Economic policy and health sector

Empirical evidence

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Who are we?

Example 1 – what influences the economic impact

Exampe 2 – ecnomic properties and epidemic outcome

What can we do and where to go?

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Who are we?

Main areas or research at the Institute for Finance and Artificial Intelligence are: health economics, corporate finance, financial markets and institutions, risk management, econometrics and data science (including artificial intelligence and machine learning). We develop new methods and their software and hardware implementation. Our members work on projects for industry and different government institutions in and outside Slovenia.

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Example 1 – what influences the economic impact

Multipliers:	Output		Income		Value added		log(Employment)		Import	
Explanatory variables:	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.
X01	0.030	0.001	0.005	0.091	0.004	0.057			-0.001	0.106
X02	-0.001	0.001								
X03									-0.012	0.038
X04	-0.038	0.004								
X05					0.011	0.051			-0.006	0.002
X06							-1.253	0.000		
X07							-0.343	0.020		
X08							-0.524	0.000		
X09									0.001	0.052
X10									-0.008	0.001
C	2.416	0.000	0.332	0.112	0.503	0.055	3.454	0.009	1.043	0.000
R-squared		0.673		0.159		0.305		0.975		0.888

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Example 2 – economic properties and epidemic outcome

Covid 19 outcome variable	Model 1 LOG(Deaths - cumulative total)		Model 2 Deaths - cumulative total		Model 3 Deaths - cumulative total		Areas of possible policy measures	Types of possible policy measures
Determinants of the Covid 19 outcome	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.		
South America	-1.381 ***						Regional characteristics	No policy measures possible
Africa	-1.856 ***							
Asia	-1.894 ***		-0.639 *		-0.7105 *			
Oceania	-3.360 ***		-2.828 ***		-4.8998 ***			
Covid 19 Cases - cumulative total	0.307 ***						Virus characteristics	No policy measures possible
Covid 19 virus clade _20A	0.024		0.030		0.4856			
Covid 19 virus clade _20B	0.250 *		0.240 *		0.6210 ***			
Share of population older than 65	-0.587 **						Population characteristics	Long- and mid-term policy measures possible
Share of the population living in urban areas	1.713 ***				2.0748 **			
Mean BMI (male and female)					3.872 **		9.9473 ***	
Female employment-to-population ratio	-1.266 ***						Equality characteristics	Long-, mid-, and short-term policy measures possible
Gini index of consumption			-1.814 **		-3.9628 ***			
Share of public health care sector			-0.478 *		-0.9352 **		Health sector characteristics	Long-, mid-, and short-term policy measures possible
Healthcare Access and Quality Index					-3.9142 **			
GDP per capita, PPP (constant 2011 international $)			-0.393 *				National economy characteristics	Long-, mid-, and short-term policy measures possible
High-Tech export (share of manufactured exports)			-0.350 **		-0.7123 ***			
FDI country attractiveness			5.063 ***		6.7496 ***			
Share of the agriculture sector	-0.393 *							
Google mobility measures			0.451 ***		0.4016 ***		Cultural characteristics	Short-term policy measures possible
Constant	0.101		-5.472 ***		-11.4865 ***			
Sample	78		61		61			
R-squared	0.734		0.664		0.7918			

Complexity of possible policy measures

JAGRIČ, Timotej, FISTER, Dušan., JAGRIČ, Vita. Reshaping the Health-care with Economic Policy Measures Based on COVID Epidemic Severity: A Global Study. UNDER REVIEW -2021

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What can we do and where to go?

Which type of provider has a higher impact on the local economy?

The impact of a reduction in the provision of health services on the local economy.

Climate change impacts health but the health-care industry impacts the environment.

Structural changes and economic relevance of the health sector?

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