Nonlinearity in the nexus of export and economic growth has not been addressed in most of the previous studies. If the true relationship is nonlinear, then inference from linear model may be invalid. This study re-examines the exports-growth nexus in four current Newly Industrialized Countries by nonparametric methodology. Results from Breitung cointegration test show existence of nonlinearities in the cointegration relationship of exports and economic growth in Malaysia, Thailand and Indonesia. With evidences of nonlinearities from cointegration test, nonparametric causality test based on rank series provides more reliable results than conventional linear model. The nonparametric causality test indicates a bilateral causality between exports and economic growth in Malaysia and Thailand. On the contrary, Indonesia support the hypothesis that growth driven exports. This results highlight that export is an engine to economic growth through its multiplier effect but it is not a general rule for all the Newly Industrialized Countries.