

ASYMMETRIC VOLATILITY TRANSMISSION BETWEEN EMPLOYMENT, EXPORT, EDUCATION, AND NEW BUSINESS ESTABLISHMENT

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ABSTRACT

This paper uses the Multi- variate EGARCH model to investigate the volatility spillovers between employment growth rates, exports, number of degrees awarded (proxy for education) and new business establishments for South Carolina. To our knowledge, similar empirical study is not available for South Carolina. The results provide evidence of significant mean spillover effects from changes in export, education and new business establishment to employment growth; from changes in employment growth and new business establishment to export; from changes in employment, export, and new business establishment to number of degrees awarded. However, there is no significant mean spillover from change in number of degrees awarded to export. Results show the existence of volatility spillover from export, degrees awarded and new business establishment to employment growth. The results also indicate volatility spillover from employment growth to number of degrees awarded, and from employment growth to new business establishment. Yet, there is no volatility spillover effect from employment growth, number of degrees awarded, and new business establishment to export. Also, there is no volatility spillover effect from export and new business establishment to number of degrees awarded; and from export and degrees awarded to new business establishment. The measure of asymmetry (π) is positive and statistical significant at the 1 percent level in case of employment growth and export models. The result indicates that positive shocks (good news) are likely to produce greater volatilities than negative shocks of the same magnitude. These results provide policy implication on how to mitigate the problem of volatility in employment growth. Policy makers should stabilize export, provide the right type of education that meets industry requirements and attract the establishment of new businesses.

Keywords: Employment Growth, Volatility Spillovers, Asymmetric Volatility, EGARCH.