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*Erasmus*

# **Investigating the Current Account Balance Movement of Indonesia**

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## List of Acronyms

BI	<i>Bank Indonesia</i> (The Central Bank of Indonesia)
BOP	Balance of Payments
BPS	<i>Badan Pusat Statistik</i> (The Central Bureau of Statistics of Indonesia)
CA	Current Accounts
CPI	Consumer Price Index
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IMF	International Monetary Fund
NPISH	Non-Profit Institutions Serving Households
OECD	The Organisation for Economic Co-operation and Development
QTM	The Quantity Theory of Money
SNA	System of National Accounts
WB	World Bank

## **Abstract**

Indonesia as one of the largest emerging market in Southeast Asian has continuously received attention from the global market. However, despite its optimistic economic growth, the country still experiences a deteriorating current account balance in the recent years. This study aspires to investigate the important factors which could explain this long-term weakness in Indonesia's current account balance, with the sub-objective being to explain the period of relative strength in the current account balance from 1998-2003. The research uses two approach from monetarist and structuralist. In order to support the analysis, this paper use several secondary data from Government and International Organizations. The study finds that trade account possessed a vital role of the overall current account balance. But in some period, especially in the weakness period of current, the primary income surpasses the trade balance.

## **Relevance to Development Studies**

An issue of current account balance in Indonesia have been studied a lot by many scholars, including the local government and International Organization. The research has covered many issues of the balance; for instance, the determinants, threshold, and financing resources for the imbalances. Thus, given to that this paper seeks to provide a comprehend investigation of the changes in current account balance in 1981 until a recent year in 2018 by particularly investigating the relative strength and weakness of the current account balance. It is considered that the findings could contribute to the common literature for a developing country case, and for Indonesia.

## **Keywords**

Current account, monetary approach, terms of trade, primary incomes, exchange rate, inflation, Indonesia

# Chapter 1

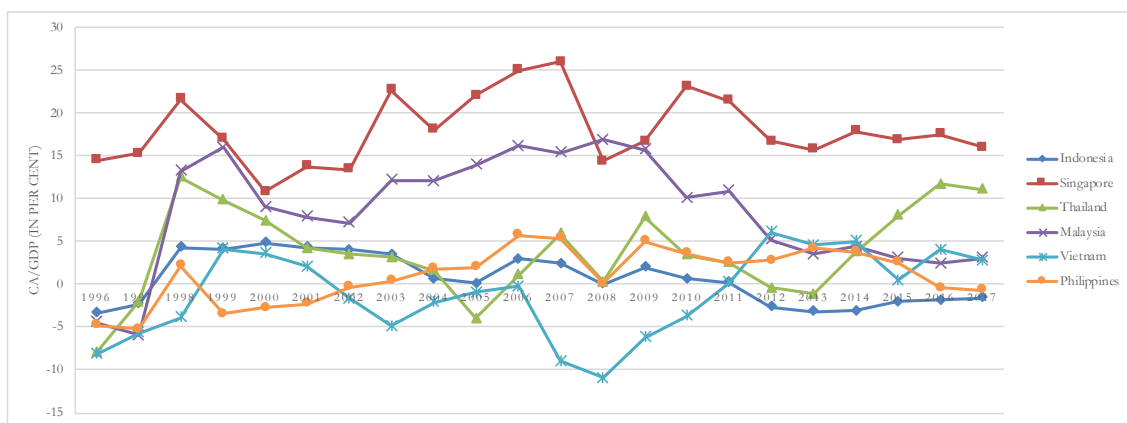
## Research Overview

### 1.1 Introduction

The balance of payments is a record of the financial transactions of the residents of one country with the rest of the world. It is generally accepted that the balance of payments is an important barometer of the health of a developing country in particular. The ending figure of the balance of payment provides an information about the country's foreign exchange reserves<sup>1</sup> changes within the banking system. Particularly, it is including the indication of the country's investment situation; a surplus ending implies the country's favourable position as a lender in the international economy, whereas a deficit ending is justifying the country position as a borrower that finances its imbalances using foreign fund inflows. Therefore, the condition of a country's balance of payment is always associated with the world economy. The study is considered to be important, especially when the balance of payments happens to be weak and causes both foreign exchange reserves to fall to low levels and the currency to weaken continuously.

The balance of payments comprises three major accounts; the current, capital and financial. Of these three, the current account is considered to be the most important driver of the overall balance of payments over the long-term. If a country's current account is relatively weak compared to its neighbours or competitors, or if it is in continuous deficit for a long period of time, it is usually taken by the relevant authorities as cause for concern. As figure 1.1 below indicates, from 2011 to 2017 Indonesia has not only had a weak current account balance compared to its neighbours, but it has been consistently negative over this period.

**Figure 1.1**  
**Indonesia's current account balance movement in comparison with some other Southeast Asia countries from 2001 – 2017 (current account in the percentage of GDP)**



Source: World Development Indicators, updated on July 10<sup>th</sup>, 2019. Data was accessed on July 12<sup>th</sup>, 2019 and charts were processed by the author.

In fact, as the paper will show later, since 1981 Indonesia has experienced continuous weakness in its current account balance, with only one period, from 1998-2011, when there was a significant improvement in this balance. An important question that needs addressing

<sup>1</sup> Reserve is the foreign exchange assets held by the government and commercial banks of the country.

when considering the weakness of Indonesia's current account balance, is what explains the period of relative strength in this balance, which coincidentally was just after the "Asian crisis".

## **1.2 Objective and Research Question**

The main objective of the paper then is to look at the important factors which could explain this long-term weakness in Indonesia's current account balance, with the sub-objective being to explain the period of relative strength in the current account balance from 1998-2011. The corresponding major research question being addressed is what explains the long-term weakness of the Indonesia's current account balance. In this context the important sub-question is what role has been played by the trade balance and the real exchange rate. The core argument of the paper in respect of these research objectives and related research questions is that the observed long-term weakness in Indonesia's current account balance is explained by the long-term weakness in the trade account balance, with this long-term weakness in turn explained by the structure of the economy and the overvaluation of the currency. It will be argued that it is the real value of the currency that also explains the period of relative strength in the current account balance, from 1998-2011.

## **1.3 Data and Methodology**

The paper will make use of data collected from secondary sources, mainly international organisations and government websites. The secondary data is the core part in several sections, but mostly in analytical section to cover the macro-economic analysis. The time period for the analysis is 1981 until 2018. The starting date is chosen because it is when most of the reliable macroeconomic data is available, and the end year is because it is the last year for which the relevant data is available

The paper uses simple graphs and tables to make the relevant empirical points, with this evidence supported by a review of the relevant academic.

## **1.4 Scope and Limitation**

The research paper focuses on the main period from 1981 to 2018 due to data availability and not because of any economic rationality. However, some data are presented in the paper only up to a certain year. The focus will be on explaining the weakness of the current account balance and not the overall balance of payments. Use will be made of the real exchange rate in this explanation, but there will be no attempt to explain trends in this variable, even though this is considered an important subject in itself. Lastly, although the trade balance is considered to be an important determinant of the overall current account balance, the focus is not limited to the explanation of this account alone.

## **1.5 Structure of the Research Paper**

The paper will comprise four chapters, apart from the introduction, as follows;

- Chapter 2 will conduct a review of the literature on the determinants of current account balances beginning with a critical review of the mainstream monetary approach, and then considering alternative approaches that stress the structure of the economy. Consideration will be given to the empirical evidence provided by each approach and the manner in which this evidence is presented.



- Chapter 3 will provide the necessary background information on the Indonesian economy to undertake the empirical analysis of the current account balance trends in the following chapter. The last part of the chapter will focus on government policy with respect to the current account balance, with a view to getting a sense of the official view of its determinants.
- Chapter 4 will attempt to provide data to verify the major arguments of this paper, showing how the findings relate to the general literature and those specifically on Indonesia.
- Chapter 5 will summarise the major findings of the paper and consider the policy implications arising from these.

## Chapter 2

# The Mainstream and Alternative View of the Current Account

The chapter aims to review the literature of the determinants of movements in the current account balance. The first section will look at what is widely regarded as the standard theory on the subject, the monetary approach. The critical review of this body of literature will be used as a basis for looking at alternative approaches that focus on the structure of the economy in explaining trends in current account balances.

### 2.1 The Monetary Approach of the Current Account

The monetary approach commenced from the conventional theory of David Hume and early 1930s international monetary theory (Johnson 1977: 251). Though to grasp this view, the paper would like to start the study from the emerge of "the quantity theory of money" (QTM) as the central point of the macroeconomic study, where the argument of the theory mainly talked about controlling the quantity of money in order to create the price level that is desired (Skidelsky 2018: 65). In this approach, money is considered as a stock rather than a flow. There are two ways to acquire money stock; through the "domestic credit creation or destruction" or foreign money flows (Johnson 1977: 251).

Relating to the relationship between the price level and money stock, QTM indicates when there is a rise in price level tend to induce people to spend faster, whereas they will react the opposite way if the price is falling. Then, the theory acknowledges the money stock in the economy is as an exogenous variable, where the excess of the money stock tends to create a rise in the expenditure. The rise in the excess demand of money overflows to the inflation rate or "general price level", which Frenkel and Johnson (1976: 23-24) mentioned it does have an important level to influence "the real value of nominal assets—money". Similarly, Elliot and Reichenstein also argued about the money stock balance as an exogenous variable in the long run (Elliott and Reichenstein 1987: 328). In the research, they (Elliott and Reichenstein 1987: 331) used broad money (M2) as a measurement for the money supply rather than narrow money (M1); as M2 includes more advanced assets that are not comprised in M1. Subsequently, the broad money stock in the monetary approach is derived using below identity (Easterly 2002: 7):

$$(1) \quad MV=PQ$$

where in the model, M refers to money supply, V is the velocity of money stock, P is the price level and Q is the real output or real GDP. To solve the model for Inflation rate, Easterly (2002: 7) creates first log differences as follow:

$$(2) \quad \Delta \ln P = \Delta \ln V + \Delta \ln M - \Delta \ln Q$$

As the velocity of money is assumed as a constant variable, "then inflation will have a unitary elasticity with respect to "excess money supply growth", i.e. the excess of nominal money supply growth over real output growth" (Easterly 2002: 7).

The monetary approach observes that there is a related movement of general prices, or inflation, with the money stock. The relationship could be seen through the movement of the balance of payments; when there is an expansion of money stock, the overall balance deteriorates while inflation rate rises. In general, monetary approach underlines a budget constraint enforced on the total of a country's International spending; which reflects on the

ending of the balance of payments accounts movement as the channel to the global economy (Frenkel and Johnson 2013). Consequently, at the most straightforward argument, all items in the balance of payments will influence the money account or the country's international reserves. They (Frenkel and Johnson 2013) added that "the monetary approach focuses on the determinants of the excess domestic flow demand for or supply of money"; the behaviour of money flow becomes essential at this point. The link that connects the theory to the current account balance should depart from how the money arrives in the market system. One can explain, when there is a surplus in a trade account translates as an excess domestic flow of supplies for goods, a surplus in the money account suggests an excess domestic flow demand for money (Frenkel and Johnson 2013).

Many studies (especially in Johnson and Frenkel) discussed that the trade account, as part of the current account, is considered as the most vital account in the balance of payments; especially its ending balance whether surplus or deficit. Johnson (2013) added that the term of the balance of payments is commonly represented particular account of "merchandise trade, the current account, or the 'basic balance'". He (Johnson 1976: 148) then emphasized that domestic prices with the influence of money demand and supply affect the changes in trade flows that eventually affect the balance of payments. The transactions include exports and imports of the trade goods.

About the ending balance of the account, Dornbusch (as cited in Helmers 1988: 1) mentioned that the current account surplus could be understood as several appearances; (a) the national income exceeds the expenditure, (b) the number of exports is higher than imports, and (c) "the net increment to nation's foreign asset holdings", and vice versa. Nevertheless, the classical economists' view about the balance of payment mostly considers it as a monetary phenomenon. Although, the focus of the discussion merely centred in the current account or trade. It studies the changes in the money supply eventually bearing to the current account.

Considering that current account is included in the monetary principle, the "structural" imbalances deficits or surpluses, for instance, a deficit occurs in the "weak" economies, merely could not be existent (Johnson 1977: 227). Still, the deficit could be accepted if the real changes are accompanied by policies that contain a decreasing in international reserves. Johnson (1977: 227) added that any imbalances problems could be corrected using the domestic monetary policies, without any exchange rate changes. However, "import quotas, tariffs, exchange controls and other interferences with trade and payments" could be beneficial to the balance of payments if the purpose is to boost money demand, by increasing the price level in the domestic market (Johnson 1977: 228). He claimed that the rapid growth of a country economy would enhance the overall balance of payment "by increasing the demand for money", even though the progress might contain a trade deficit funded by the foreign fund sources (1977: 228).

In relation to the exchange rates, there is a dual relationship of the monetary approach to the exchange rate and to the balance of payment (Frenkel 2013). The approach emphasizes that the exchange rates, which represent the relative prices of two money, is influenced by the equilibrium of demand and supply of money stock outstanding (Hodrick 1978: 97). The exchange rate falls along with the money stock expansion, which induces the deterioration of the current account balance simultaneously. Whereas during the monetary contraction, the domestic exchange rate is assumed to be appreciated, and the current account slightly improves. Hodrick (1978: 114) also proved that exchange rate responded in the opposite direction with the growth of money stock, *ceteris paribus*, even though the data limitation of the study used could not distinguish whether or not the changes of exchange rate results in an overshoot or undershoot with the money supply growth.

As the concept of real exchange rates becomes essential in the analysis of current account balance, in particular trade account, Helmers (1988: 10) discussed the necessity to apply

the same basis on supply, demand and price in a commodity in the study. For instance, when a rise in a country's export incomes in nominal term equals with the cost of export production, then it means only a substantial change have been occurred in the country, not in real terms (Helmert 1988: 10). The formula that has been used by Helmert (1988: 12) to calculate the real exchange rates ( $E$ ) is:

$$E = \frac{E_n/P_d}{\$1/P_w} = \frac{E_n \times P_w}{P_d}$$

$E_n$  = Nominal exchange rates

$P_d$  = Domestic price deflator (or CPI)

$P_w$  = Foreign price deflator (or U.S CPI)

Adding to his research, Helmert (1988: 19-20) argued that the application of floating exchange rate regime is commonly applied for the developed industrial countries, while the fixed exchange rate regime is applied in the developing countries. The distinction is mainly grounded on well-developed the domestic currency market in the global, and its internal capital market (Helmert 1988: 19).

Additionally, the association of money stock, prices (or inflation) and then exchange rates in the monetary approach also need to be studied in this paper. As the movement of the exchange rate moves contrary to the rate of inflation, at the same time, both variables are being the result of money stock changes. Mussa (1976: 239) mentioned that the price level is affected directly by the exchange rate adjustments "on the prices of standardized internationally traded commodities"; where "a depreciation contributes to inflation (and an appreciation contributes to deflation)".

## 2.2 The Alternative View to Understand the Movement of the Current Account

In the previous section, the classical monetary approach explores the imbalances fundamental problems by observing the change of money stock, which then affect the behavioural spending of the domestic buyer. The approach assumes that the quantity of money stock is an exogenous variable. However, there is uncertainty on the empirical validity of the argument. Particularly for the case of Indonesia, three major components in the monetary approach discussed before; inflation, exchange rates and the current account, seem to be not determined by the quantity of money only but other important aspect and these, in turn, the result of movement in terms of trade.

This section studies the other view of the current account, which is structuralist with its terms-of-trade theory. Terms-of-trade is an index of export and import prices ratio in a particular country. Terms-of-trade approach observes how the movement in terms-of-trade, which depends on the structure of production and exports, have a substantial role in the ending balance of the current account. The influential scholars of the topic are Prebisch and Singer in 1950s. The study suggested that the commodity prices would worsen through the years and does not inelastic supply as the classical economists' belief. Besides, Santos-Paulino (2010: 855) mentioned that "the impact of terms of trade shocks on a country's current account balance is also a key issue in international economics".

Prebisch-Singer thesis was about the price of raw materials commodities tend to decline, and it might strike continuously. The weaken prices could be arisen in particular in developing or less-developed countries due to some factors. However, most notable are (1) the technological changes with its different rapidity benefits more for the manufactures product and (2) the manufactured-product tend to be in the less competitive markets, and monopolized

by more dominant side, which is industrialized and developed countries. Hence, the decision making of a country adopts more raw materials as the export products do not merely but beyond its 'competitive' advantages.

Also, the yield of technical progress on the terms-of-trade will be based contrarily on the developed countries that have the investment sources for the less developed countries as well. To sum up, it creates a dependency relation of the investment host to the home country. Singer (1950: 477) discussed that the specialization on food and raw materials of the less developed to the developed ("industrialized") countries, fundamentally due to the influence of the latter through investment capitalized in the former countries. The condition has been a disadvantage for the less-developed country's economy, as it dissuaded the country from applying a more technology-advanced production and even lessening the advantage of the country received for the "foreign trade-cum-investment" due to its specialization on the export of food and natural resources products (Singer 1950: 477). Singer (1950:478) added that "technical progress in manufacturing industries showed in a rise in incomes while technical progress in the production of food and raw materials in underdeveloped countries showed in a fall in price" and also in the form of lower prices for the customer as added by Sarkar (2001: 441).

The fluctuation of the terms-of-trade in the developing countries is greater than in the developed countries due to the country's reliant on commodity exports (Broda and Tille 2003: 2). Broda's study in 2003 (as cited in Broda and Tille 2003: 2) complemented the argument by exclaiming the developing country have lesser power over their product prices in the global market; "by contrast, developed countries and oil exporters can exert a substantial influence on export prices". Singer assumed that the relative price of food and raw materials would decrease alongside with the technological progress. At the same time, Prebisch added that the manufactures products prices would be increased more than raw material products in the developed countries and deteriorate less than in the developing countries (as cited in Hadass and Williamson 2001: 10).

In their research, Broda and Tille (2003) explained how the logic of the terms-of-trade theory is. Assumed that there was a drop in the price of export products for each country with the fixed and floating exchange rate, which will cut the income of the export players in the countries. The condition then presumably causes the industries slowing down their production, thus creates a reduction in employment as well. As there is lesser foreign currency flowing into the country as the reduced of export trading, the market tends to preserve the foreign currency as its response to the shortage supply of the currency; thus, it is appreciated. The government of both country with each currency system then will react differently to the condition; the one with fixed exchange rate might intrude the market by absorbing the local currency in exchange for the foreign one. This attempt will pull many domestic funds out of the money market, "reducing the amount of money and credit available for business investment and expansion" (Broda and Tille 2003: 2). Eventually, Broda and Tille (2003:2) found that it can "lead to a costly contraction in output". On the other hand, a fall in the country's export prices will suggest the domestic currency to be depreciated, and by adopting the flexible exchange rate regime, the government will let it be. Such depreciation enables exports to be more competitive in the world markets, thus increasing the demand. The demand itself encourages the production in the export companies, "cushioning the adverse impact of the terms-of-trade shock on output" (Broda and Tille 2003: 2).

## 2.3 The Other Major Component of Indonesian Current Account: Empirical Studies from the Central Bank of Indonesia

Since 1981 until 2018, there was a short period where Indonesia booked a surplus balance on its current account; it was after the crisis of 1998 until 2011. Nevertheless, it was only up to 2003 the surplus has a relatively high figure of approximately 5%. It has been said that trade balance is the primary driver of CA, yet there are other contributors as its stimulus. Sahminan, Ibrahim and Yanfitri (2009) conducted a study to find the determinants of Indonesia current account using data from 1994 until 2004 based on the intertemporal approach. They founded that three components significantly influenced current account; consumption, investment and real effective exchange rates during the period; and one per cent increase in those three in respect to GDP ratio created a lower current account to GDP by 0,38 per cent, 0,39 per cent and 0,07 per cent, respectively (Sahminan, Ibrahim and Yanfitri 2009: 20). Adding to the findings, Sahminan, Ibrahim and Yanfitri (2009: 20) claimed that the threshold of the current account to GDP ratio is  $\pm 2$  per cent, where an excessive consumption spending, investment and Indonesia appreciation will lead to an unsustainable current account balance. On a different direction of causality, Nugroho et al. (2012: 32) found that when the current account deficit to GDP exceeds the threshold of  $\pm 2$  per cent, the exchange rate will be depreciated around 12,7% (m-o-m) with a delay effect approximately four months.

As a developing country which experienced a deteriorating in its external balance for most of the time, it could not be neglected that the role of external financing is a necessity to CA. Widodo et al. (2013: 31) argued that during the period of 1970 until 2012, especially in the short-term, the imbalances are considered as a sustainable one if it is supported by capital inflow to the capital and financial account. Moreover, the investment climate in the country must ensure a support system to attract FDI, other investment (loan), and portfolio investment to handle the short-term pressure in the imbalances (Widodo, Tobing and Yuwana 2013: 31). In accordance to that, Tobing et al. (2014: 40) agreed that FDI, in particular, is the most influential component of capital and financial account toward the current account balance and the economic growth in general. However, it resulted in many payment outflows from the country than to remain in the country to support export production. They added (Tobing et al. 2014: 41) that financing of current account deficit using FDI is not sustainable unless it is invested in an export-oriented sector.

In brief, it seems there has been a constant issue on how the economic structure addresses the problem of imbalance in the country. It could not be denied as well that external financing or FDI, in particular, is required to fix the imbalance problem; only if the fund is well invested in a productive sector; manufacture than natural resources sectors. Even more, the expansion of the export-oriented production has to be centre of the policy where the external finances as the support system, not the other way around.

# Chapter 3

## The Drivers of Indonesian Economy

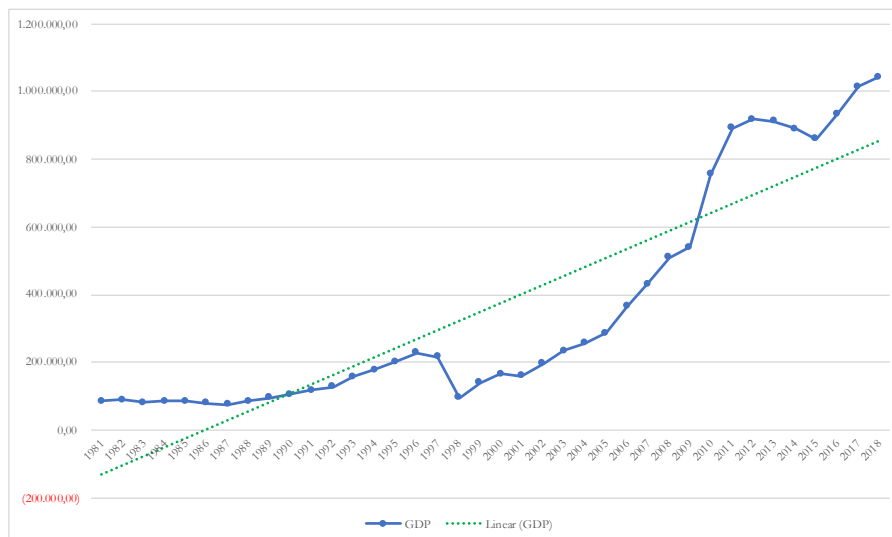
*We would like to have breakthroughs and to synergise between all ministries; therefore, there are more job opportunities available. We would like to suppress current account deficit, trade balance deficit and develop industrialisation, which is export-oriented and import-substitution.*

*(Joko Widodo, President of Indonesia for 2019 – 2024, his speech on October 23rd, 2019 during the announcement of the new ministry cabinet)*

### 3.1 Indonesia’s Economic Structure

Indonesia, as one of the largest economies in Southeast Asian, has been continuous attention in the global for both its potentials and problems in several discourses; social, politic, culture, economy, natural resources and many more since its Independence Day in 1945. Based on that, numerous cooperation has been established within the bilateral, regional, and multilateral level to improve and strengthen the country's economic condition. On October 8th – 14th 2018, Indonesia became the host of an important annual meeting of International Monetary Fund and World Bank (IMF-WB) in Nusa Dua, Bali Region (Bank Indonesia 2019: 65-66). Particularly in the finance topic discussion, Indonesia raised four focus; (1) reinforce the international cooperation for the monetary system, (2) infrastructure financing, (3) digital and (4) sharia economy and financing. The current President, Joko Widodo, since his first year in 2014 he focuses principally in the development of infrastructure to boost the economic production activity.

**Figure 3.1**  
**Indonesia’s Gross Domestic Product (Current Price, in Million USD)**



Sources: Data extracted from World Development Indicators on October 24<sup>th</sup>, 2019.

The trend of the gross domestic product of Indonesia presents an upward through the years in Figure 3.1, even though in specific years it experienced some drop off due to an external factor; such as Asian crisis in 1997. Moreover, particularly during the period of the

Asian crisis, the main reason for a significant drop of GDP was triggered by the depreciated value of Indonesian exchange rate 244,18% from IDR 2.909,38 to IDR 10.013,62. GDP as the primary indicator of a country's economic condition, it could be analysed based on several lenses. One is the expenditure approach; GDP is composed by household and NPISH consumption, government consumption, investment (fixed capital formation and changes in inventories), and trade (export and import) in the approach. Each year, the final consumption regularly gives the most considerable contribution with approximately 50 per cent of total GDP between other components; investment, trade, and government. The consumption itself is categorised into two types of consumers; households and NPISH, the contribution of households spending has consistently dominated with the percentage of 56, 56,31 and 56,66 in 2014, 2015, and 2016 respectively out of other components (BPS 2019: 11). It is indeed proof that domestic demand leads to the economy of the country.

Yet, the absorption has still to be supplied by the import activities to fulfil the domestic demand. For the past three years, the trade transactions contribute 37 per cent of the total GDP. It would seem right for Indonesia, as a country that has diverse natural resources compares to its country neighbours; for instance, Singapore and Malaysia, to conduct an export-oriented economy structure. Mostly year, the trade of raw materials booked a positive net export. The country is a raw materials producer, although it also has manufacture production. The manufactures shares are considerably more substantial than the raw materials in the total of merchandise trade; 45 and 66 per cent for manufactures exports and imports in 2018. The manufactures exports had experienced an aggressive expansion from 3 to 51 per cent in 1981 and 1996 respectively, which was one year before the Asian crisis emerged in 1997.

**Table 3-1**  
**Agricultural raw materials and manufactures shares in percentage of merchandise exports in particular years.**

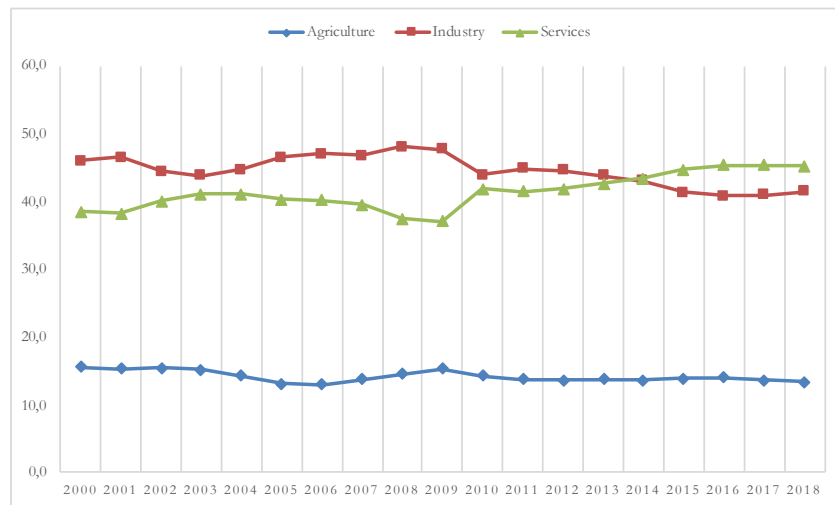
	1981	1996	2011	2018
Agricultural raw materials exports (% of merchandise exports)	8,22	5,83	7,52	4,65
Agricultural raw materials imports (% of merchandise imports)	3,20	5,45	3,19	2,90
<b>Agricultural raw materials net exports (% of merchandise exports)</b>	<b>5,02</b>	<b>0,38</b>	<b>4,33</b>	<b>1,75</b>
Manufactures exports (% of merchandise exports)	3,02	51,43	34,16	44,72
Manufactures imports (% of merchandise imports)	68,95	71,20	59,74	65,94
<b>Manufactures net exports (% of merchandise exports)</b>	<b>-65,93</b>	<b>-19,76</b>	<b>-25,58</b>	<b>-21,22</b>

Sources: Data extracted from World Development Indicators on October 29<sup>th</sup>, 2019.

Since then, the growth rate was slower and slightly fell from 57 per cent in 2000 to 34 per cent in 2011. Despite its larger shares than raw materials in exports, manufactures trade booked negative net export in many years due to the higher import transactions. It might have occurred because the structure of the Indonesian economy has substantial agriculture, forestry and fishing production. The share of manufacture production has not sufficient yet to cover the entire domestic demand, which promotes more imports to enter the country.

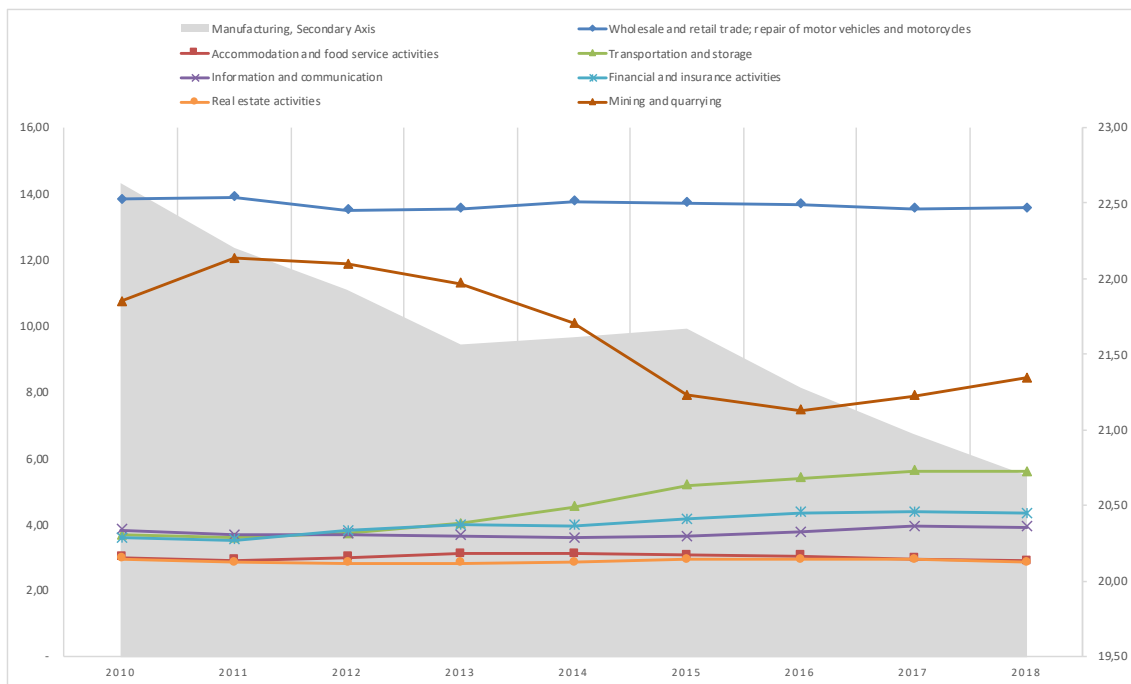


**Figure 3.2**  
**Structure of Output (percentage of GDP at current basic prices)**



Sources: Data extracted from ADB Key Indicators on November 11<sup>th</sup>, 2019.

**Figure 3.3**  
**Comparison of Output from Two main Industry Sectors (Manufacturing, and Mining, Quarrying), and Several Services Sectors (percentage of GDP at current basic prices)**



Sources: Data extracted from ADB Key Indicators on November 11<sup>th</sup>, 2019.

In the recent years, there are three main drivers in the economic growth; agriculture, industry, and services<sup>2</sup>. Based on Figure 3.2, industry and services sector perform more

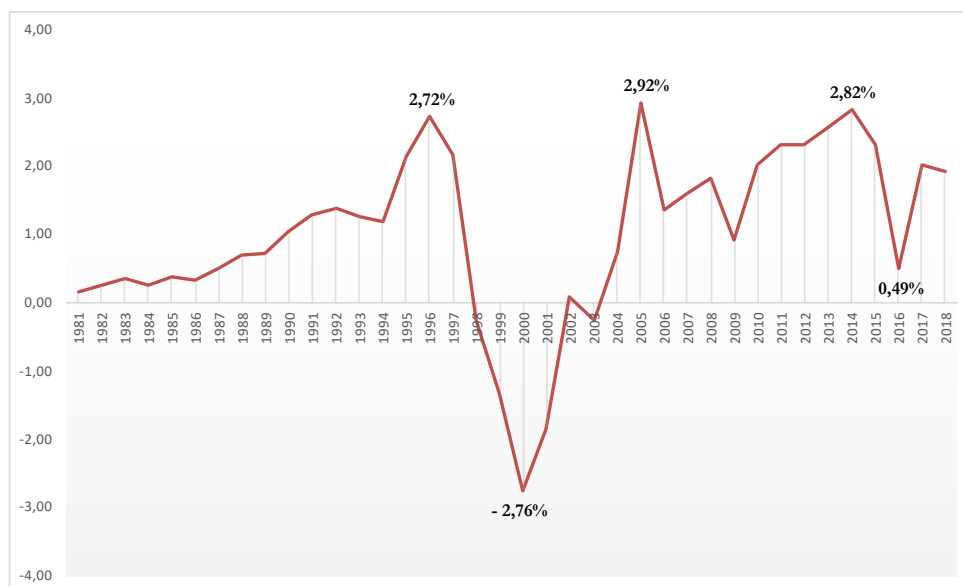
<sup>2</sup> The definition of each indicator is based ADB Key Indicators' definition. Agriculture refers "hunting, forestry, and fishing". Industry sector refers "mining, manufacturing, construction, electricity, gas, steam and air conditioning supply". Services refers "wholesale and retail trade, transport and storage, accommodation and food service activities, financial and insurance activities, real estate, and professional and technical services". <https://kidb.adb.org/kidb/references/definitions>

significant role than the agriculture sector, with an average of 44,5 per cent, 41,3 per cent and 14 per cent, respectively between 2000 and 2018. Nevertheless, there was a shifting period when industry sector started to weaken by having the closest gap with services sector in 2010 due to a significant drop from the previous year and eventually be passed in 2014. It is also confirmed by the gradual decline of manufacturing output to GDP from 22,63 per cent in 2010 to 20,70 per cent in 2018. It was followed by mining and quarrying as well, although since 2016 the graph showed a slight improvement from 7,45 per cent to 8,42 per cent in 2018. But the percentage is still below 10,74 per cent in the year of 2010.

To support domestic production, it undoubtedly needs investment to expand and accelerate the real sector. The liberalisation era of Indonesian financial sector (especially in banking) was started on October 27th, 1988; where the regulation of bank establishment lessening accelerated the massive emerge of new banks in the country, and also the central bank of Indonesia assigned a lower banking reserve requirement. Besides, back in 1967, the government issued Law No. 1 about Foreign Direct Investment application in Indonesia. It started the country's openness attitude to the International market, where previously the foreign investors were restrained by the nationalisation mechanism of the country's economic structure (Sahminan, Ibrahim and Yanfitri 2009: 7).

Figure 3.4 informs about the net inflow of foreign direct investment that is obtained by calculating the new investment deducts with the disinvestment in the country. The financial sector liberalisation of Indonesia began in October 1988, where the government eased the banking reserve requirement from 15 to 2 per cent and the bank establishment permit for a new bank. Besides, the massive emerged of banks were accompanied as well by the advancement of financial instruments; "negotiable certificate of deposits, commercial papers, promissory notes, Automatic Teller Machines" (Warjiyo and Solikin 2003: 38). The deregulation of economic policy to provide a more supportive climate for a more significant role of private actors in 1983 – 1996, which was proven by the rise of FDI inflow to the country. The growth of foreign direct investment net inflows was significantly improved by 975 per cent from 576 to 6.194 Million USD (BOP, current price). The rise in FDI was also caused by the rise in textile and garment industry, which was a result from the labour-intensive industry relocation from Taiwan and Korea (Widodo, Tobing and Yuwana 2013: 26).

**Figure 3.4**  
Foreign direct investment, net inflows (% of GDP)



Sources: Data extracted from World Development Indicators on October 31<sup>st</sup>, 2019.

The boom of foreign inflow to the country, it was used to cover the saving-investment gap of the country. The fund was mostly in the form of foreign private loans and had a short-term maturity. However, it invested in a private long-term project in the country, which did not match with the loan maturity and currency (Warjiyo and Solikin 2003: 38–39). That condition was suspected as the primary trigger of crisis struck in Indonesia in 1997.

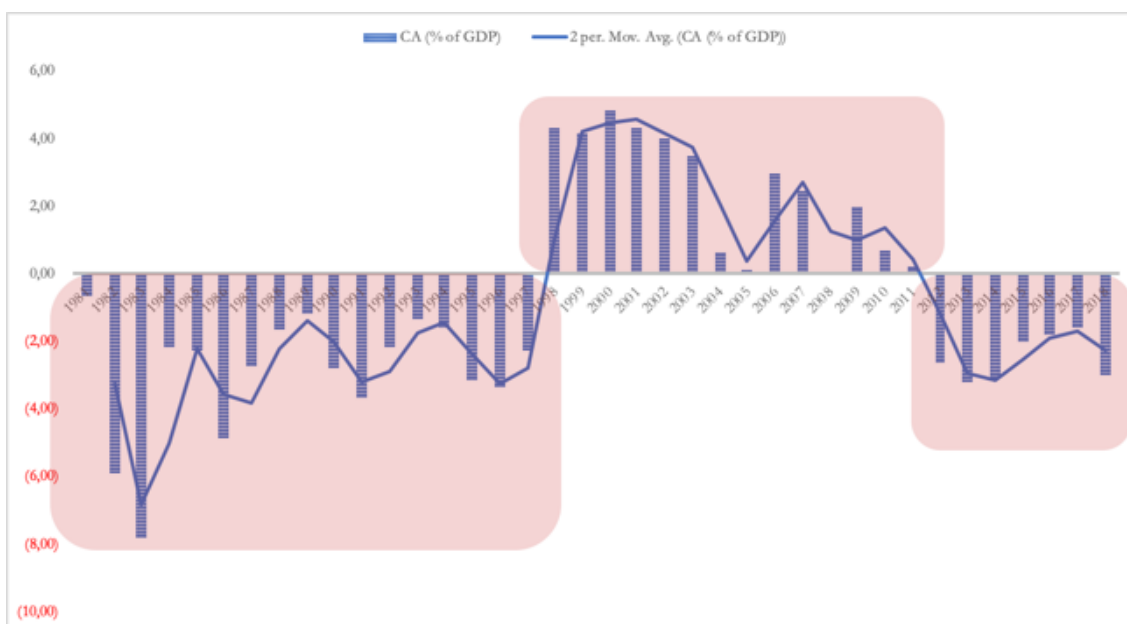
Afterwards, the foreign direct investment plumped down from 2,72 to minus 2,76 per cent of GDP, which the net FDI inflow was minus 4,5 billion USD (BOP, current price) at the lowest in the year of 2000. Facing the crisis of the financial sector, the government initiated a loan-restructure for private banks and non-banks in order to ease the condition. Later on, the financial sector was improved owing to the success of private loan restructures and the increasing of capital inflow as the result of privatisation of state-owned companies and divestment of banks within the Indonesian Bank Restructuring Agency (Badan Penyehatan Perbankan Nasional/BPPN) (KKBP 2017: 30). During 2002 until the recent years, the net investment inflows has rather volatilities. Nevertheless, the FDI indicated an increasing trend of the investment amount from 414 million to 1,51 and 12,05 billion USD from 1970 through 1980, 1980-1997 and 2004-2015, respectively (Hastuti and Dewati 2017: 48).

The motives of foreign fund sources are invested in a developing economy could be some-how tricky. Dunning (as cited in Hastuti and Dewati 2017: 13) categorised the aim of multinational company's direct investment into four characteristics; (1) to expand markets for a new product –market seeking oriented–, (2) to access natural and human resources in order to guarantee the production's inputs –supply-seeking oriented–, (3) to maximise profit through rising its production efficiency –efficiency-oriented– and (4) to protect or accelerate the ownership advantage through portfolio investment, or merger-acquisition on other foreign or domestic-owned companies to reduce the competitor –strategic asset-seeking oriented–. It has been a challenge for Indonesia to shift the investment direction from market-oriented to export-oriented (Hastuti and Dewati 2017: 73).

### **3.2 The Trends of the Balance of Payments and its Sub-Accounts**

Current account justifies the movement of goods, services, primary income, and secondary income (also known as current transfers) that occur between one resident to a non-resident(s) (IMF 2009: 9). Each transaction will be presented using "double-entry basis" accounting; credit and debit. Credit is applied for transactions are related with "exports of goods and services, income receivable, reduction in assets, or increase in liabilities". In contrast, debit is for recording "imports of goods and services, income payable, increase in assets, or reduction in liabilities" (IMF 2009: 10). Moreover, the IMF acknowledges that the current account (or also entitled external balance) is the most crucial account between others in the BOP structure. Likewise, the current account in the percentage of the country's gross domestic product is commonly understood as the country competitiveness position compares to other countries. The current Indonesian account appears to have a negative ending balance for the past seven years. As the Monetarist observes the current account imbalance as a trade account problem, the Structuralist argues that there might be a structural problem on which sub-account is dominating on a particular period.

**Figure 3.5**  
**Current account to gross domestic ratio (in percentage) from 1981 – 2018**



Sources: Data for Current Account extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019; GDP (current price, USD) extracted from World Development Indicators on October 24<sup>th</sup>, 2019.

If we observe the CA graphs in Figure 3.5 using a helicopter view, it gives some idea that the changes of CA since 1981 until the recent years presume to have three periodical cycles; 1981 – 1997, 1998 – 2011, 2012 – 2018. It was grounded on the assumption of the surplus or deficit balance of the account. Yet, it is required more comprehensive analysis to conclude it, which will be investigated in the remaining chapters.

**Table 3-2**  
**Decomposition of the Current Account Balance in Percentage of Gross Domestic Product Based on Three Periodical Cycles**

Details	1981 - 1997	1998 - 2011	2012 -2018
<b>Current Account/GDP (in Percent)</b>	<b>(2,92)</b>	<b>2,43</b>	<b>(2,48)</b>
<b>Trade/GDP (in Percent)</b>	<b>0,72</b>	<b>5,58</b>	<b>0,10</b>
- Goods/GDP (in Percent)	4,86	9,65	1,07
- Services/GDP (in Percent)	(4,14)	(4,07)	(0,97)
<b>Primary Incomes/GDP (in Percent)</b>	<b>(3,96)</b>	<b>(4,17)</b>	<b>(3,11)</b>
<b>Secondary Incomes/GDP (in Percent)</b>	<b>0,31</b>	<b>1,02</b>	<b>0,53</b>

Sources: Data for Current Account extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019; GDP (current price, USD) extracted from World Development Indicators on October 24<sup>th</sup>, 2019.

Three sub-accounts drive the movement of current account balance; trade account, primary incomes, and secondary incomes (or transfer) account. Each account records specific transaction; for example, exports-imports in the trade account, reinvested earnings in the primary incomes, and remittances in transfer account. The ending of each account forms the final current account balance. Assumed that there is an imbalance account, it could be financed through external resources (foreign direct investment, aid, bilateral or multilateral loan) or national resources (government budget account, economic structure adjustment).

In order to conduct an analysis for the changes of CA, table 3-2 elaborates the sub-accounts within three periodical cycles. Notably, two accounts stand out as the main drivers for CA; trade and primary incomes account. Each account dominated alternately between all sub-accounts in different periods; 1981-1997 and 2012-2018 were the period of the primary incomes hold approximately a larger figure than the trade account, meanwhile, in 1998-2011 it was led by the trade account. Especially during the time when trade account in charge, it alleviated the current account to have a surplus ending balance.

Conversely, there was one point that should be highlighted from table 3-2; primary incomes account consistently performs deficit balance through the years with the lowest was 8,58 in the percentage of GDP in 1998. The largest contribution of the primary incomes debit post in 1998 was another investment interest payment, direct investment interest payment and dividends as percentage 64,9%, 23,7% and 11,3% respectively. It could be recognised during the emerge of the Asian Crisis in 1997, where numerous foreign investors with its money left the country in the next couple of years. Notably, this could be an issue to be more considered whether the foreign fund that invested in the country is in short or maturity term; and whether the authority's approach in financing its imbalance is depending on the foreign fund, such as direct investment, portfolio or loan, rather than expanding the economies to outdo the current account deficit.

### **3.3 Policy Attitude**

To carry on the previous issue, this sub-chapter attempts reviewing to what extent the authorities responding to the deteriorating condition of the country current account and what kind of policy they generally applied in previous years.

#### **3.3.1 Before the Asian Crisis in 1997**

After its independence, Indonesia faced many struggles in the economy; a significant drop in the production capacity, lack of productive asset as the result of the post-war, high inflation due to products scarcity, unmanageable money circulating in the market, export-import blockaded by the Netherlands, several version of money circulated in the market (based on Indonesian, Japanese, and Netherlands Government) and lastly, large inter-regional migrations (KKBP 2017: 4). The ruled Government at that period conducted a massive Nationalisation<sup>3</sup> on most crucial assets for the country; agriculture companies, trading companies, industrial and mining companies, banking sector (including the Central Bank), merged the private-owned electricity, and transportation companies into state-owned companies to rebuild the country again.

Before the 1980s, Indonesia has been blessed by the high price of the world oil. However, there was a declining in the world oil price in the early 1980s, which led to the emerging of the world recession. The stabilisation of the Indonesian economy suffered toward the recession; as the national income was weakening, it limited the government spending to help the domestic economy.

In order to recover from the 'dark times', the government conducted massive deregulation, de-bureaucratisation, and even liberalisation in many layers of economic sectors; banking, finance, trading and investment (Warjiyo and Solikin 2003: 36). In particular, the era of Indonesia banking and financial sector liberalisation started on October 27th, 1988. It was the moment when the banking reserve requirement was decreased from 15 to 2 per cent, and the new bank establishment permit regulation was lessening (Warjiyo and Solikin 2003: 38).

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<sup>3</sup> Changing the ownership from private-owned to state-owned.

The money market instruments were evolved as well in accordance with the banking system; "negotiable certificate of deposits, commercial papers, promissory notes, Automatic Teller Machines". One of the results can be from an increase in the gross domestic saving of GDP per cent from 10,6 per cent in 1970 to 30,7 per cent in 1989.

However, Indonesia experienced a long-term current account deficit from 1981 until 1997. To encounter the deficit on the CA and promote the International competitiveness, "the government devalued Rupiah exchange rate by 27.6% and 31% in 1983 and 1986, respectively" (Sahminan et al. 2009: 8). The government at that time also applied a development policy with a focus on food self-sufficiency and raw materials processing industry (for example steel, fertiliser, cement and paper as the output products) (KKBP 2017: 17).

### 3.3.2 Indonesia After the Crisis: 1998 onwards

Before the crisis emerged, there was a boom of foreign inflow entered the country to cover the saving-investment gap of the country (Warjiyo and Solikin 2003: 37-39). The fund was mostly in the form of foreign private loans and had a short-term maturity. However, the fund was invested in a private long-term project in domestic, which did not match with the loan maturity and currency. When the crisis finally reached Indonesia, the country overwhelmed with its current external debt stocks.

**Table 3-3**  
**External Debt Stocks and Domestic Exchange Rate from 1996 - 2000**

Details	1996	1997	1998	1999	2000
External debt stocks (% of GNI)	58,30	65,10	168,20	117,37	93,49
Exchange Rate (in Rupiah)	2.342,30	2.909,38	10.013,62	7.855,15	8.421,78

Source: Data extracted from World Development Indicators on November 11<sup>th</sup>, 2019.

In facing the problem, government considered that price stabilisation and exchange rates are the main requirement to drive the economy (Bank Indonesia Annual Report 1999: 7). With IMF, the country set the base money target, including net international reserves, net domestic assets and Indonesian bank liquidity assistance (or Bantuan Liuiditas Bank Central/BLBI). BLBI is a financing assistance scheme for banking that experiences liquidity problems during the monetary crisis in 1997. A massive restructuring of the banking industry and its assets in particular also conducted through National Bank Restructuring Agency (Badan Penyehatan Perbankan Nasional/BPPN).

Also, the government focused on paying the foreign debts, in order to reopen the access of international trading financing, where on June 4th, 1998 the delegates of Indonesian government reached the agreement with the foreign creditor that represented by the Bank Steering Committee (Bank Indonesia Annual Report 1999: 10). In supply-side, mostly the business industry experienced a contraction due to a falling in global market demand. Business industry decided to restructure its debt problem first before expanding and waiting for the global market recover. It was the primary reason why imports fell significantly about 30 per cent in 1998; especially for raw materials support. The outcome of a falling in raw materials and consumer goods in the trade account, it delivered a surplus in the CA for several years ahead.

Since the 4th quarter in 2011, the current account balance shifted from surplus to deficit again due to the strong domestic demand could not be supported by the domestic market to provide the goods and the increasing of Indonesia's dependency towards fuel imports (Bank Indonesia Annual Report 2012: xix). A sharp drop in exports, as a result of global economic contraction, caused the CA to GDP ratio experienced a significant deficit of 2,66 per cent. Still, the investment and working capital credit were assumed quite high to boost the economic capacity onward. To support the economic growth, government applied a reduction of banking lending rates (Bank Indonesia Annual Report 2012: 41).

## Chapter 4

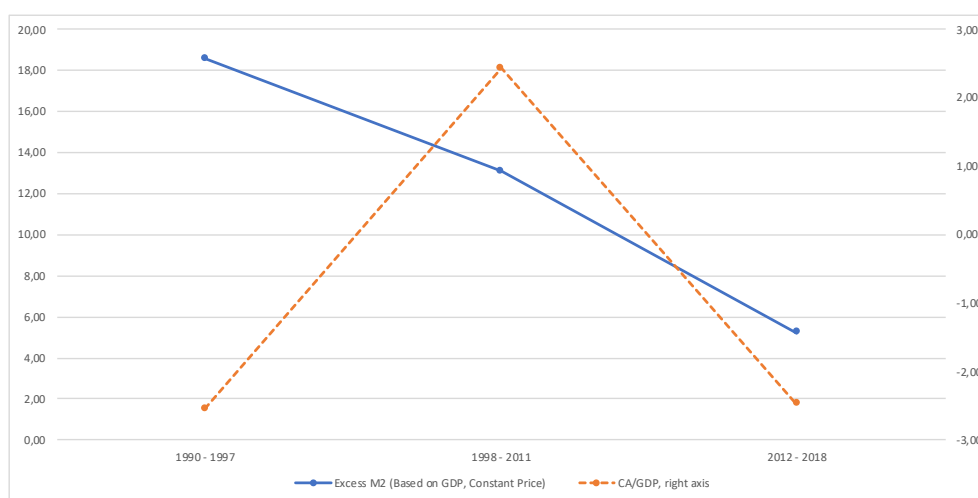
### Analysis of the Views

It has been clear from the previous chapters, that there were several years of current account surplus in Indonesia current account balance from 1981 until 2018; which was in 1998 until 2011. Hence, this chapter will attempt to address what could explain the relative strength of Indonesia current account in 1998 – 2011 and the weakness in afterwards using the monetary and alternative approach. Firstly, this study the impact of monetary expansion as being studied in the monetary approach. It assumes that the excess in the money stock is the primary driver to the changes in expenditure. That condition subsequently becomes a future problem in the current account deficit through the rise in import trading. Other impacts have been seen as well in the changes of exchanges rate depreciation, as it is assumed as a variable to counterweigh the damaging current account deficit. However, the implementation of the approach towards understanding the events in Indonesia could not cover the full details. Using the structuralist approach, the paper will elaborate the structure of the current account, without being focused simply on the relation of money expansion to the current account movement, will be used to assist the study in the second part of this chapter.

#### 4.1 Findings on the Monetary Approach

In the previous chapter, it has been mentioned that the current account of Indonesia has experienced three periods that have significant changes from 1981 until 2018. The country encountered a relative improvement, of a surplus ending balance, in the current account between 1998 and 2011. Although, it seems that the strength period was only from 1998 until 2003 with an average surplus of 4,17 per cent of GDP.

**Figure 4.1**  
**Current Account Balance as Percentage of GDP and Excess Broad Money Stock (M2) Growth, Period Averages, 1990 - 2018**



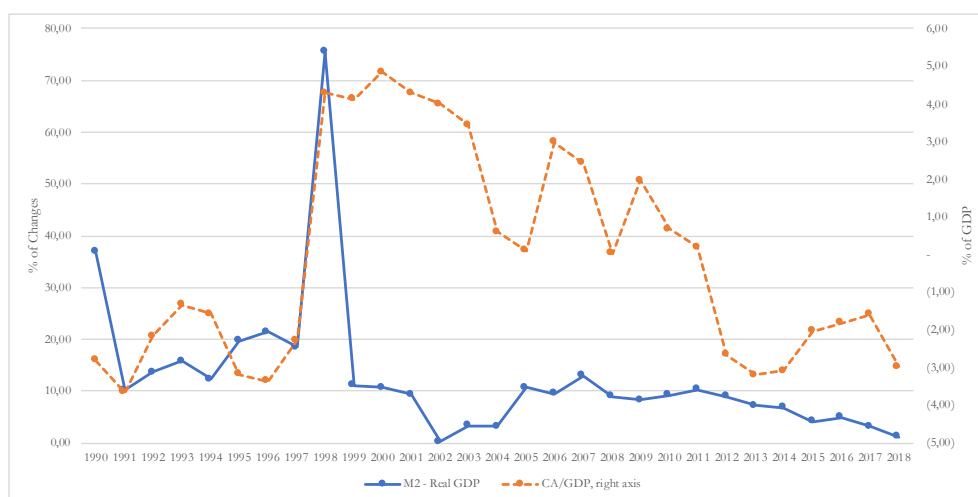
*Sources:* Data for Excess M2 consists of M2 data from Bank Indonesia on November 7<sup>th</sup>, 2019 and GDP Constant Price from WDI on November 21<sup>st</sup>, 2019; Current Account in percentage of GDP consists of Current Account data extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019 and GDP (current price, USD) from World Development Indicators on October 24<sup>th</sup>, 2019.



Taken from the standard literature approach, the analysis will start by comparing the changes in excess broad money stock (or known as M2) and CA in the percentage of GDP. The excess broad money stock is derived from the annual percentage changes in broad money minus change in real GDP (GDP constant price, the basis year 2010 of the US dollar). Figure 4.1 above provides averages for the account balance and excess money stock growth three periods; 1990-1997, 1998-2011 and 2012-2018. The periods were classified based on its overall movement of the current account balance; whether it was surplus or deficit with an intention to check a brief relation on both variables.

It appears that there were two different stories within three periods. Firstly, the changes from the first to the second period of the broad money stock and current account balance move in an inverse manner as studied by the monetary approach; where a declining in excess money stock created current account balance surplus. Secondly, in the next period after 1998, both charts shift in moderately similar to the same, which could question the argument of the monetary approach. It could be suggested that the principal explanation for the movement of the current account balance was not merely based on the changes in the excess money stock.

**Figure 4.2**  
**Current Account Balance as Percentage of GDP and Excess Broad Money Stock (M2) Growth, Annual Movement, 1990 - 2018**



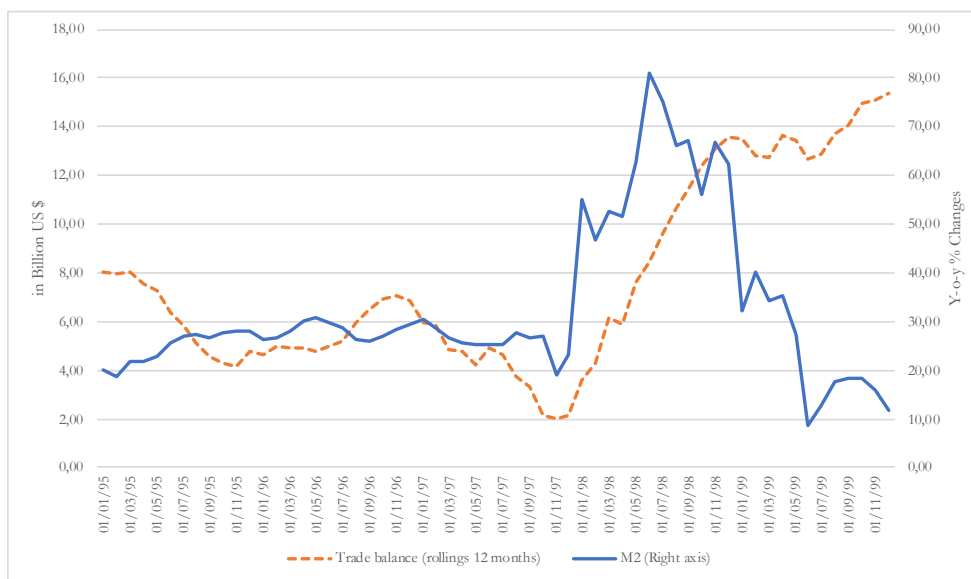
Sources: Data for Excess M2 consists of M2 data from Bank Indonesia on November 7<sup>th</sup>, 2019 and GDP Constant Price from World Development Indicators on November 21<sup>st</sup>, 2019; Current Account in percentage of GDP consists of Current Account data extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019 and GDP (current price, USD) from World Development Indicators on October 24<sup>th</sup>, 2019.

In figure 4.2, the general view that could be grasped with the graph is about a correlation between the excess broad money and current account. There were some years that two variables had a negative relationship. The graphs also provide a view that money stock and current account balance move in sync, especially in 1997 – 1998. It was the year when both variables rose sharply, which is contrary to the literature of the monetary approach. It could of course be claimed that the relationship is a lagged one. However, the annual data could not proof that argument. In order to see such relation appropriately, the monthly data shall be presented to check the validity of it. But since the monthly data current account for Indonesia is not available, it is replaced by the monthly trade balance data, as the most significant component of the current account balance.

By using the trade balance as a proxy for the current account, figure 4.3 rather indicates that the annual data does not imply the lagged relationship. Instead, it strengthens the theory that an increase in excess money stock improves the trade balance, and eventually, the current

account balance as well up to the first term of 1998. However, since in August 1998, there was a contrast correlation between variable. A gradual declining in excess money does not seem to affect the movement of trade account balance entirely. It is indeed that the movement of current account balance was slowing down, but the changes were not as much as the excess money stock. To some extent, it is suggesting that there is another variable that influences CA.

**Figure 4.3**  
**Changes in The Trade Balance and Broad Money Stock, Monthly Data, 1995 - 1999**



Sources: Data for M2 extracted from Bank Indonesia on November 20<sup>th</sup>, 2019; Trade Balance from ADB on November 20<sup>th</sup>, 2019.

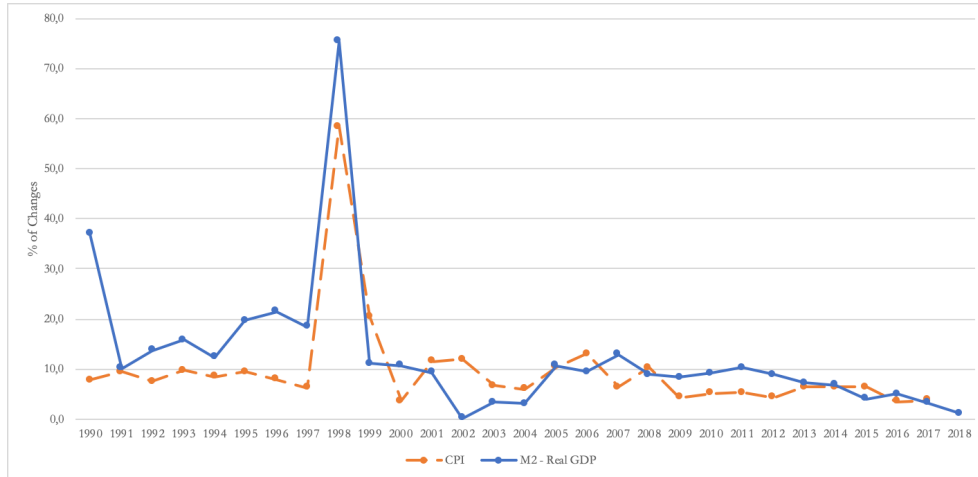
Based on the monetary approach discussion, a change in the current account balance should be accompanied by an opposite movement in the rate of inflation. The reason is that the same factor, money stock enforces both variables. To support the argument, figure 4.4 provides empirical support by using the consumer price index (CPI)<sup>4</sup>, as a variable to represent inflation. It appears that both variables move along as argued by the monetary approach; thus, it contains valuable information for the current account movement as well in the general picture. For instance, in 1998, the sharp rise of the excess broad money stock in 1998 is accompanied by an increase in the consumer price index in the preferably same pace. But then again, in between 1991 – 1997, both variables did not have similar growth.

The other important note that should be taken from the monetary approach is about the role of exchange rates. The movement of the exchange rate encounters the relation of current account balance and money stock in the form of an adjustment programme to improve the imbalances. The literature stated that it moves in the opposite direction with the balance as it a way of restoring it. A depreciation of exchange rate will be as a response to a current account deficit, where it is expected to encourage the trade account, in which equal to the current account balance. As it acknowledges the relationship between the current account and exchange rate, therefore it might reflect in the real effective exchange rate as well. The graphs in figure 4.5 are the average figure of CA in the percentage of GDP and REER changes divided into three periods of central concern in this paper. The point that should be taken from the graphs is that the movement of two variable is contradicting with the

<sup>4</sup> It is acknowledged that using CPI as an indicator for inflation, but for the case of developing countries like Indonesia most of studies commonly use this variable.

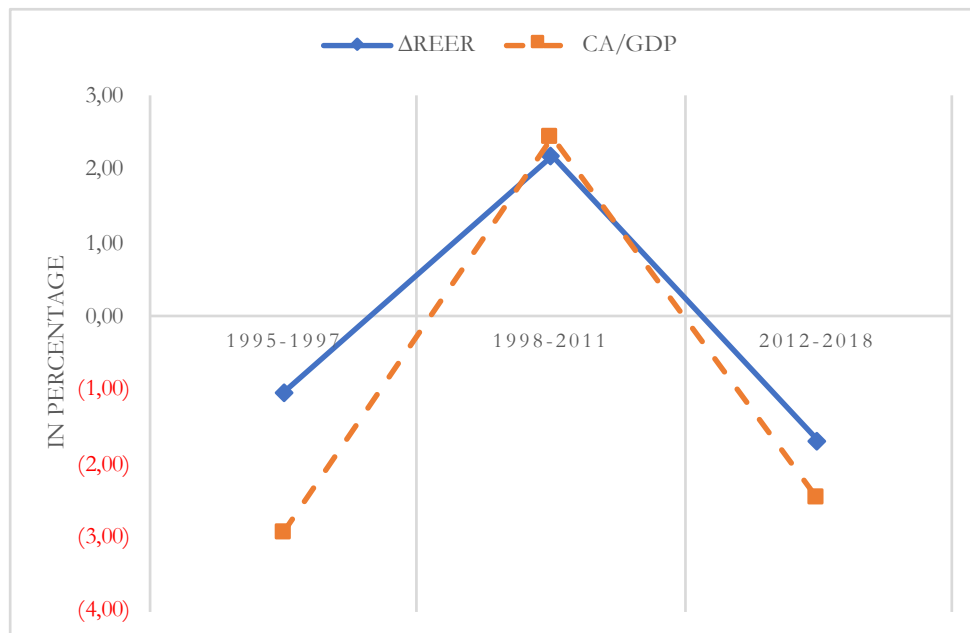
approach. An appreciation in exchange rates accompanies a current account deficit. Moreover, instead of exchange rates movement to be in the opposite direction, it is somehow moving in line with the current account balance.

**Figure 4.4**  
**Changes in Excess Broad Money Stock and Inflation, annual data, 1990 - 2018**



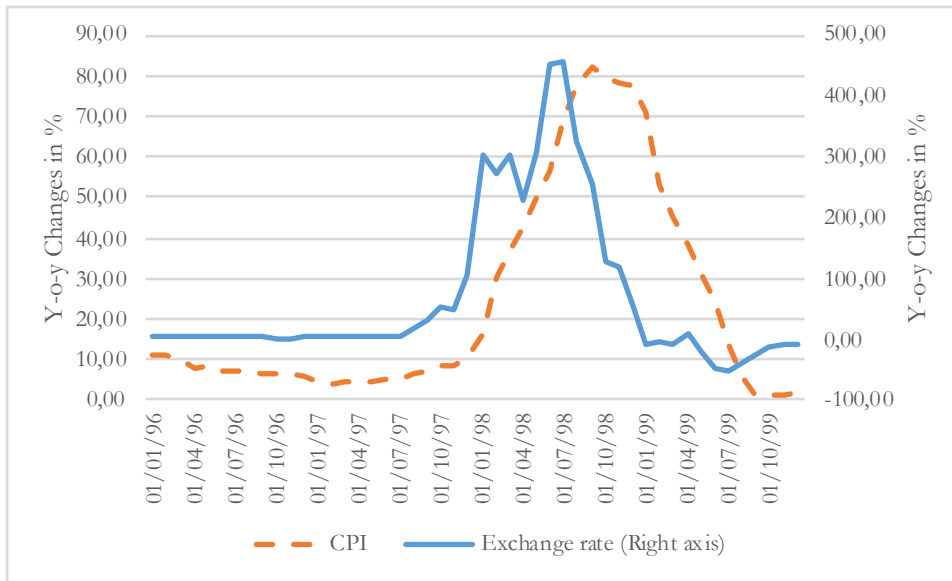
Sources: Data for Excess M2 consists of M2 data from Bank Indonesia on November 7<sup>th</sup>, 2019 and GDP Constant Price from World Development Indicators on November 21<sup>st</sup>, 2019; CPI from World Development Indicators on November 20<sup>th</sup>, 2019.

**Figure 4.5**  
**Current Account/GDP Ratio and Percentage Changes of Real Effective Exchange Rates**



Sources: Current Account in percentage of GDP consists of Current Account data extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019 and GDP (current price, USD) from World Development Indicators on October 24<sup>th</sup>, 2019; Real Effective Exchange Rates from Bank for International Settlements on November 7<sup>th</sup>, 2019.

**Figure 4.6**  
**Year-on-year Changes of Exchange Rates and Inflation, Monthly Data, 1996 - 1999**

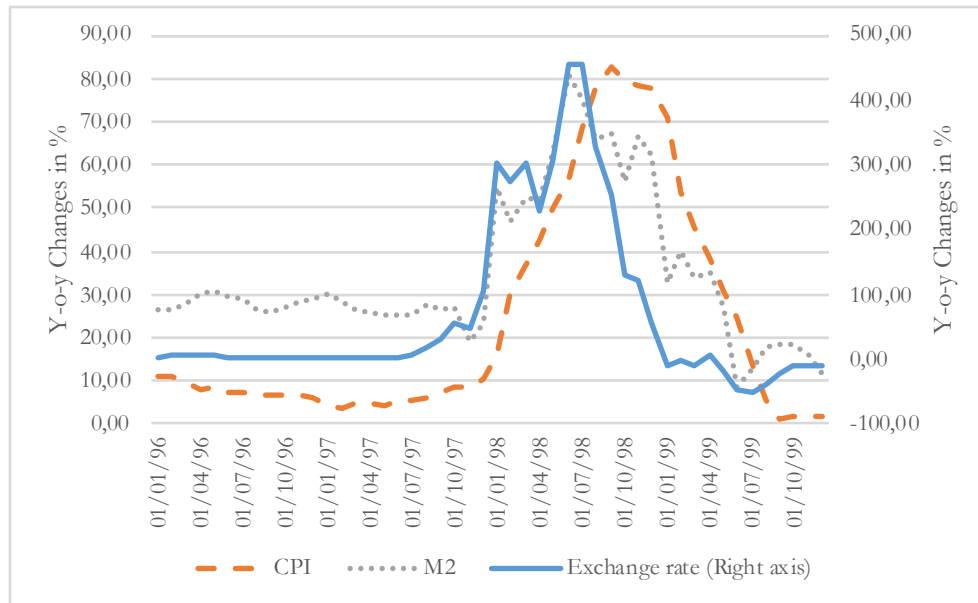


Sources: Data for CPI extracted from OECD Statistic on November 20<sup>th</sup>, 2019; Exchange Rates from OECD on December 17<sup>th</sup>, 2019.

Since there was a confirmation about the movement of inflation that contains slightly hint for the current account balance, figure 4.6 attempts to check the relationship between the inflation and exchange rates. The monetary approach argued that when there is a rise in prices (or inflation as the variable), the exchange rates will emerge as a response to such change. To some extent, it suggests that inflation changes precede the appreciation or depreciation of exchange rates. Observing the monthly data for year-on-year changes for two variables, it is more precisely contradicting with the approach. It also seems to suggest that the changes in exchange rates were responsible for the observed sharp rise in inflation in 1998 rather than the changes in the excess money supply.

Still, it could be argued that the movement of the exchange rate was due to changes in the excess money stock. Figure 4.7 then attempts to check the argument. The broad money stock is added to the graph with inflation and exchange rates. The application of broad money stock instead of the excess money stock is due to data limitation of GDP data in the monthly report. These data show that in general, the trend of the broad money stock and inflation movement are similar by some means and had a delay changes followed the exchange rates during 1997 – 1998 as the first questionable year. Theoretically, the money stock is assumed as the exogenous in the monetary system, where the variable is assumed not to get affected by a change of another variable like the exchange rate. Instead, through this brief testing, the result shows that the money should be considered as the endogenous variable. This is argued as the variable seems determined by the change in exchange rates, not the other way around. The fact of the exchange rate trend that is moving earlier than the money stock, it is questioning the primary argument in monetary approach about an exogeneity of money—in that way doubting its understanding of the current account balance, especially over the short-term as it is presented in monthly data.

**Figure 4.7**  
**Year-on-year Changes of Exchange Rates, Broad Money and Inflation, Monthly Data, 1996 - 1999**



Sources: Data for CPI extracted from OECD Statistic on November 20<sup>th</sup>, 2019; Exchange Rates from OECD Statistic on December 17<sup>th</sup>, 2019; and M2 from Bank Indonesia on November 20<sup>th</sup>, 2019.

## 4.2 Findings on the Alternative Approach

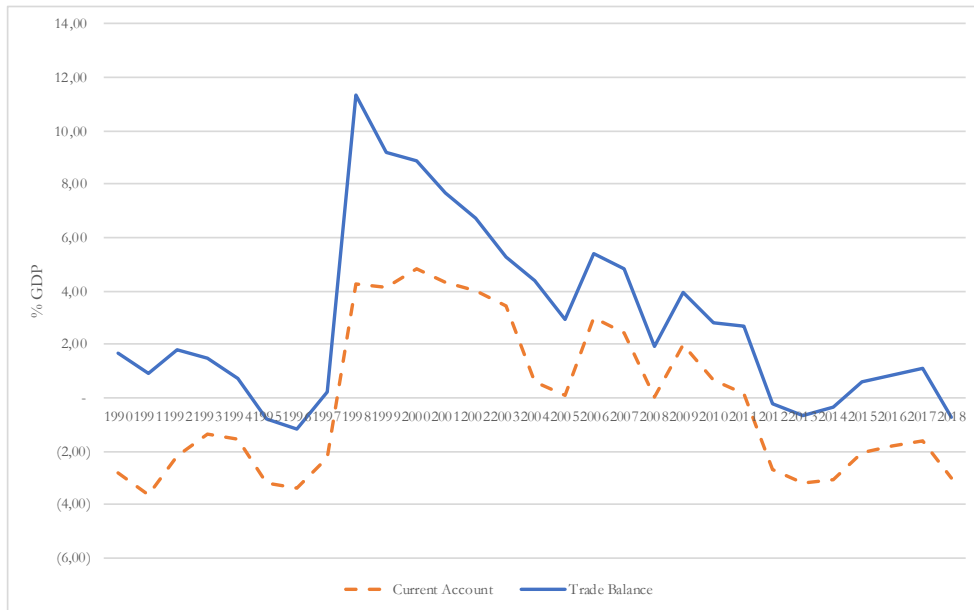
The findings in the sub-chapter 4.1 might have indicated an open debate on what might justify the movement of CA in Indonesia. The structuralist approach, as an alternative theory to this study, carries an understanding that the trade account tends to be the main driver and an important transaction for the current account balance. On the other hand, there are also other essential factors that might play a significant role as well in the movement of Indonesia's current account; such as services account and primary incomes account. This sub-chapter attempts to investigate how both sides of stories have their effect on the current account, as the main topic in this paper.

### 4.2.1 The Changes in Trade Account

The main argument of the structuralist approach is that the trade account is the crucial driver between other sub-accounts for the current account balance, where the changes in trade balance are aligned with the movement of the current account. To check such relationship, figure 4.8 plots the two accounts together from the year of 1990 until 2018. It appears that the graphs acknowledge the theory, where it moves in line throughout the years. However, it could not be summed up that the trade balance is the only sub-account which has a significant impact on the CA, as there is still a gap between the graph of current and trade account.

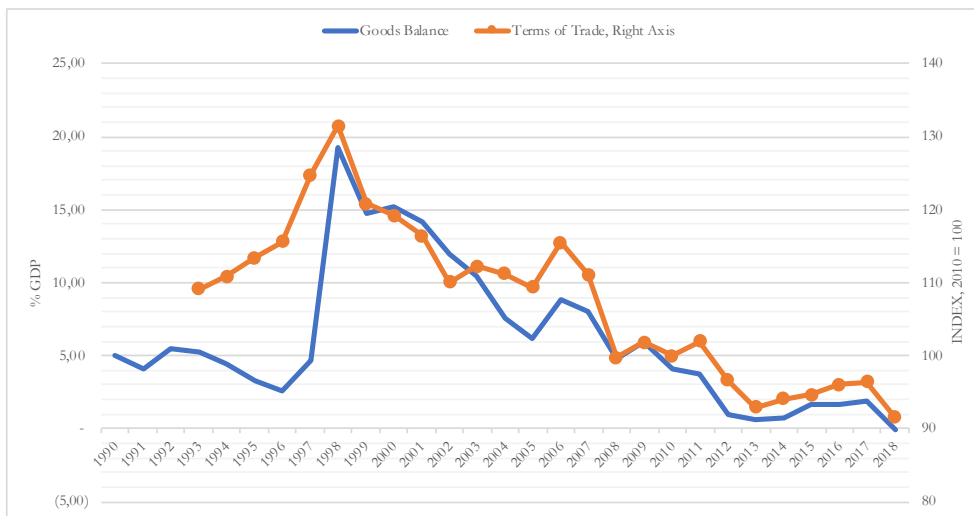
Furthermore, the structuralist approach uses terms-of-trade as a proxy to observe the condition of the trade account structure. The approach argues that a long-term deterioration of current account balance creates a negative impact to the terms-of-trade. This correlation could be briefly seen in figure 4.9 by jointly plotting the goods account, as the largest share in the current account, and terms-of-trade. The graphs confirm that both variables are moving aligned; it suggests that the two variables might impact each other.

**Figure 4.8**  
**Current Account and Trade Account Balance, Annual, 1990 - 2018**



Sources: Data for Current and Trade Account extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019.

**Figure 4.9**  
**Goods Trade Account and Terms of Trade, Annual, 1990 - 2018**



Sources: Data for Goods Trade Account extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019; GDP (current price, USD) extracted from World Development Indicators on October 24<sup>th</sup>, 2019.

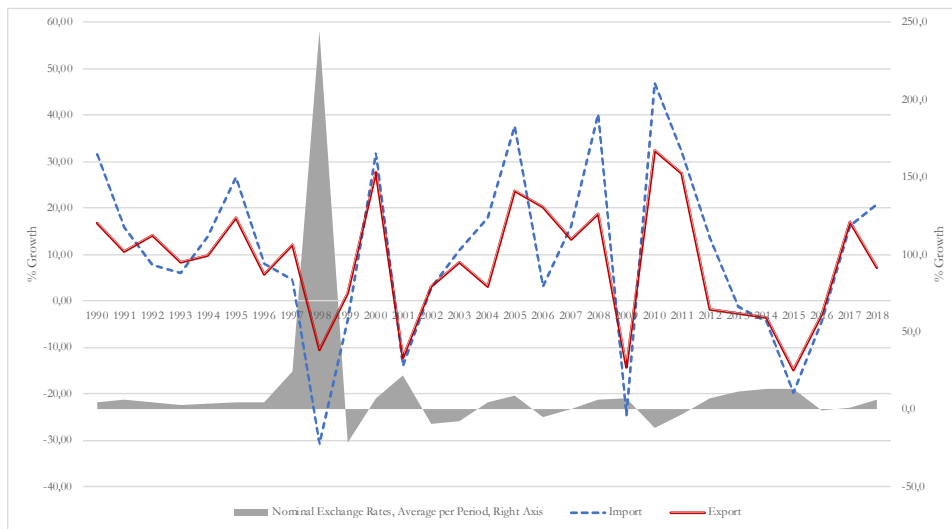
But particularly in 1998, a significant increase on current account and terms-of-trade are still a question. Figure 4.10 attempts to seek an evidence for the occurrence. A dramatic increased on the current account balance through the trading system, could be debated because of a sudden depreciation of the Indonesian Rupiah currency against US Dollar. The value was severely fall about 454 percent from Rp 2.518,3 in July 1997 to Rp 13.962,4 in July 1998<sup>5</sup>. The depreciation caused a rise in export and import prices, nevertheless the increase

<sup>5</sup> Based on Currency Exchange Rates, Monthly Average from OECD Statistics, on 17<sup>th</sup> December 2019

in import price was less than the export price. There was also a larger amount of lessening import than export value. In practice, the currency depreciation will bring benefit for the exporter.

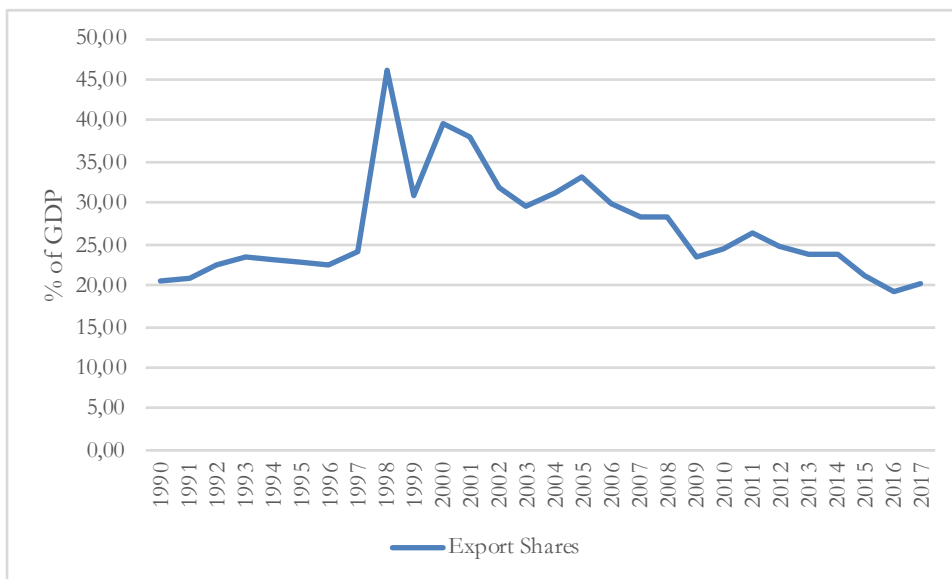
Yet, there was a conflicting story between the value and growth of total export, particularly in 1998. Figure 4.11 demonstrated that particularly in 1998, the export value shares to total GDP was increased, while in figure 4.10, the export growth was weakening. These incidents provide exceptional attention that the dramatic increase of current account balance was a result of an overvalues Rupiah, not due to a high performance of export transactions.

**Figure 4.10**  
**Import, Export, and Nominal Exchange Rates, in Percentage Growth, Annual, 1990 - 2018**



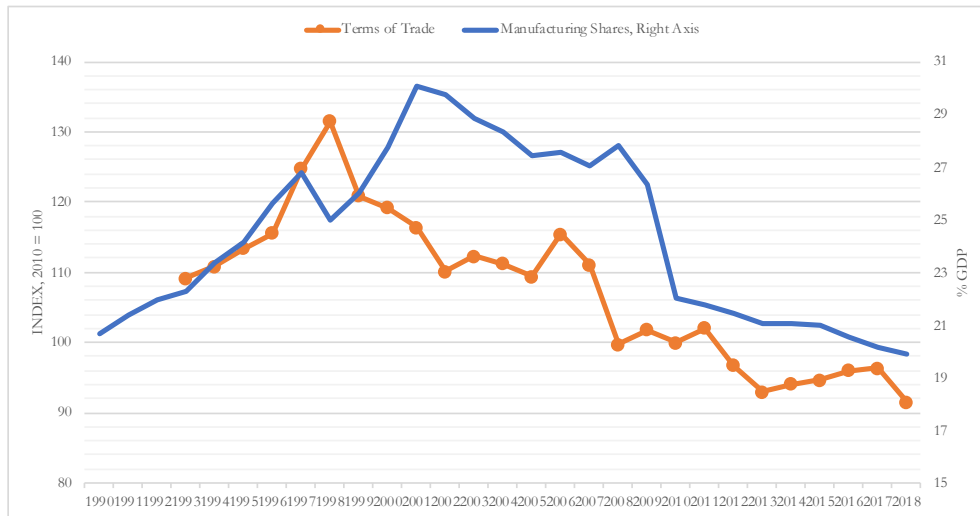
Sources: Data for exchange rates from OECD Statistics on December 17<sup>th</sup>, 2019; and import-export data is based on Balance of Payments data from IMF Data Warehouse on September 12<sup>th</sup>, 2019.

**Figure 4.11**  
**Export Shares in Percentage of GDP, Annual, 1990 - 2017**



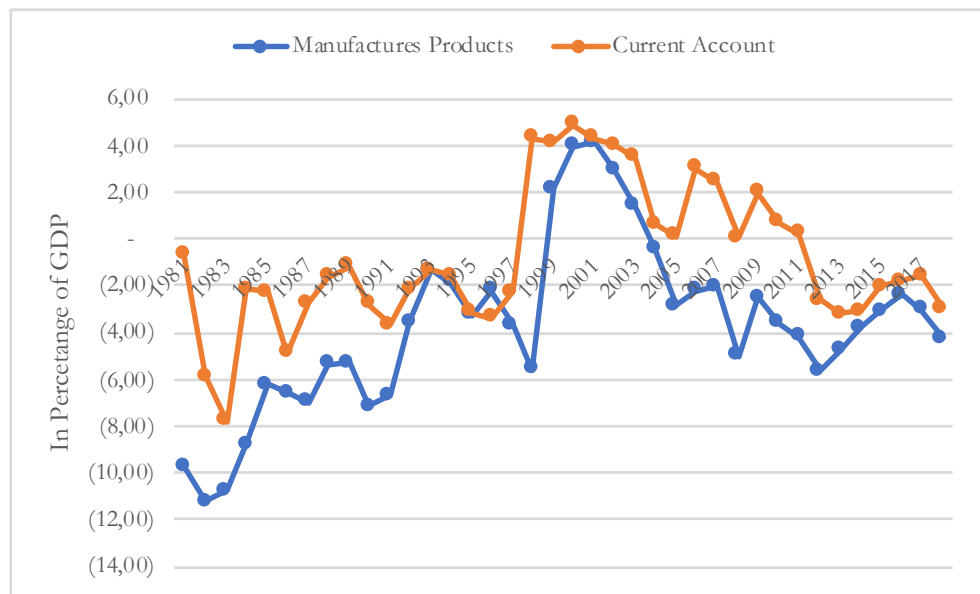
Sources: Data extracted from International Financial Statistics on July 12<sup>th</sup>, 2019.

**Figure 4.12**  
**Terms of Trade and Manufacturing Shares (% GDP), Annual, 1990 - 2018**



Sources: Data for Terms of Trade and Manufacturing Shares from OECD Data Portal extracted on November 20<sup>th</sup>, 2019. Graphs were prepared by the author.

**Figure 4.13**  
**The Movement of Manufactures Product Net Export and Current Account, in Percentage of GDP, Annual, 1981 - 2018**



Sources: Data for Net Exports Manufactures from WTO Data Portal extracted on November 11<sup>th</sup>, 2019; CA from IMF extracted on September 12<sup>th</sup>, 2019. Graphs were prepared by the author.

As noted in chapter 2, the theory also mentioned the importance of trading product decomposition. Notably, a country that concentrates in raw materials instead of manufactures tends to experience a lesser and not competitive terms-of-trade index. Figure 4.12 provides to find some evidence on this relationship. It can be seen from the graphs that in the early period, the terms-of-trade progressed along with the country production shifts toward manufacture activities. The downward graph of terms-of-trade starts to occur when the trend of manufacturing shares is descending. In the beginning, the deterioration of current account was affected prior to the collapse of the Rupiah currency in 1998, but then the shifting towards less manufacture production can be attributed in large share to the constant deterioration of current account balance for the next periods. Figure 4.13 supports the idea of



structuralist in regard to this manufacture exporter argument. The indication of deindustrialisation phenomena that is shown through the decreasing number of Indonesia's net export manufacture products comprises another crucial point to the deterioration of the current account balance. The dramatic collapse of Rupiah currency in 1998 assisted a temporary improvement to the manufacturing industry by creating these goods more internationally competitive and gave more revenue in money value term for the exporter. But then, deindustrialisation that was occurred in the following period pulled back the current account balance of Indonesia into a negative figure again, and it remains still weak until 2018.

## 4.2.2 The Significant Role of Other Sub-Accounts

In the previous chapter, table 3-2, it indicated three main periods that become analytical materials of the research; 1990 – 1997, 1998 – 2011, and 2012 – 2018. It appears that there was a shifting of the important driver of the current account movement from trade to primary incomes account. The relative improvement that occurred in 1998-2011 was sourced from the trade account, whereas the primary incomes account movement dominated the later period of a worsening condition. To be precise, the positive figure of CA in the second period was caused by the relative improvement from the manufacturing shares in the total GDP, which also supported by the substantial depreciation of Rupiah. Then, the later period was followed by both declining in manufacturing shares and larger negative figure of primary incomes.

As a comparison, table 4-1 provides two other large shares after the goods account in the current account balance; which are services and primary incomes. As a country that has a large population and abundantly beautiful natural resources as tourist attractions; the common assumption was that services account would have a greater share after the goods account. However, the primary incomes account was the second substantial account in CA throughout the periods; with significant negative figures of 4,17 and 3,11 per cent of total GDP in the period of 1998 – 2011 and 2012 – 2018, respectively.

**Table 4-1**  
**Details Structure of Services and Primary Incomes Account, Average per Period**

Details	1998 - 2011	2012 - 2018
<b>Goods Account (% GDP)</b>	<b>9,65</b>	<b>1,07</b>
<b>Services Account Structures (% GDP)</b>	<b>-4,07</b>	<b>-0,97</b>
Manufacturing services on physical inputs owned by others	-0,09	0,04
Maintenance and repair services n.i.e.	-0,01	-0,03
Transport - Passenger	-0,22	-0,13
Transport - Freight	-1,43	-0,67
Transport - Others	-0,20	-0,01
Travel - Business	0,31	0,14
Travel - Personal	0,34	0,20
Other Services	-2,78	-0,51
<b>Primary Incomes Account Structures (% GDP) *)</b>	<b>-4,17</b>	<b>-3,11</b>
Direct Investment Incomes	-2,29	-1,95
Portfolio Investment Incomes	-0,22	-0,78
Other Investment Incomes	-1,67	-0,24

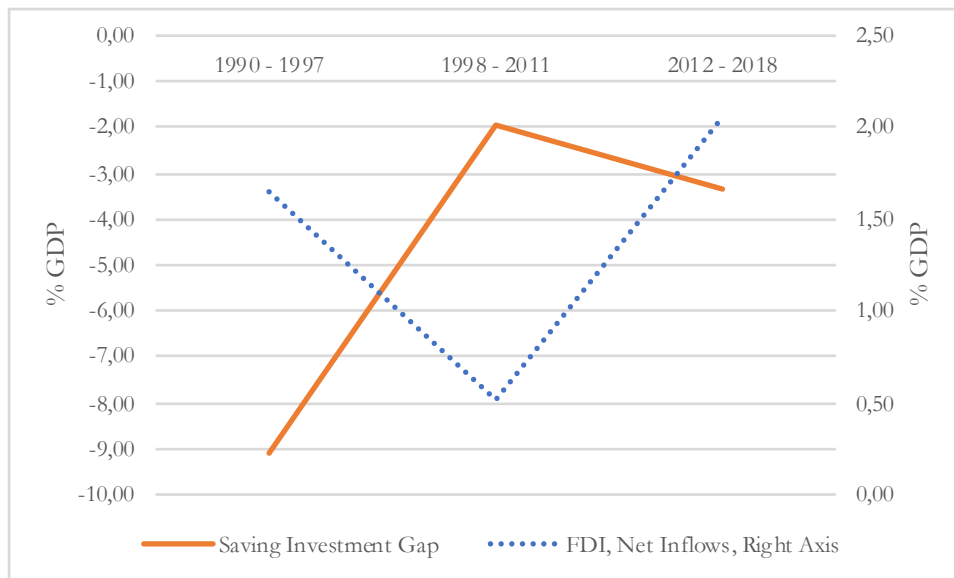
Sources: Data extracted from IMF Data Warehouse on September 12<sup>th</sup>, 2019.

\*) Data started from 2002

The following point that should be observed is that the direct investment incomes have had a constant and larger portion between other sub-accounts in the primary incomes account; like portfolio investment and other investment incomes. The negative figure presented in the direct investment provides an important note that the country earned lesser

than the repayment made on the equity and investment fund shares. Figure 4.14 added to the argument that FDI was an important source to fulfil the gap of the saving and investment in the country. However, at the same time, the investment holds a negative contribution to the overall ending of the current account balance significantly.

**Figure 4.14**  
**Saving – Investment Gap and FDI**



Sources: Data for Gross Savings and FDI was extracted from WDI; and Total Investment from WEO on December 13<sup>th</sup>, 2019.

## Chapter 5

### Conclusion

This paper addressed the question of what factors explain the long-term imbalances in the current account in Indonesia in 1981 until 2018. We began by noting the monetary approach of economic theory concerning an excess of money supply and its implications to the direction of the current account balance. The theory addresses that excess in money supply will lead to a rise in the expenditure on the economy, follow by an increase in inflation and create a deficit in the trade balance; as the imports exceed in the trade transactions. On the other hand, an alternative approach from structuralists argues that the terms-of-trade issue affects the direction of the current account balance. The theory distinguishes a country by its sector production exports; where it assumes that a raw-materials oriented export will be unfavourable sector as it contains more barriers on the global market and more disadvantage compare than the manufactures production.

This paper analysis the movement of Indonesia current account by classifying the time period based on its ending balance of the current account; 1981 – 1997, 1998 – 2011, and 2012 – 2018. Between three periods, there was a relative current account surplus during 1998 – 2011, which was accompanied by a decline in excess money in the broad and narrow term, as the monetary approach suggests it. The relative stronger current account balance at that time was also accompanied by the depreciation of the domestic exchange rate as the theory mentioned and in line with the changes in the inflation rate. The latter provides contradictory information to support monetary theory.

The other issue of the Indonesia current account arises from primary incomes account, where it consistently reported a negative ending balance. The country suffered a significant deficit in the primary incomes account, especially from 2012 through 2018 and it did hurt the current account ending balance. It does not mean per se that foreign financing is harmful to the economy. In fact, it could promote economic growth. But then one should be taking into account is about on which sector the money is invested; whether should it be better invested in the sector of the manufacture as its benefits for the improvement in the country's current account.

Using the structuralist approach of terms-of-trade, the paper argued that the trade account balance holds a vital role in CA throughout the years. The approach provides the analysis by underlying the importance of the trade account structure, especially the manufacturing products. It could be mentioned from the charts that Indonesia's terms-of-trade improved along with its shift towards manufacturing, but then started to fall with the shift away from it. The collapse in Rupiah currency in 1998 gave a temporary boost to manufacturing by making the trading goods become internationally competitive, but then it did not remain long as there was a hint of deindustrialisation in the country in the following years. That deindustrialisation occurs in the country and falls in the terms-of-trade switched back the process of current account balance improvement and returning its balance to the negative figure (and it was still deteriorating until the year 2018).

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