# CHAPTER I INTRODUCTION

### 1.1 Background

International trade has become very important for the welfare of the country now more than some centuries or even decades ago. However actually long distance trade have exist and important for economy since far thousand years ago. Helpman(2012) stated that long distance trade had began after the Neolitic Revolution, it is when human start to change from hunter gatherer to be sedentary society in which they plant the food crop. After that the emergence of city and civilization significantly evolve trade. In the end of 15<sup>th</sup> century discovery of america and the passage to the east indies significantly affects on long distance trade. in last three centuries the emergence of globalization in the middle of the nineteenth century up to World War one, and after World War two until to present significantly affect international trade.

The importance of international trade had been discussed by many economist. UNCTAD(2014) state international trade when it properly harnessed could become a solid tool to reduce unemployment, make resource more efficient, support the entrepreneurs and increase the living standards. Cited from Salvatore(2013) David ricardo emphasize importance of international trade with the theory of comparative advantage which told that countries would get gains of trade by specializing in goods where it had a relatively lower opportunity cost. Base on Heckscher–Ohlin model (H–O model) country have to specialized to produce and exported items that used abundants factor endowment to gains from trade.

Exchange rate policy is an important factor that affect international trade. Many study had been studies link between exchange rates and international trade. theoritically appreciation of exchange rate will hurt export since the foreign goods become cheaper than domesic goods. Otherwise depreciation of exchange rates would

push export since foreign goods become more expensive than domestic goods. This theory support empirically by many studies such as Wondemu and Potts(2016) study the effect of real exchange rates change to exports in tanzania and ethiopia found that overvaluation will decrease export and undervaluation boosts export supply and also exports diversification. Li, Ma & Xu(2015) investigate the effect of exchange rate movements to chinese exports. The result show that Appreciation of RMB by ten percent lead to decrease of exports approximately three point five percent.

Khalighi and Fadaei(2015) studies the effect of exchange rates and foreign policy to Iranians dates export in the period 1991 until 2011. They found that positive link between Iranian dates export and real exchange rate. Tunc and Solakoglu(2018) studies the effect of external exchange rate risk and change on trade flows. They use cross section data from exporter country collected from world bank. It is consist of 32 exporter countries and 98 destination countries in the year of 1997 until 2014 with 418.197 total observations. They found that depreciation is positive and significantly effect exports.

Paudel and Burke(2015) examine the effect of Nepal's real exchange rate policies on its export performance in the year of 1980-2010. They employ gravity model approach to see whether real exchange rate appreciations had negatively effect nepal's export. Xu, Mao & Tong(2016) study the impact of change in Renmimbi on chinese multi product companies export behavior using China companies level micro data and highly disaggregated in the year of 2000-2007. They found that real appreciation of Renmimbi give harmful effect on chinese multi product company export price and export quantity, and the effect is significant across companies with different productivity and product ladder in multi product companies. Thuy and Thuy(2019) study the effect of exchange rates on export in Vietnam used quarter data from the Q1 of 2000 to Q4 of 2014 using ARDL Bounds approach. Their study found that depreciation will effect export positively in long run however negatively in short run confirm the J curves effect.

However besides that there are also some studies which found insignificant or negative relationship between depreciation and export. Oluyemi and Isaac(2017) conducted research in Nigeria, Liew, Lim, and Hussain(2003) in ASEAN countries found that insignificant impact of exchange rates to export import. Some research in Indonesia also found insignificant result such as Ratana, Achsani and Andati(2012) in crude palm oil (CPO), rubber's and coal's used VAR/VECM method and Anindhita(2017) in manufacturing sector. Firdaus, Holis, amaliah, fazri & sangadji(2018) and Anindhita(2017) in their paper state that insignificant or negative relationship of depreciation could be happen because existence import content in export product. Besides positive impact of depreciation on export, depreciation could also give negatively impact since high import content in export-oriented industries reduces the ability of production and exports products to the global market.

This research will study the link between real effective exchange rates as well as exports in Indonesia. Indonesia export performance did not in outstanding performance in the last several years. Data from the world bank official website showed that annually growth of Indonesian export of goods and services from 2010 until 2019 only 1.96%. This value is only ranked eighth out of eleven countries in south east asia. Indonesia only outperformed Timor Leste, brunei Darussalam, and Malaysia. Indonesian export composition is still dominated by the basic commodity as well as slow diversification of value added. Indonesia main export come from animal/vegetable fats and oils which contribute around 12.5%, mineral fuels around 15% and rubber around 4% which only commodity that have small value added. Data of export indonesia in 2017 also shows that indonesia export left behind some of other south east asian countries

Despite many empirical finding support the theory of exchange rate and export data from Indonesia it seem dubious. Manufacturing sector since 2002 have positive trend but it decrease in 2009, 2012,2013,2015 and 2016 while exchange rate keep depreciate in that year. Agricultural sector is decrease in 2015 and 2016 and mining sector decrease in 2012 until 2016 while exchange rate in 2012 until 2018 constantly

depreciated. At glance it seems contrary to the economic theory in which depreciation will increase exports since in several year exchange rate depreciate but exports still decreasing.

Unlike the previous studies this paper will try to analyse the impact of real effective exchange rate in three different export sectors of Indonesia which are agricultural sector, manufacturing sector and mining sector. The result will show which sector is positive and significant affected by real effective exchange rate movement so that Indonesian government can focus on those sector when Indonesian exchange rate depreciated. This paper will conducting ARDL Bound test approach in period 2004-2019 with quarterly data in order to find the result.

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# 1.2 Research Problem

Indonesia export did not work very well in the last several years. Data from the world bank official website showed that annually growth of Indonesian export of goods and services from 2010 until 2019 only 1.96%. This value is only ranked eighth out of eleven countries in south east asia. Indonesia only outperformed Timor Leste, brunei Darussalam, and Malaysia. Indonesian export composition also is still dominated by the basic commodity as well as slow diversification of value added. Indonesia main export come from animal/vegetable fats and oils which contribute around 12.5%, mineral fuels around 15% and rubber around 4% which only commodity that have small value added.

Indonesia exchange rate constantly depreciated in the last several years. Theoretically depreciation will hurt import and indirectly to economy since import goods that cant be replace by domestic goods will increase the price of consumption goods and increase the cost of the firm that is using imported raw material. So that Indonesian government have to take advantage from the increasing in export to make it break even. This paper will separate exports into three sectors which are agricultural sector, manufacturing sector and mining sector. The purpose of this division is to see in which sector exchange rate effect the most and which sector was not. Government

can focus more to develop the sector that more sensitive to exchange rate to take momentum of exchange rate depreciation.

# 1.3 Research Objective

- Examine the impact of real effective exchange rate change on export of manufacturing sector in indonesia 2004-2019
- 2. Examine the impact of real effective exchange rate change on export of agricultural sector in indonesia 2004-2019
- 3. Examine the impact of exchange rate change on export of mining sector in indonesia 2004-2019

# 1.4 Research Advantage

- 1. As a basis that can be used in policy making to improve Indonesia's export
- 2. Additional work for existing literature related to relationship between exchange and export in manufacturing, agricultural and mining sector in Indonesia.

## 1.5 The Structure of Writing

This research paper divides into five chapters as follow:

#### Chapter I: Introduction

This chapter consist of research background, research problem, research objective, research advantage and structure of writing. In research background section will be explain the importance of the topic to be taken as well as some theories and empirical studies about the topic.

## Chapter II: Theoretical Framework and Literature Review

In this chapter will be elaborate the theoretical foundation which is the theoretical basis of the research and elaborate previous research and description of hypotheses related to effect of exchange rate on export in manufacturing, agriculture and mining sector in indonesia.

# Chapter III: Research Methodology

In this chapter provides an explanation of research variables and operational definitions of variables, the type and source of data used in this study along with an explanation of data collection methods, and a description of the analytical method used.

## Chapter IV: Discussion

In this chapter will be conducted regression anlysis to see the effect of exchange rate on exports in manufacturing, agriculture and mining sector in indonesia. this chapter will also conducted diagnostic test test and unit root test and then describe the results interpretation of the regression.

## Chapter V: Conclusion and Recommendation

In this chapter is the final chapter of writing which consists of conclusions and a series of discussion of thesis in chapter V as well as suggestions that need to be delivered to the parties involved in policy making or further research.

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