

# Chapter 7

## Is There a Relationship between Financial Stability and Macroeconomic Variables? OECD Example

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### **ABSTRACT**

*Financial stability has many determinants. These include various macroeconomic variables, the soundness and infrastructure of financial institutions, and the monetary policies pursued. This study aims to examine the relationship between financial stability and economic growth, interest rates, inflation rates, and interest rates of OECD member countries Z-score provides important information about the financial stability of a country's banking system by comparing its capital and returns and the volatility of returns. The study's data set consists of 15 OECD constituent countries. The data range of the study was determined as the period 2000 - 2021. Panel data analysis is used in this study. Dumitrescu and Hurlin causality test results from gross domestic, inflation, and interest rate variables to the Z-score. Also, there is bi-causality from the Z-score to gross domestic, inflation, and interest rate variables.*

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## 1. INTRODUCTION

The liberalization of financial markets and globalization have contributed to the deepening and adequacy of national economies. However, countries' different levels of development and various financial system structures have affected financial stability differently. Because of this, how the central bank and other intermediary institutions—actively involved in the financial markets—address financial stability has grown increasingly significant, particularly during the 1990s (Allen & Wood, 2006). Instability in financial institutions affects other sectors directly and indirectly. This is demonstrated by the U.S. financial crisis in 2008, which eventually extended to different industries and nations and sparked the global Crisis.

This study aims to examine the relationship between financial stability and economic growth, interest rates, inflation rates, and interest rates of OECD member countries. It is assumed that there is a causality between financial stability and economic growth (Manu et al., 2011; Creel et al., 2015; Karim et al., 2016; Akram & Eitrheim, 2008). The most important reason for this is that economic growth in countries will lead to financial stability by providing a more secure and peaceful environment in financial markets. Inflation, considered one of the most important indicators of financial stability (Chandrashekar, 2014), is expected to have a causality between financial stability and inflation (Akram & Eitrheim, 2008). A review of the literature price stability is the economic variable that influences the purchasing decisions of producers and consumers. Uncertainty in prices affects the purchasing decisions of producers and consumers. price increases may cause interest rates to rise, which may have a destabilizing effect on financial stability. Interest rate: the long-term government bond yield, one of the important applications for the banking sector, is another macroeconomic variable that effectively determines financial stability. As with the inflation variable, causality is expected between financial stability and interest rates. The study has many contributions to the literature. Firstly, the literature does not study the relationship between financial stability (Z-score) and OECD countries' economic growth, inflation, and interest rates. Secondly, it is expected to contribute to the literature as an inclusive study with all data from 2000, when financial stability started to be calculated, until 2021.

The study consists of four stages. In the second stage, the importance of financial stability and the basic concepts of measuring financial stability are emphasized, and the relationship between financial stability and various macroeconomic variables is discussed. There are many economic variables that affect financial stability. However, there is no study in which variables such as economic growth, interest rate and inflation rate of OECD constituent countries are considered together. Because of that in third stage the relationship between financial stability (Z-score) indicators and economic growth, interest rates, and inflation rates of OECD founding members is

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