

## **THE NEXUS BETWEEN MACROECONOMICS VARIABLES AND THE CO<sub>2</sub> EMISSIONS: EMPIRICAL EVIDENCE FROM MALAYSIAN ROAD TRANSPORT SECTOR**

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### **Abstract**

In the present paper, an attempt is made to examine the nexus between the macroeconomic variables and the CO<sub>2</sub> emissions from road transport sector in Malaysia. Using vector error correction model during 1980 to 2009 period, the empirical results show that there is an evidence of a long-run relationship among the variables. The findings of this research also indicate that a bi-directional relationship exist between the number of vehicles and CO<sub>2</sub> emission in the short-run.

**Key Words:** *Real GDP, Population, CO<sub>2</sub> emissions, Oil Price*

**JEL Classification:** Q53

### **1. INTRODUCTION**

Over the past few decades, the debate on the relationship between environmental degradation with trade liberalization and economic growth has ignited significant studies (Condo and Dinda, 2002; Frankel and Rose, 2002; Liu, 2006; Choi, Heshmati and Cho, 2010). Majority of previous studies tend to employ the country-based approach in their empirical research. For that reason, this study examines the macroeconomic factors affecting Carbon Dioxide (CO<sub>2</sub>) emission in Malaysia road transport sector. As Malaysia is shifting from manufacturing to