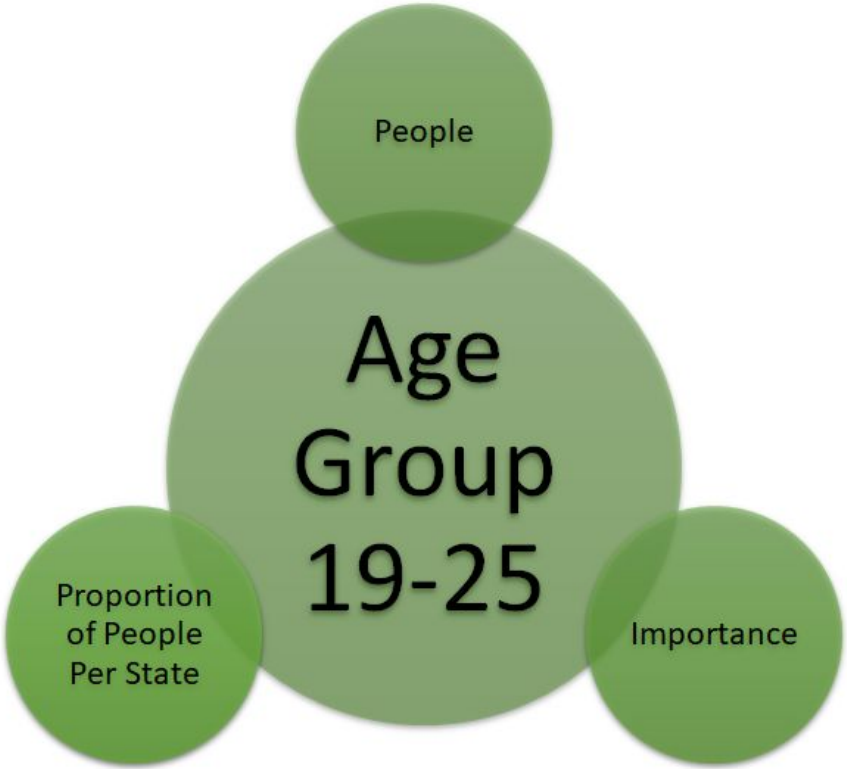


Source: YouGov Daily Question, n=12,118 US adults, March 2020

BUSINESS INSIDER INTELLIGENCE

Variables


Dollars
Weekly UI
For Each State
Importance


People
Age Group 19-25
Proportion of People Per State
Importance

Regression Table

Table 1: Regression Table

	Dependent variable:		
	case_rate_per_100000		
	(1)	(2)	(3)
adults_19_25	96,997.020***	92,872.060***	74,334.310***
	(17,428.040)	(16,798.810)	(17,168.180)
weekly_ui		−1.953**	−2.829***
		(0.851)	(0.848)
days_till_stay_at_home			3.618**
			(1.608)
days_till_emp_mask			6.425***
			(1.941)
gov_party			−308.645
			(248.033)
pop_density			1.366**
			(0.611)
tests_per_100k			0.013**
			(0.006)
Constant	−5,663.542***	−3,196.069*	−2,538.011
	(1,518.141)	(1,809.375)	(1,697.460)
Observations	50	50	50
R^2	0.392	0.453	0.636
Adjusted R^2	0.380	0.430	0.576
Residual Std. Error	903.573 (df = 48)	865.945 (df = 47)	747.225 (df = 42)
F Statistic	30.976*** (df = 1; 48)	19.494*** (df = 2; 47)	10.498*** (df = 7; 42)
Note:			*p<0.1; **p<0.05; ***p<0.01

Model 1: Baseline Model without Weekly UI

Case Rate = $\beta_0 + \beta_1$ Proportion of Adults 19-25

Model 2: Model of Focus Containing Weekly UI

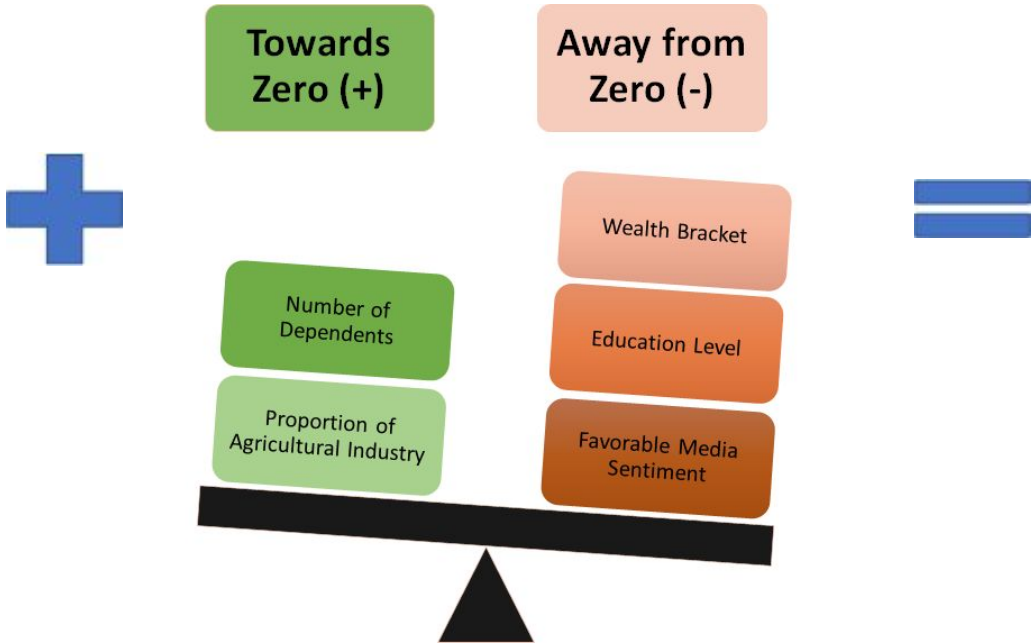
Case Rate = $\beta_0 + \beta_1$ Proportion of Adults 19-25
$+ \beta_2$ Weekly UI

Model 3: Inclusive Model Testing Robustness of Weekly UI

Case Rate = $\beta_0 + \beta_1$ Proportion of Adults 19-25
$+ \beta_2$ Weekly UI
$+ \beta_3$ Days till Stay-At-Home Order
$+ \beta_4$ Days till Employee Mask Mandate
$+ \beta_5$ If Governor is Republican
$+ \beta_6$ Population Density
$+ \beta_7$ Testing per 100K

Omitted Variable Bias & Conclusions

Negative UI Coefficient (model 2)



Potential for: Overestimation