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Selected Factors Affecting the Subsectors of the Philippine Agriculture: A Panel Regression Analysis

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ABSTRACT

The study examined the effects of exports to GDP, employment, and production loans granted in the GDP agriculture of the Philippines. The study employed descriptive and quantitative techniques to analyze the behavior of GDP, production loans granted (PLG), exports to GDP (EGDP), and employment (EMP) from 2005 to 2015 totaling 33 observations of agriculture, forestry and fishery sectors. Specifically, panel data analysis was used to assess the effects of APLG, EMP, GDPt-1 and AEGDPt-1 in GDP. The fixed effect model corrected from autocorrelation and heteroscedasticity, a one percentage unit increase in the exports to GDP, on the average, leads to Php 774.96 increase in the GDP, other things equal; and a one unit increase in employment, on the average, leads to PhP23.55 increase in the GDP, other things equal; a one peso increase in the production loans granted lagged by one period, on the average, leads to Php 0.4760 increase in the GDP, other things equal. Using the fixed effect model, all the explanatory variables such as, exports to GDP, employment and production loans granted lagged by one period exhibited significant effect on the GDP agriculture. Hence, the model is considered satisfactory from statistical perspective. The results from the fixed effect model were consistent with the priori expectations that exports to GDP, employment and production loans granted lagged by one period positively affect the GDP agriculture.

Keywords: agriculture, GDP, exports, production loans, employment

About the presenter:

Patrick R. Diaz is a graduate of the Master of Arts in Economics program in 2019 at the Polytechnic University of the Philippines. He also earned a Bachelor's degree in Banking and Finance in 2013 at the same university. He is working as a lead specialist for an international financial technology company, skilled in financial data analysis and equity research.