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RESEARCH HYPOTHESES

- Population health influences and is influenced by economic outcomes.
- Public Health Expenditure plays a critical role in influencing health outcomes.

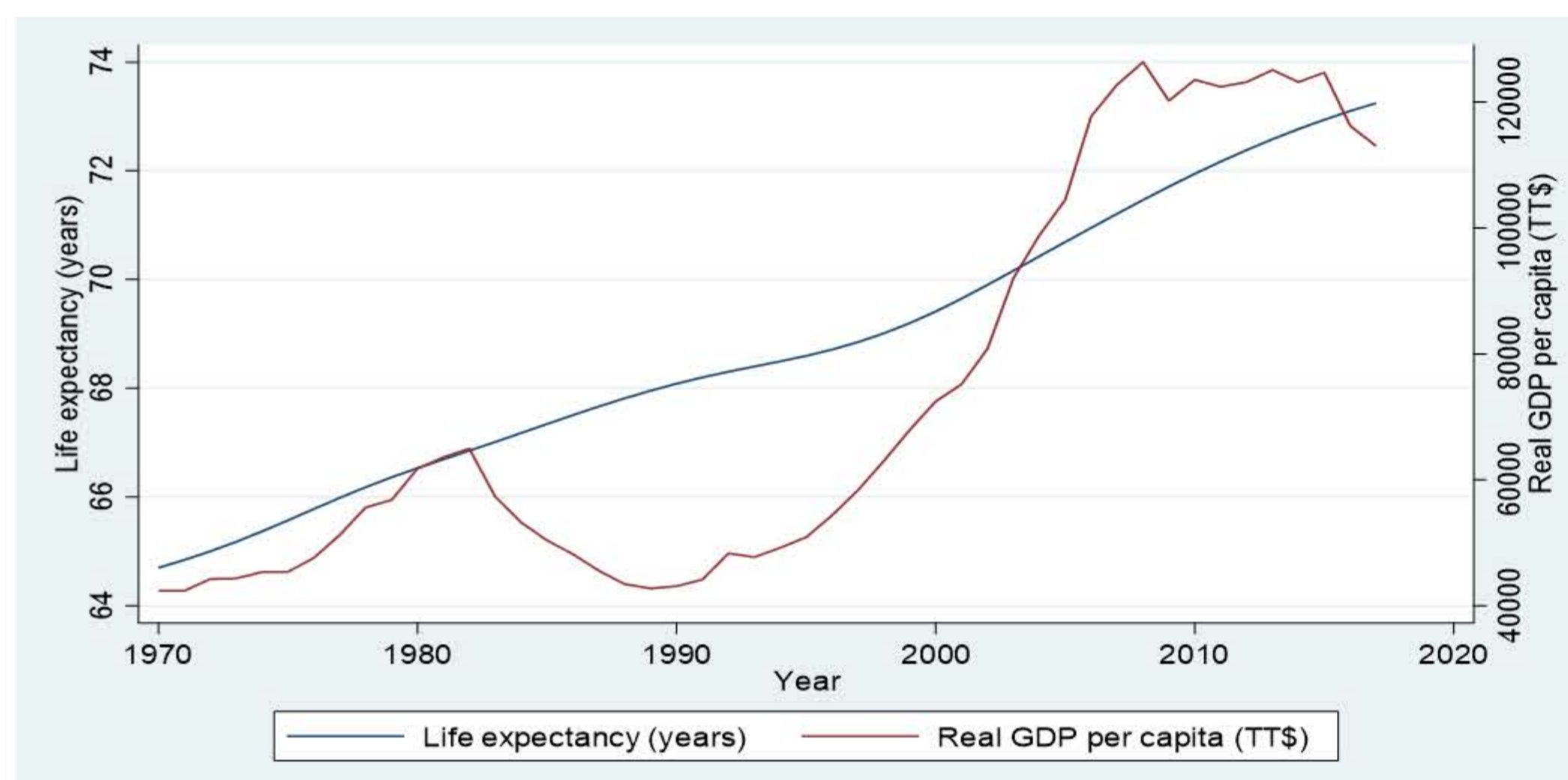


Fig. 1 Line plot of Life expectancy and Real GDP per capita for T&T

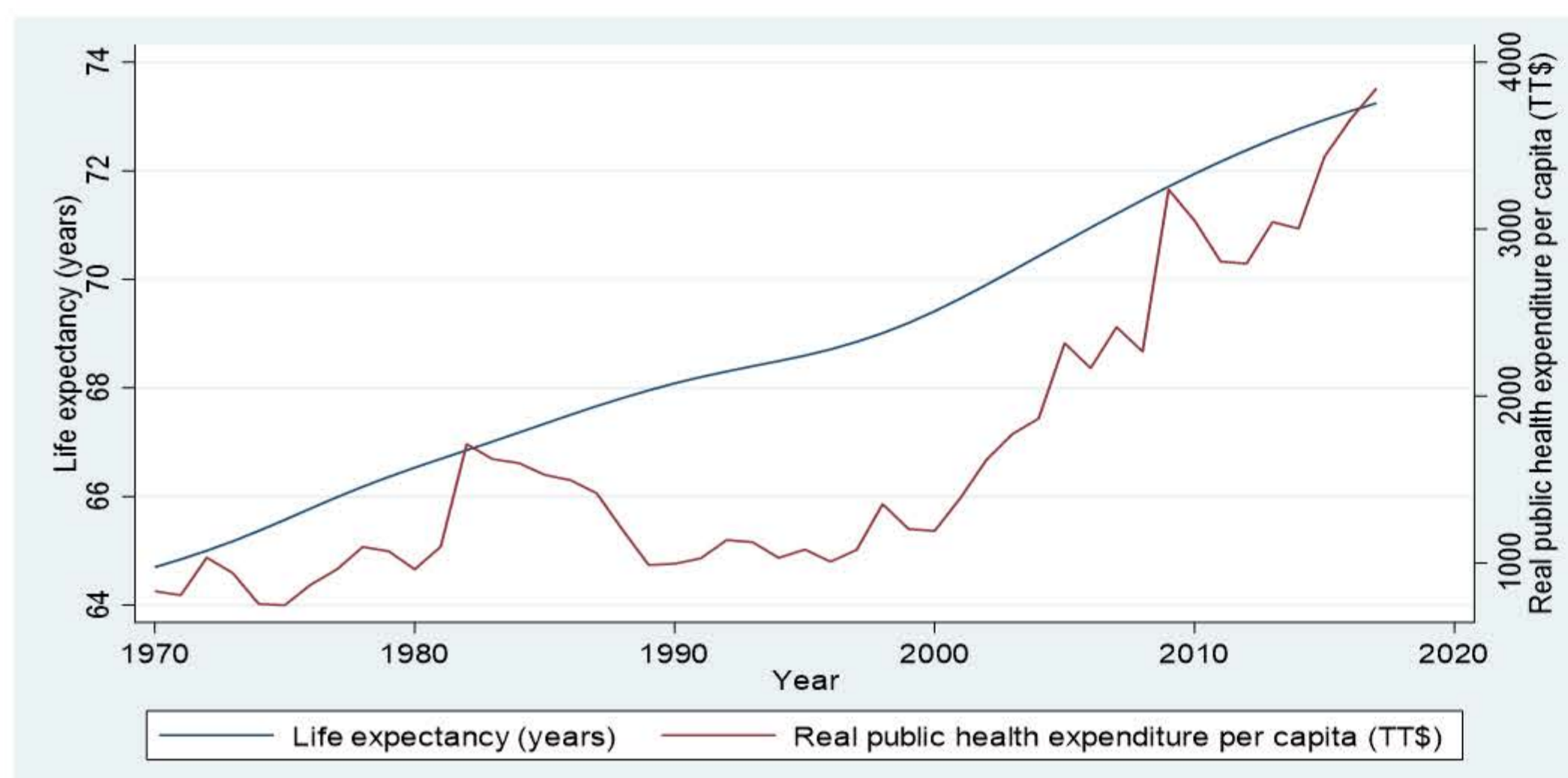


Fig. 2 Line plot of Life expectancy and Public health expenditure for T&T

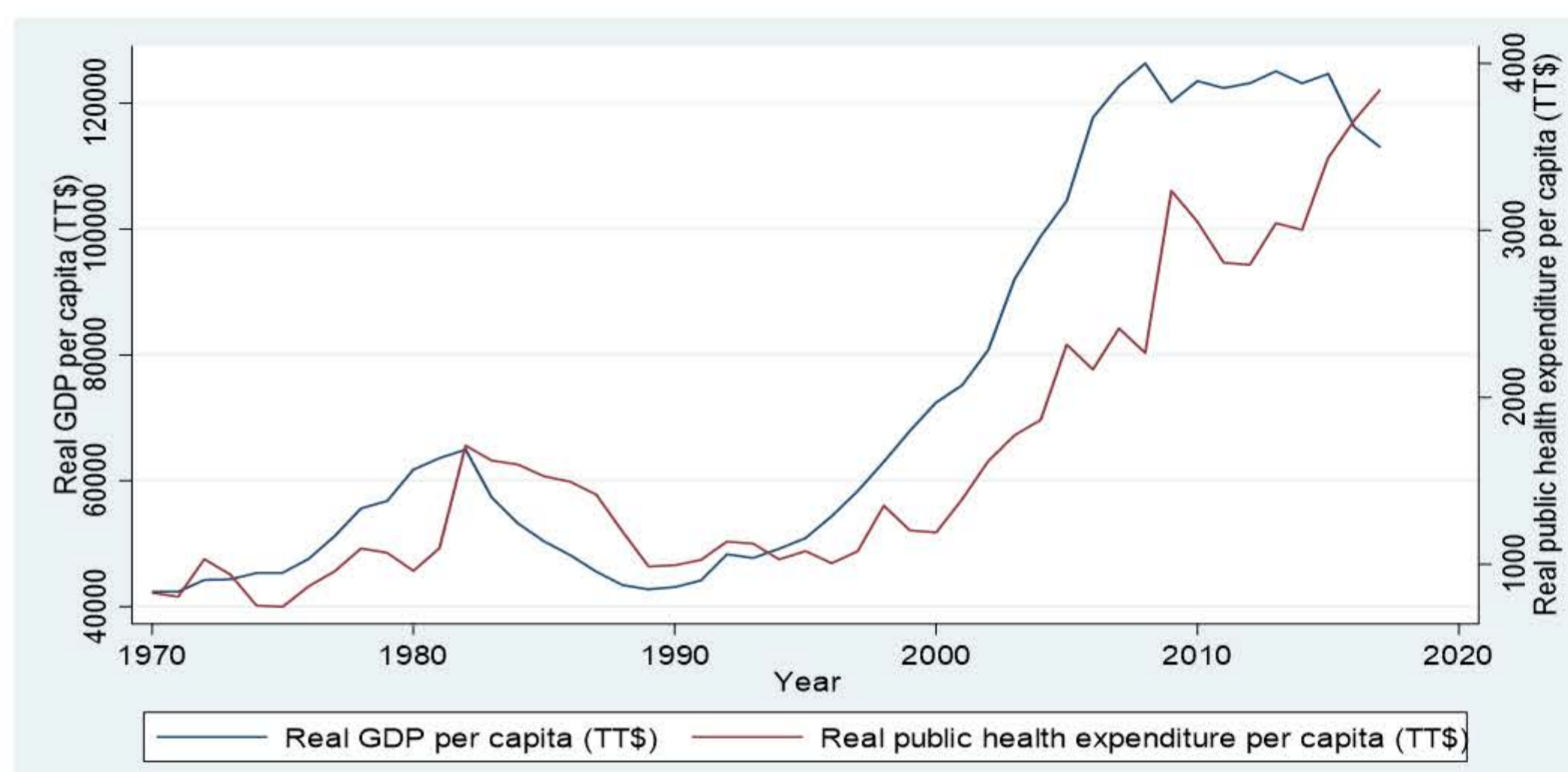


Fig. 3 Line plot of Real GDP per capita and Public health expenditure for T&T

OBJECTIVES

To determine the long-run and short-run associations among life expectancy (LE), public health expenditure (PHE) and GDP in Trinidad and Tobago.

METHODS

- This research makes use of annual data covering the period 1974-2017.
- It employs the Johansen cointegration procedure to test the existence of a long-run relationship.
- The long-run and short-run dynamics are estimated with a Vector Error Correction Model.
- Exogeneity tests and modified Wald tests are used to examine the direction of causality.

RESULTS

	<u>Model A</u>	<u>Model B</u>	<u>Model C</u>
	LE = f(GDP)	LE = f(PHE)	PHE = f(GDP)
<u>H₀: No cointegration</u>			
p-value	0.054	0.056	0.024
<u>VECM estimates</u>			
Long-run coefficient	0.078 (0.123)	0.066 (0.137)	1.166*** (0.071)
Adjustment parameter	-0.052*** (0.015)	-0.033** (0.015)	-0.596*** (0.154)
<u>Causality (Exogeneity)</u>			
Likelihood ratio test	LE → GDP GDP → LE	LE → PHE PHE → LE	GDP → PHE
Toda-Yamamoto	LE → GDP	None	None

Values in parentheses are standard errors.

DISCUSSION/CONCLUSION

- A long-run relationship exists in each bivariate model.
- For Models A and B, the long-run relationship is positive but not very strong. For Model C, the relationship is positive and significant.
- For Model A, there is evidence of causality from LE to GDP with a possible feedback effect.
- For Model B, there is some evidence of bidirectional causality between LE and PHE.
- For Model C, there is some evidence of causality from GDP to PHE.
- The results suggest that LE and economic outcomes are causally related, but the long-run effects of the economic variables on LE are not strong.
- The results suggest that GDP may influence PHE in the long run.