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**Economic Connectivity** 

in the South-Caucasus: A Post-Conflict Economic Scenario

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### Importance of the Research

- Building a post-conflict economic scenario
- The future of the region without Nagorno-Karabakh conflict
- Quantifying benefits of the resolution of Nagorno-Karabakh conflict
- First econometric modeling on the subject

## Benefits of the Single Market

- Attractive ground for Foreign Direct Investment (FDI)
- Free labour movement in the region
- Free capital movement in the region
- No import/export tax
- Caspian Sea ports linked to Black Sea ports

### Research Design

- Econometric Modeling
- Two stage Least Squares Regression (2SLS) Analysis. Widely used to analyse the feedback loops (bilateral relations) rather than the unilateral relations among variables. by applying two consecutive OLS methodologies, estimates two-way impact among variables, after considering the impacts of control variables.
- Main indicators: GDP and FDI
- Additional indicators: Labour force, Export, Domestic investment.

### Research Design

- The regressions are estimated with following specification and by applying STATA:
- GDP = Intercept + b<sub>1</sub>\* FDI + b<sub>2</sub> \* Domestic Investments + b<sub>3</sub> \* .....
- FDI = Intercept +  $b_1^*$  GDP +  $b_2^*$  Exports +  $b_3^*$  .....

### Research Design

- Regression estimates are tested for (1) normality, (2) multicollinearity, (3) heteroskedasticity, and (4) serial correlation, to estimate reliability of the regression results
- Normality tests have been conducted via the Shapiro-Wilk and Jarque-Bera tests
- The model was run for all three countries separately

- Low volume of the investment from outside of Caucasus
- Azerbaijan is one of the biggest investors in the last three years
- Liberal economic policies (compared to Azerbaijan and Armenia) – attracting more investment from outside in case of the single market

- In line with the theory, GDP and FDI in Georgia are bilaterally related
- A dollar increase in FDI increases GDP by 11 USD, and one dollar increase in GDP increases FDI by 0.05 USD.
- Impact of GDP to FDI is significant at 90% and 95% confidence intervals, insignificant at 99% confidence interval. Nevertheless, FDI-GDP relation is significant at 99% confidence interval

Three-stage least-squares regression

#### . reg3 (gefdi gegdp gedomi gelab) (gegdp gefdi gecapu geex gelab)

Equation	Obs	Parms	RMSE	"R-sq"	chi2	Р
gefdi	40	3	80.43699	0.6940	85.58	0.0000
gegdp	40	4	893.1862	0.6411	159.79	0.0000

	Coef.	Std. Err.	z	P> z	[95% Conf.	Interval]			
gefdi	 I								
gegdp	.0538881	.0259226	2.08	0.038	.0030807	.1046954			
gedomi	1.65e-07	3.71e-08	4.45	0.000	9.24e-08	2.38e-07			
gelab	-342.331	43.81007	-7.81	0.000	-428.1971	-256.4648			
_cons	21479.95	2733.547	7.86	0.000	16122.3	26837.6			
gegdp									
gefdi	11.15379	1.914315	5.83	0.000	7.401802	14.90578			
gecapu	-1.10e-06	3.42e-07	-3.21	0.001	-1.76e-06	-4.26e-07			
geex	.0009818	.0006659	1.47	0.140	0003233	.0022869			
gelab	3816.301	484.5884	7.88	0.000	2866.525	4766.077			
_cons	-239431.5	30579.24	-7.83	0.000	-299365.7	-179497.3			
Endogenous variables: gefdi gegdp Exogenous variables: gedomi gelab gecapu geex									

### Benefits for Azerbaijan

- Cheap workforce from Georgia and Armenia
- Less military spending
- New safe areas for investment
- Increase of transportation from Russia to Armenia via Azerbaijan

### Benefits for Azerbaijan

- A dollar of attracted FDI increases GDP of Azerbaijan by 0.11 USD
- The increased GDP attracts 5.94 USD FDI per one dollar increase.
- The relations are significant at 99% confidence interval. The significance holds even stronger, once model accounts the control variable.

### **Benefits for Armenia**

- Economic Integration with Azerbaijan & Turkey
- Flow of investment from Azerbaijan and Turkey
- Less economic dependency on Russia
- Less dependency on Georgia for transport routes

### **Benefits for Armenia**

- A dollar of attracted FDI increases GDP of Armenia by 0.07 USD
- The increased GDP attracts 4.06 USD FDI per one dollar increase.
- The relations are significant at 99% confidence interval.

## Shortcomings

- Shortage of the data
- Shortage of the trustable data
- A lot of political influence on the economic decisions in three countries
- Lower correlation between GDP and FDI, than was expected

### Conclusion

- Single Market followed by Free Trade Zone
- Creating economic incentive for sustainable peace
- Politically more united Caucasus

### Thank you

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