

**THE IMPACT OF TRADE ON POVERTY:
ECONOMIC GROWTH –UNEMPLOYMENT
LINKAGE**

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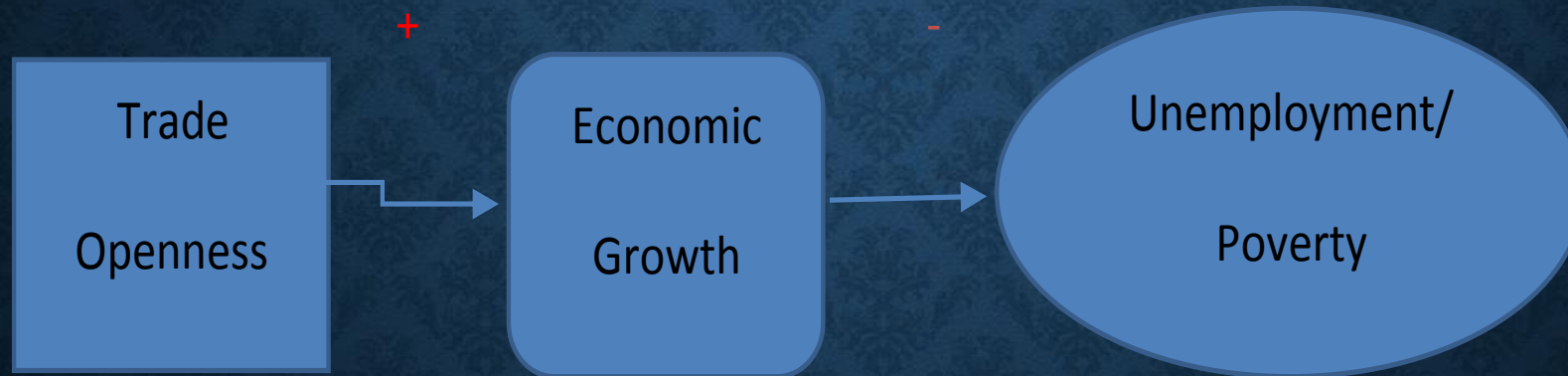
INTRODUCTION

- Openness and trade liberalization are now widely accepted to be positively connected to economic growth
- However the relationship between trade liberalization and poverty is less clear and still unsettled
- Empirical evidences on the relationship between trade and poverty varies across countries depending on the economic model used and variables measurement

MEASUREMENT ISSUE

- To empirically evaluate the connection between trade openness and poverty, consistent measures of both variables are needed
- Several measures for trade openness are available : the ratio of trade size to gross domestic product is the most widely used
- Although several measures of poverty exist: income share held by certain percentile, number of poor earn certain amount of dollars a day, poverty gap at national poverty lines, rural poverty gap, mean consumption, Unfortunately, no consistent data available on any of these poverty measures in the case Jordan

TRADE, GROWTH, UNEMPLOYMENT- POVERTY LINKAGES



THE GROWTH MODEL

- According to the neoclassical growth theory total output (measured by GDP) is determined mainly by factors of production and technology:

- $$Y_t = A_t F(\text{capital, labor, land})$$

- Taking total differential and rearranging yields the econometric model:

- $$d \log Y_t = b_0 + b_1 d \log(\text{capital}) + b_2 d \log(\text{labor}) + b_3 d \log(\text{land}) + b_4 (\text{policy}) + e_t$$

THE LINK BETWEEN GROWTH AND POVERTY IN JORDAN

- Due to the lack of direct poverty measure, the study utilized Okun's law to empirically estimate the relationship between real economic growth and the rate of unemployment ; according to the augmented growth version of Okun's Law:

$$\Delta U_t = \alpha + \beta_1 \Delta Y_t + \beta_2 \Delta P_t + \epsilon_t$$

Where the population growth is added to take into account the impact of internal and external population shocks on unemployment rate

GROWTH MODEL: ESTIMATION RESULTS

	Coefficient	Std. Error	t-ratio	p-value
ld_alandu	0.027628	0.0151949	1.9182	0.05
ld_remit	0.142669	0.0290033	4.9190	0.00
ld_fdinf	0.000959863	0.000352992	2.7192	0.01
tradeo	0.00028545	6.03735e-05	4.7281	0.00
ld_gsize	-0.14284	0.0691171	-2.0666	0.05
ld_capf	0.0134598	0.0252225	0.5336	0.59
ld_pop	0.00615402	0.162935	0.0378	0.97
R-squared	0.776183	F(7, 23)= 11.4		0.00

ESTIMATION RESULTS

- The model overall fit is very good as shown by relatively high R-squared (78%) and highly significant Fisher F-test. All estimated coefficients carry the correct expected sign; all positive except the coefficient for government size variable which turned out to be negative indicating to the crowding out effect on growth due to over optimal size of public sector. It also may indicate to the negative corruption effect on economic growth usually associated with inflated public sector.

- Trade openness and foreign direct investments coefficients although very small in size but are highly significant indicating to positive effect of both openness indicators on economic growth. This may indicate to a limited positive effect of trade liberalization and FDI on real economic growth in the case of Jordan
- The strongest and most significant effect on the growth of Jordanian economy came from worker remittances

UNEMPLOYMENT MODEL: ESTIMATION

	Coefficient	Std. Error	t-ratio	p-value
• gdprg_1	-1.03677	0.521125	-1.9895	0.0555
• POPG_1	2.12118	0.887917	2.3889	0.0232
• Sum squared resid	0.153824	0.733516	S.E. of regression	
• R-squared	0.166467	F(2, 31) 3.095546	P-value(F)	0.059471
• Log-likelihood	15.98086	Akaike criterion		-27.96172
• Schwarz criterion	-24.96871	Durbin-Watson		1.912786

ESTIMATION RESULTS

- All estimated coefficients carry the correct expected sign and statistically significant at 5% or better. The coefficient of multiple determination R^2 is very low (about 17%), but this expected when the estimated model is in the growth form.
- Never the less the model overall fit is satisfactory as Fisher test indicates significance at about 5%.

- A 1% growth in real GDP potentially (after one-time period) reduce unemployment rate by almost 1%, other things held constant
- However, the coefficient for population growth indicates that a 1% increase in the population will (after one-year) increase unemployment by about 2%, other things held constant

CONCLUSIONS AND POLICY IMPLICATIONS

- The study provides evidence to the importance of external factors to economic growth of the Jordanian economy; in particular, worker remittances, external trade and FDI inflows affected positively economic growth in Jordan
- Although growth in real GDP is found positively related to unemployment / poverty), the negative impact on unemployment resulting from population

- Population growth and/ or influx of foreign labor tends to offset this favorable impact of trade and growth on poverty via employment.
- One important policy implication of the study findings is that the inflated size of public sector, fast population growth combined with influx of foreign cheap labor are preventing high rates of economic growth achieved over time from affecting favorably unemployment and hence poverty in Jordan.

END OF PRESENTATION

- **Thank you for your time**