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1

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Introduction

The world has been witness to a steep depreciation of many of the currencies of the emerging market economies following the decision of the reversal of bond purchases by President Jerome Powell in the September Meeting of the Federal Open Markets Committee. Following the targeted federal funds rate being increased by the 75 basis points, there has been large retreat of funds from the emerging market economies. The oil price increase triggered by the Ukraine -Russia imbroglio and its inflationary impact is now taking its toll on the developing and emerging economies which are forced to bear the brunt of the hike in interest rates in the international economy. The situation is even more worse even when we take into consideration the fact that there has been a large increase in borrowings from the part of the emerging economies, in particular by the non-financial corporations in the aftermath of 2008 crisis. They were simply riding the tide of low interest rates and making the best use of the interest rate differentials in the world economy. As interest rates rise in the advanced world, the exchange rates of these developing country currencies vis-a-vis the dollar are witness to steep depreciation despite the large foreign exchange reserves they has accumulated over the years.

This study tries to locate the issue from the perspective of the different developing and emerging market economies exploring the same using databases from the open sources databases of the International Monetary Fund. It tries to explore the aspects of trade, capital flows and the exchange rates of the economies and the shifts over the period since 2000.

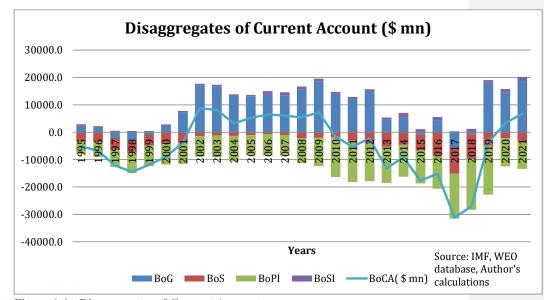
In this study, a set of students explore data from international databases trying to make sense of the external balance sheets of ten developing and emerging economies. While the Asian economies of China, Indonesia, Sri Lanka, Thailand and Vietnam are explored by Tushita Agnihotri, Tarun Kumar, Khushi Goel, Shruti Garg and Shambavi Singh respectively; three of the Latin American economies, Argentina, Brazil and Mexico are explored in this study by Kashish Narang, Manya Bassi and Niranjana respectively. The economies of Russia and South Africa are covered in this study by Himanshi Bharadwaj and Nandini Shankhyan. In the following chapters, the studies about these economies are arranged in the alphabetical order.

Chapter 1

Argentina

Overview

Argentina is one of the largest economies in Latin America, with a GDP of approximately US\$490 billion. According to the definition of International Monetary Fund (IMF), Argentina is considered a developing economy. The Argentine economy is currently undergoing the deepest recessionary process where inflation is expected to hit 95% by the end of 2022 (Reuters). Argentina's ongoing battle with inflation dates back to the 1980s, or even earlier. But the COVID-19 pandemic, coupled with Russia's war in Ukraine, shrinking global food supplies, and tighter energy markets, has sent shock waves through an already battered economy. According to INDEC National Statistics Bureau, nearly 4 in 10 Argentines currently live below the poverty line.



Balance of Payment Statistics

Figure 1-1 : Disaggregates of Current Account

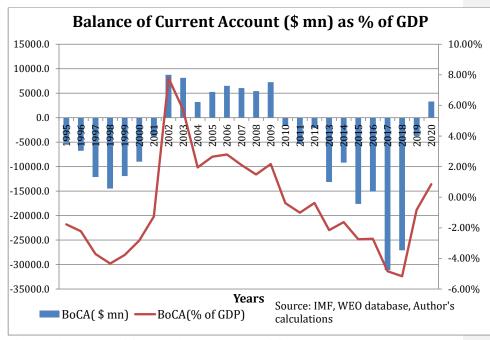


Figure 1-2: Balance of Current Account as a % of GDP

The current account is the most inclusive indicator of a nation's international trade, covering goods and services as well as a variety of financial flows, including interest payments. In 2002, Argentina's current account balance achieved a record high of \$8.7 billion in surplus, and a record low of \$31.1 billion in deficit (Figure 1 1). The surplus in commodities and secondary revenue has historically made up the majority of the current account. The Argentine Peso was tied to the US dollar under the convertibility plan put forth by the Argentine currency board in 1991 in an effort to lower high rates of inflation and establish macroeconomic stability. This fixed rate exchange system was abandoned in January 2002 causing the domestic currency, which was overvalued at the time, to depreciate in the same year. This led to gain in trade competitiveness in the economy which in turn brought about a rise in the export level. As a result, the balance of goods surplus has increased over time after 2002 as a proportion of the current account. A high inflation

rate in the country may have put pressure on the trade balance after 2014, causing it to exhibit a deficit once more.

The balance of Primary Income has always been in a deficit, and the balance of Secondary Income has always been in a surplus. According to the Net Official Development Assistance and Official Aid data, Argentina has always been the recipient of financial aid from other countries, with the exception of the years 2015-2017, which is reflected in its then low secondary income surplus (World Bank).

The year 2002 saw a peak in the current account balance due to the fact that the balance was in surplus and the year's gross domestic product in dollars saw an all-time low (Figure 1-2). The breakdown of the 1991 convertibility plan was a major factor in the nation's currency and sovereign debt crises as of the beginning of 2002. Even though GDP increased significantly after 2003, it took until late 2007 for it to surpass 1998 levels. The amount increased to \$643 billion USD in 2017, the highest level since 1965. When President Maurizio Macri took office in December 2015, his administration lowered export taxes on agricultural products and eliminated several import restrictions. Contrary to the government's expectations, the country suffered stagflation with GDP dropping by 2.3% and inflation reaching nearly 40% in 2016. This led to a surge in imports which was not accompanied by a proportional increase in exports, widening the current account deficit to -4.8% of GDP in 2017.

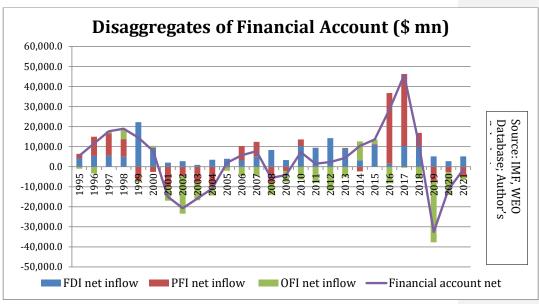
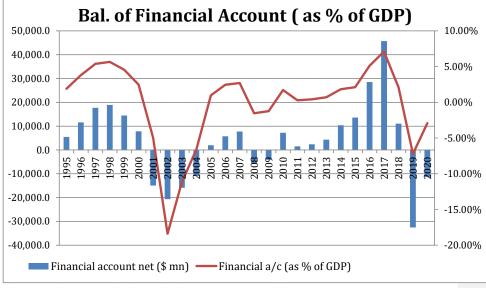


Figure 1-3: Disaggregates of Financial Account





Financial Account of a country measures the increase or decrease in the country's ownership of international assets. The balance of the various components of the financial account i.e. Foreign Direct Investment, Portfolio Investment and Other Investments has been unstable from the years 1995-2020.

Foreign Direct Investment

Due to the comprehensive privatization programs in Argentina, FDI Inflows were over ten times higher in between 1990 and 2003, as compared to the 1980s. More and more of the inflows came from OECD nations. Privatizations are intended to attract investments in other economic areas by having a multiplier effect.

Mergers and acquisitions are one of the main elements of foreign direct investments. The amount of FDI net inflow into Argentina peaked in 1999 at 14.4 billion USD. The peak can be attributed to the 1999 privatisation of YPF, a significant oil business, by the Spanish corporation Respol. After the year 2000, FDI inflows significantly decreased as a result of the economic crisis that started in 2001.

The majority of FDI inflows in Argentina are ascribed to FDI that is looking for markets and resources. The availability of inexpensive raw materials as oil cakes, gas, and minerals in Argentina draws foreign investors looking for resources, resulting in an increase in FDI. With the exception of 2009, which was the year of the global financial crisis, the inflow of FDI appears to be rising since 2004. After 2018, the FDI influx further started to decrease. The nation, which has been in a severe recession since 2018, was compelled to make default on its foreign debt. As new investments were scaled back and major foreign investors sold their enterprises to regional investors, the challenging environment had a significant influence on FDI.On the other hand, U.S. based firm Accenture acquired Wolox (a leading Argentinian agile development company) in January 2021 resulting in FDI inflows increasing by almost 2.4 USD billion from 2020 to 2021.

Portfolio Direct Investment and Other Investments

Up until 1998, the Net Portfolio Direct Investment Inflows were positive before a sharp fall. Argentina experienced a four-year downturn that began in 1998 and saw a 28 percent decline in its economy. The 1997–1998 East Asian currency crisis and the August 1998

Russian currency crisis made investors in affluent nations far more wary about making general investments in emerging nations. PFI Inflows above \$35 billion in 2017 for the first time ever. Investments other than FDI and PFI have remained negative due to political and economical instability.

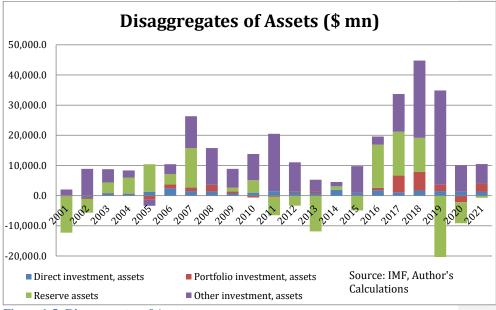


Figure 1-5: Disaggregates of Assets

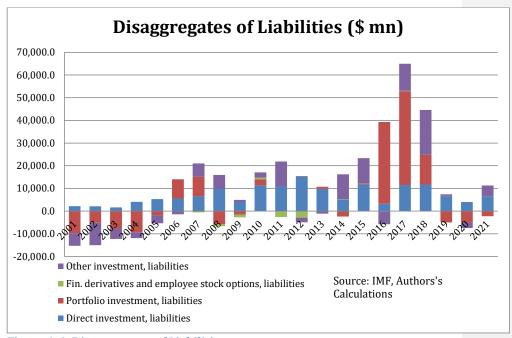


Figure 1-6: Disaggregates of Liabilities

The term "foreign direct investment" refers to net investments made to purchase a longterm management stake (10 percent or more of voting stock) in a company that operates in a country other than the investor's own. According to the balance of payments, it is the total of equity capital, reinvestment of earnings, other long-term capital, and short-term capital. The term "portfolio equity" refers to net inflows from equity securities, such as shares, stocks, depository receipts (American or global), and direct purchases of shares in local stock markets by foreign investors, which are not recorded as direct investments.

Reserve assets are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, and include holdings of monetary gold, special drawing rights (SDRs), reserve position in the International Monetary Fund (IMF), and other reserve assets.

The major component of the total assets has majorly been other investments, which includes loans and credit from banks and other financial institutions. This will include the loans that the non-residents have taken from the banks in Argentina. The figure for the

same reached a peak of \$31.2 billion in the year 2019. Due to the devaluation of the Argentine Peso in 2019, more foreign borrowers started taking loans from the Argentine banks, hence the sudden increase in the figure. The balance of Other Investments dropped to 8 USD billion in 2020 from 31 USD billion in 2019, the most important factor being the Covid-19 pandemic.

In 2019, the Argentinean economy went into recession causing the reserve assets to drop to -21.3 USD billion in 2019 from 11.2 USD billion in 2018. Direct and Portfolio Investments constitutes a very small proportion in the overall assets.

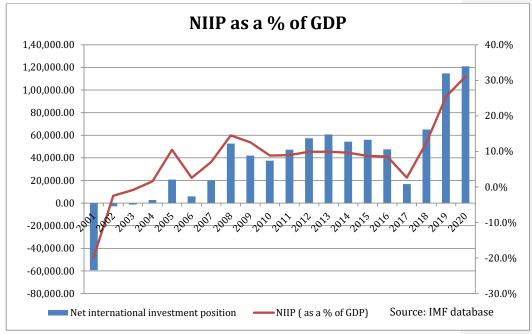


Figure 1-7: NIIP as a % of GDP

The Net International Investment Position (NIIP) is the balance value when external assets are adjusted for external liabilities. The government, businesses, and individuals of the nation own its external assets. The local assets owned by foreigners are the external liabilities. A nation's financial standing in relation to the rest of the globe is gauged by its Net International Investment Position. Up to 2003, the Net International Investment

Position value was only negative, suggesting that Argentina was a net creditor at that time. After 2003, the numbers significantly increased, reaching an all-time high of USD 121 billion in 2020. The abandonment of the Convertibility plan in January 2002 followed by the huge devaluation of the argentine peso led to a huge decrease in NIIP in 2002. After 2002, Argentina's peso has drastically lost it value as compared to the US Dollars. NIIP had the highest positive balance in 2020 which is the same year in which the exchange rate was at an all-time high of 84 Argentine peso per US Dollar.

Over the years, NIIP has remained positive even though Argentina's economy has faced one crisis after the another. A positive NIIP indicated that Argentina is a net creditor. Reserve assets constitute a small proportion of the total assets whereas the proportion of other assets is relatively large.

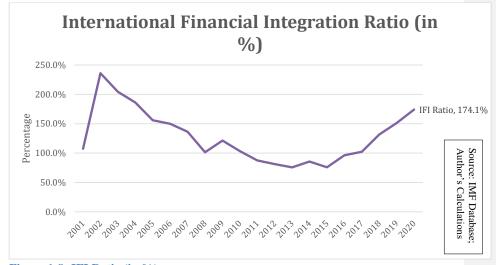


Figure 1-8: IFI Ratio (in %)

The International Financial Ratio is calculated by dividing the sum of assets and liabilities by the GDP. It measures the closeness between financial markets in neighboring or global economies and shows how dependent the country's markets are to the financial markets of certain other economies. Argentina saw a severe episode of capital flight in 2001–2002, but curbs on outflows were only put in place by the end of 2001, allowing us to determine the impact of controls on the cross-market premium independent of the impact of the crisis event. Additionally, the country imposed tax-like controls on inflows in the form of two restrictions in mid-2005 in response to renewed capital inflows and a strong recovery in asset prices that had already begun by the end of 2003: the amount entering the country must remain within Argentina for 365 days, and 30% of the total amount must be deposited in a local bank in the form of usable funds for the bank's minimum reserve requirement.

International Trade

Argentina's policies towards international trade have also been characterized by large swings. Inward-focused policies acquired control as of the 1930s, after aggressively participating in international trade at the start of the 20th century with exports centred on commodities. These were predicated on an effort to replace imported goods with domestic ones in order to establish an industrial sector at the expense of farmers. Following a more than 20% decline in real per capita income between 1970 and 1990, import barriers were partially decreased and foreign investment inflows increased. After 1990, the economy resumed expansion thanks to declining inflation and a currency tied to the US dollar. However, during the course of the decade, the exchange rate moved more out of alignment and export competitiveness decreased, and by the late 1990s, the economy was experiencing a severe recession. The debt default in 2001 and the breakdown of the currency peg were caused by growing budgetary imbalances. The subsequent sharp devaluation also contributed to the crisis' impoverishing effects by wiping away significant amounts of household savings kept in local currency. Then, policies began to focus more inwardly once more, including new initiatives to expand domestic businesses through import replacement.

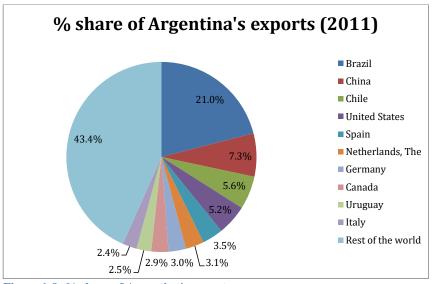
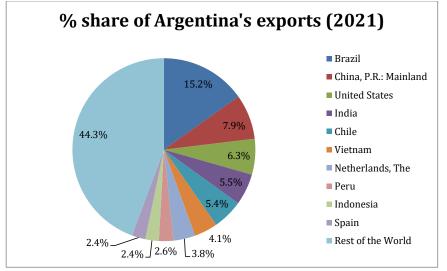


Figure 1-9: % share of Argentina's exports

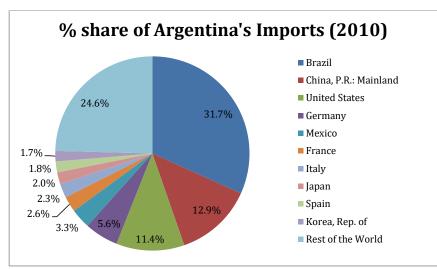




The major export partners of Argentina have more or less remained the same over the years. Brazil has remained the leading export partner with 21% of total share in Argentina's exports in 2011 and 15.2% share in the year 2021. The main products exported from

Argentina to Brazil include Delivery trucks, wheat and cars. Major manufacturing exports include motor vehicles (8% of exports), which are predominantly exported to Brazil, although exports to other Latin American markets have increased in recent years. Approximately 48% of all exports of goods in Argentina are made up of agricultural commodities, and 17% are made up of processed food items. The world's greatest exporter of soybean meal and oil, which together with soybeans make up 27% of all exports, is Argentina. Other significant agricultural export goods include bovine meat (2.2%), crabs (2.1%), wine (1.3%), and corn and wheat (11% of exports). Overall, over the past ten years, there has been a decline in the diversification of exports of goods. This is due in part to an increase in exports of soybeans, soybean oil, and soybean meal, which has been more dramatic than in other Latin American economies. Main export destinations are Brazil, the EU, China and the U.S. In a bid to protect domestic consumers and earn revenue, the Argentine government relies heavily on export taxes. Earlier this year, the government hiked export taxes on processed soybeans, one of its top commodities, to 33 percent, giving soy growers fits but offering a way to squeeze more out of one part of the economy that is working.

Beyond exports of goods, knowledge-based service exports have grown from the late 1990s to 2017. They make up the majority of commercial, professional, and technical services as well as software and computer services, and they represent close to 9% of all exports of goods and services (including audio-visual services). The United States (41%) and the European Union (26%), as well as other countries in Latin America, are the main markets for services exports.





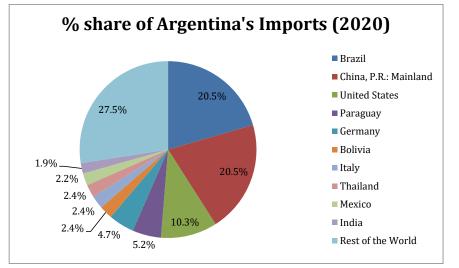


Figure 1-12: % share of Argentina's Imports in 2020

Brazil, China and the United States have remained the leading import partners of Argentina. The main products imported to Argentina from Brazil include cars, motor vehicles, delivery trucks, parts and accessories. During the years, the imports from Brazil have decreased from 31.7% in 2010 to 20.5% in 2020. The primary imports are

pharmaceuticals, electrical and office equipment, machinery and parts, petroleum oil and gases, motor vehicles and parts, and office equipment. Knowledge-based service imports have increased as well, accounting for around 8% of all imports of commodities and services and typically being used as intermediate inputs in their creation. The country's high tariffs and non-trade tariff barriers have a significant impact on import prices. They also have an impact on capital and intermediate commodities, increasing production costs throughout the economy. A 15% tariff protects industries that primarily generate capital and intermediate goods. As a result of being a net importer of oil and gas, tariffs on petroleum, gas, mineral goods, and other raw commodities are low. In sectors like textiles and wearing apparel, footwear, leather products and furniture, more than 70% of imports are still subject to non-automatic import licenses.

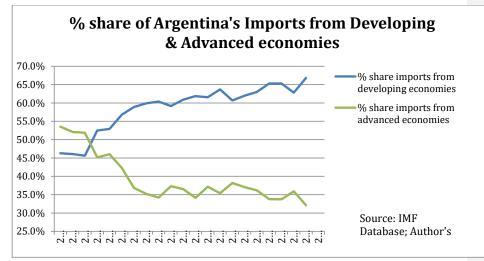


Figure 1-13: % share of Argentina's Imports from Developing & Advanced economies

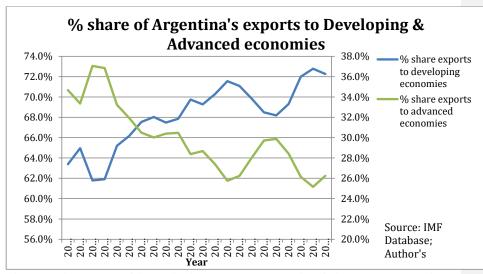


Figure 1-14: % share of Argentina's exports to Developing & Advanced economies

The percentage share of Argentina's imports from advanced economies has gone down from 53.3% in the year 2000 to 32.1% in the year 2020. Whereas the share of developing economies has increased over the years from 46.3% in the year 2000 to 66.8% in the year 2020.

The percentage share of Argentina's exports to advanced economies have decreased over the years and in the year 2021, the share was recorded at 26.2%. On the other hand, the exports to developing countries have gone up. It was recorded as 72.3% in the year 2021.

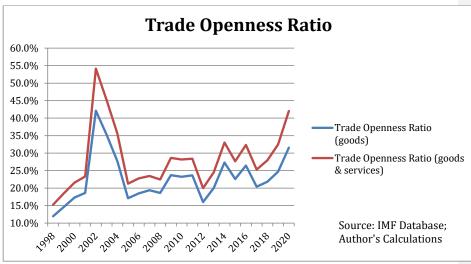


Figure 1-15: Trade Openness Ratio

The trade-to-GDP ratio is frequently used to measure the importance of international transactions relative to domestic transactions of a country. This indicator is calculated as the sum of total trade (i.e. the sum of exports and imports of goods and services) relative to GDP. The ratio is frequently referred to as the trade openness ratio, though the term "openness" may be slightly misleading since a low ratio may be caused by factors like the size of the economy and geographic isolation from potential trading partners rather than high (tariff or nontariff) barriers to foreign trade.

In 2002, Argentina's trade openness ratio (for both goods and services) soared to an alltime high of 42%. The ratio had previously been low because of the anti-export bias, but it quickly began to improve after the 1990s. Export taxes were completely repealed in the early 1990s, coinciding with the liberalisation period of Menem and Cavallo, and the agricultural sector remained fully liberalised until the Kirchner Presidency, during which export taxes were aggressively used again.

Argentine comparative advantage lies primarily on agricultural goods, broadly defined so as to include both primary products as well as agro-manufactures. In fact, Argentina has historically been considered as one of the "grain yards" of the world. The ratio seems to be recovering and in the year 2020, it was recorded at 42%.

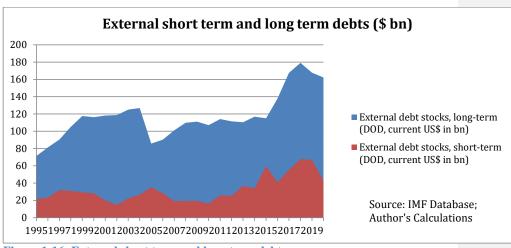


Figure 1-16: External short term and long term debts

Short-term external debt is external debt with a remaining maturity of one year or less. A helpful indicator of how rapidly a nation would be compelled to adapt if it were cut off from external borrowing is short-term debt by remaining maturity, which gives a gauge of all debt repayments to nonresidents during the upcoming year. The maturity of long-term external debt is greater than one year. Either a remaining basis or an original basis might be used to determine maturity. In 2002, the short-term external debt fell to an all-time low of \$14 billion.

The external long term debt stocks of Argentina have always been at least more than twice than the short-term external debt stocks. Argentina is accustomed to having a high level of debt because of the numerous financial crises it has experienced recently. The external long-term debt decreased dramatically between 2004 and 2005, falling from \$126 billion to \$85 billion. After the 2002 financial crisis, Argentina's economy began to recover in 2004. However, a temporary setback to Argentina's economic recovery occurred in 2004 when a transient energy crisis was brought on by escalating industrial demand. In 2018, the long-term debt rose to an all-time high of \$179 billion.

Argentina's external debt should rise for the year 2021 as a result of the international economic crisis brought on by the COVID-19 epidemic and negative interest rates.

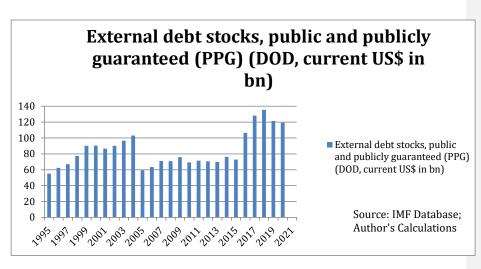


Figure 1-17: External debt stocks, public and publicly guaranteed

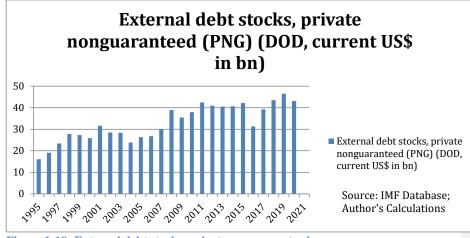


Figure 1-18: External debt stocks, private nonguaranteed

External debt stocks, both public and private, have not been very stable since the 1990s. The private nonguaranteed external debt stocks seem to be increasing over the years, mostly due to privatization. The public and publicly non-guaranteed debt have also been increasing, except for the year 2005 where it came down to \$59 billion. In the year 2016, the figure jumped to \$106 billion from \$72 billion in 2015.

In the year 2020, the PNG external debt stocks stood at \$43 billion whereas the PPG external debt stocks stood at \$119 billion.

Argentina's economy was ranked among the best in the world. But government incompetence and corruption caused a sharp economic downturn, which was exacerbated by a series of military coups and a protracted state of terrorism in the middle of the 1970s and early 1980s. The hope that Argentina will prosper in the future, despite its turbulent economic past, has been strong enough to encourage ongoing foreign investment and assistance from the International Monetary Fund. Argentina still owes the International Monetary Fund \$40 billion for its bailout from 2018, but it already received a \$44 billion loan from the IMF earlier this year to cover the debt.

Chapter 2

<u>Brazil</u>

Overview

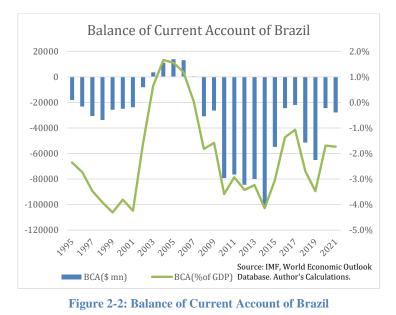
Located in South America, Brazil is a developing mixed model economy faced with a fluctuating growth rate over the past three decades. Home to the largest forests in the world, the Amazon rainforest, the country has a strategic geographic location to its economic advantage. Brazil is the seventh most populous country with its major share of GDP contributed by the service sector. In the 1990s, Brazil introduced supply-side reforms after several modifications, ensuring control of inflation which were hailed as a success as it reduced regulatory intervention and increased competition through trade liberalisation, deregulation and privatisation by the end of the decade leading to increased productivity. (Campos, 2003) The effects of these reforms can be seen in Figure 2-1 with real GDP growth rate reaching a high of 5.3% in 1994. However, as growth accelerated along with price stabilisation, the balance of payments deteriorated rapidly. At the same time, the "Tequila effect"-following the collapse of Mexican Peso in December 1994, surfaced which forced the government to curtail aggregate demand rapidly, acting as one of the factors leading Brazil into its January 1999 financial crisis facing a decline in real GDP to 0.5%. (Palma, 2006)

Brazil, however faced one of its longest period of recession lasting 11 quarters in 2014-16 due to domestic factors of political instability and corruption, without any foreign shocks such as from oil prices and foreign interest rates or a balance-of-payments crisis (Brinca & Costa-Filho, 2021) The recent recession was caused due to the COVID-19 pandemic leading to a 4.1 percent GDP decline in 2020 where Brazil was the 2nd country to peak in absolute number of deaths caused by the pandemic.



Balance of Payment Statistics

The balance of current account of Brazil has continued to run negative for the exception of the period 2004-2007. Balance of goods and Balance of secondary income are the two components which have remained positive for a majority of the years. Figure 2-3 shows how the sum of import of services and net primary income outweigh the sum of positive balance of goods and secondary income since 2002 with the exception of 2013-14. Figure 2-2 shows a dominant negative current account balance except for the period 2003-2007. When financial crises swept Asia in 1997 and Russia in 1998, investors were pulling their investments out of those countries which also meant capital outflows from Brazil. (F. Koenig & Duca, 1999) In mid-2002, Brazil's situation worsened due to the confidence crisis of investors from the fear of new economic policy changes due to the upcoming presidential elections. In September 2002, the IMF announced a 15-month stand-by credit of about \$30.4 billion to support Brazil's economic and financial program in December 2003. (IMF, 2007) This loan was one of the largest ever made by IMF and helped to lead Brazil into an economic boom along with favourable monetary and economic policy under the newly elected government, thereby creating a positive current account balance for Brazil in 2003-07.



The 2014-15 political crisis led to a massive decline in exports of Brazil and secondary

income, both of which were key positive components of the current account thus, leading to lower negative current account balances.

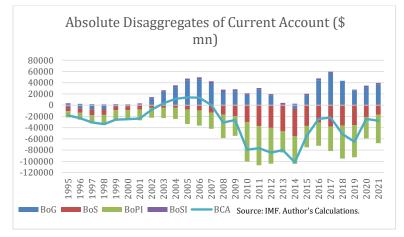


Figure 2-3: Absolute Disaggregates of Current Account

Trade Openness Ratio of a country measures the integration of the country in the world economy. Over the past decade Brazilian firms have also faced serious competitiveness challenges, such as real appreciation and high transactions cost of international trade. This means that only the most efficient firms or larger firms benefitting from economies of scale are able to overcome barriers to export which are a few in number. (Canuto, Fleischhaker, & Schellekens, 2015) The highest Trade Openness Ratio of Brazil under the years of study is 38.3% in 2021. (Figure 2-4) Figure 2-5 shows Brazil having the lowest Trade Openness Ratio for majority of the years amongst its BRICS competitors.



Figure 2-4: Trade Openness Ratio of Brazil (G &S)

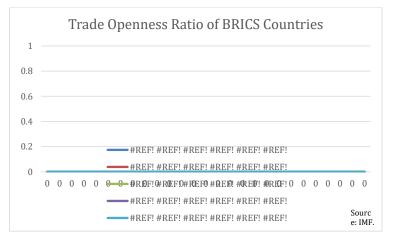


Figure 2-5: Trade Openness Ratio of BRICS

The foreign direct investment remained positive throughout the years under study except 2006. Net financial account was the highest in 2011 (Figure 2-6) when Brazil was an important destination for foreign investment due to its economic and political stability, growing middle class, and thus several market opportunities, particularly in natural resources—agriculture, energy, and mining. Major investors in Brazil include some USA and European Union countries like France, Spain, the Netherlands and Luxembourg. Brazil was the 4th highest recipient of FDI in 2021. (OECD, 2022) Portfolio investments fell in 2002 due to the confidence crisis of investors in view of the new candidates for presidential elections. All investments as a percentage of GDP fell in 2008 in wake of the global financial crisis after reaching a peak in 2007. (Figure 2-7)

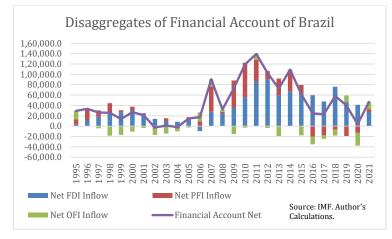
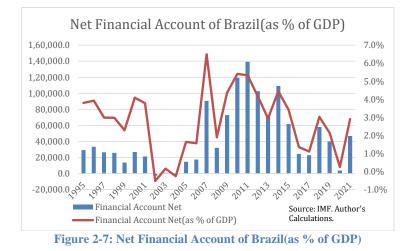


Figure 2-6: Absolute Disaggregates of Financial Account of Brazil



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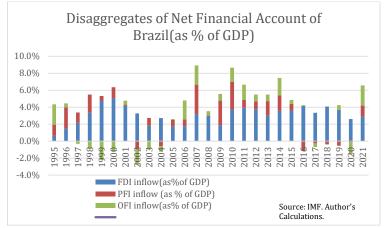


Figure 2-8: Disaggregates of Net Financial Account of Brazil (as % of GDP)

Direction of Trade Statistics

The following graphs depict direction of trade of Brazil with its top partner countries in volume. Brazil is a major exporter of soyabeans, iron ore and concentrates, petroleum oils and crude, sugarcane and maize. (WTO, 2021) A comparison has been made between the exports of Brazil in three years, 2002 (Crisis of Confidence), 2014(Political instability) and 2020(Coronavirus Pandemic). Majority of the exports by Brazil have been to the United States (22% of the total exports) in 2002, followed by Argentina, The Netherlands, Singapore and Mexico which means most of these exports have been to neighbouring Latin American countries. (Figure 2-9)



Figure 2-9: Brazil's Exports to Partner Countries, 2002

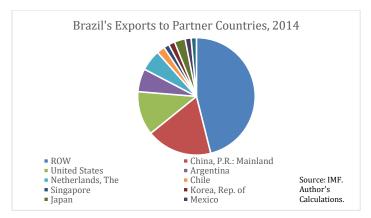


Figure 2-10: Brazil's Exports to Partner Countries, 2014

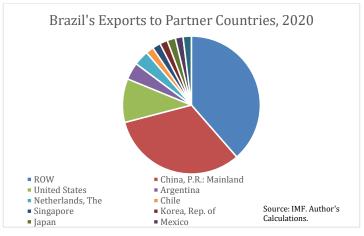


Figure 2-11: Brazil's Exports to Partner Countries, 2020

Figure 2-10 shows a large shift in the volume of Brazil's exports to China from the United States which passed down to the 2nd position of Brazil's export country. In 2020, China had a whopping 32% share in Brazil's exports followed by United States, Argentina and The Netherlands. (Figure 2-11) Brazil's decline in exports to Advanced economies and increase in exports to Emerging and Developing Economies (Figure 2-12 & Figure 2-13) are indicative of the shift in exports from the United States to China.

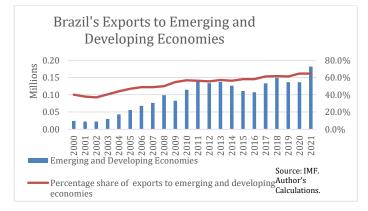


Figure 2-12: Brazil's Exports to Emerging and Developing Economies

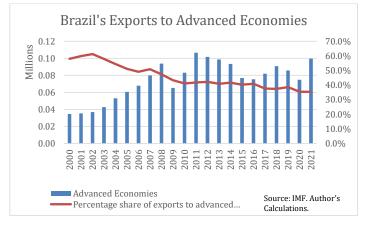


Figure 2-13: Brazil's Exports to Advanced Economies

Brazil shared a similar pattern for its imports volume with the United States being the major country to import from in 2002, and subsequent shift to importing from Mainland China in 2014 and 2020. (Figure 2-14Figure 2-15, Figure 2-16 & Figure 2-16) Brazil is a major importer of petroleum (other than crude), motor vehicle parts, wheat and electronic integrated circuits. (WTO, 2021) The imports from advanced economies and emerging and developing economies share the similar trend of exports in Brazil with the shift from the United States to China as the major country of trade. (Figure 2-18 & Figure 2-18) China is in the lead, both as a destination of Brazilian exports and as a source of Brazilian imports, for over a decade now. Thus, there is a strong bilateral trade between the two countries. Brazil's exports to China are almost three times greater than those to the United States. The rise of China among Brazil's largest trade partners has been clearly accompanied by other Asian countries. Conversely, other regions have gradually lost their relative importance as export destinations of Brazil, such as North and South America and Europe. (Rosito & Mariano de Carvalho, 2022) Brazil has an increasing trade surplus with China since 2009.

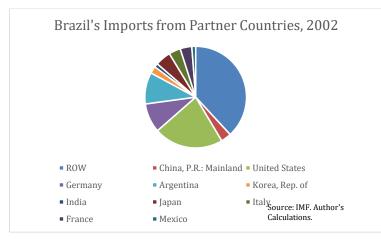


Figure 2-14: Brazil's Imports from Partner Countries, 2002

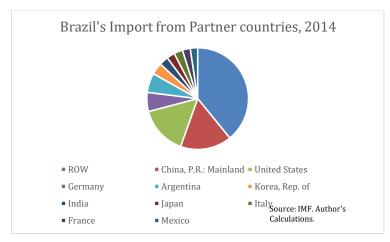


Figure 2-15: Brazil's Imports from Partner Countries, 2014

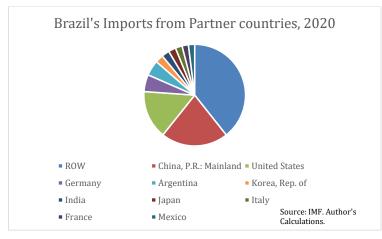


Figure 2-16: Brazil's Imports from Partner Countries, 2020

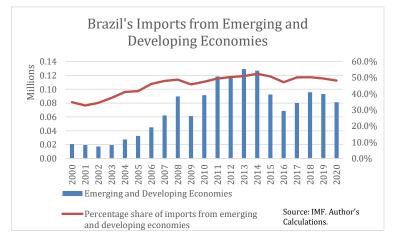


Figure 2-17: Brazil's Imports from Emerging and Developing Economies

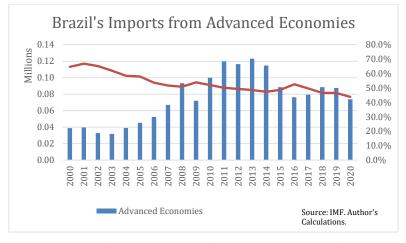


Figure 2-18: Brazil's Imports from Advanced Economies

International Investment Position

The following graphs depict an image of Brazil's international investment position. As ascertained from the graphs of International Investment Position Statistics under study, the assets are greater than the liabilities and thus, NIIP is negative for all years. Throughout the years, there has been an upward trend in Brazil's assets but its liabilities declined in 2008, owing to the global financial crisis. Assets rose to a maximum of 63.5% of Brazil's GDP in 2020 with liabilities reaching a high of 101.8% in the same year. (Figure 2-19Figure 2-20 & Figure 2-20) The net international investment position is the difference in the external financial assets and liabilities of a country. Figure 2-21Figure 2-21 shows NIIP as a percentage of GDP which increased gradually from 2003 falling a little in 2009 but reached its peak in 2008 with -14.4% due to the decline in external liabilities owing to the global financial crisis.

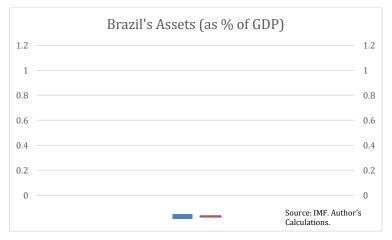


Figure 2-19: Brazil's Assets (as % of GDP)

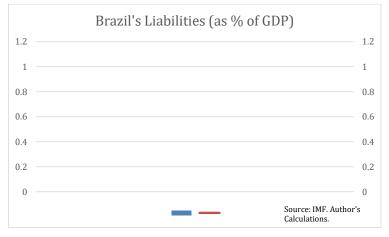


Figure 2-20: Brazil's Liabilities (as % of GDP)



Figure 2-21: NIIP of Brazil (as % of GDP)

The disaggregates of assets chart (Figure 2-22) shows that reserve assets formed a major proportion of the total assets in Brazil. The absolute assets of Brazil have been rising gradually in absolute numbers since 2021. From the liabilities chart (Figure 2-23), we can observe that other investments (majorly constituting of loans from banks) make up the major portion of liabilities in absolute terms. Brazil's external liabilities have decreased for 2008 (Global Financial Crisis), 2015 (Political instability) and 2020 (Coronavirus Pandemic).



Figure 2-22: Absolute Disaggregates of External Assets (\$ bn)

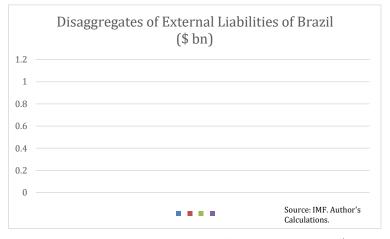


Figure 2-23: Absolute Disaggregates of External Liabilities (\$ bn)

The international financial integration ratio of Brazil is calculated by the sum of assets and liabilities divided by the GDP and shows the linkages of a country's market to the financial markets of other economies. IFI Ratio of Brazil has reached over 100% after

2014 and the lowest was in 2008 during the global financial crises. (Figure 2-24Figure 2-24) Such high IFI ratios are beneficial for a middle-income developing country like Brazil as greater market integration leads to increased competition, streamlined restrictions and increased liquidity of markets. (Acharya & Prakash, 2013)

The debt creating assets as a percentage of GDP were highest in 2020 as 7.7% and lowest in 2011 recorded as 3.2%. (Figure 2-25) Total debt assets are the sum of debt instruments of direct and other investors(assets), debt securities of portfolio investments(assets) and other reserve assets. Debt assets were high in 2020 owing to the pandemic crisis in Brazil creating an unstable domestic economic situation. Thus, there was increasing in investments in debt assets abroad and at an increased rate.

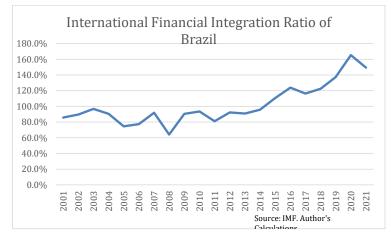


Figure 2-24: International Financial Integration Ratio of Brazil

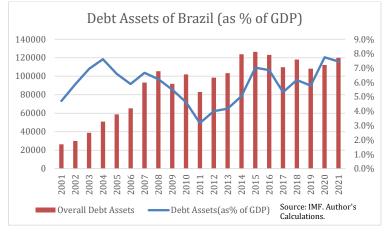


Figure 2-25: Debt Assets of Brazil (as % of GDP)

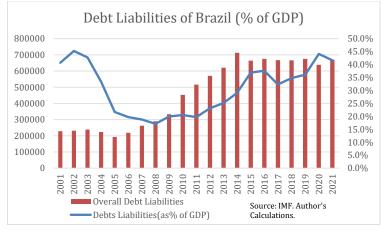


Figure 2-26: Debt Liabilities of Brazil (as % of GDP)

Debt Liabilities of Brazil (as % of GDP) have lowest averaging around 20% while the highest has been 45.3% in 2002. (Figure 2-26) In 2002, both GDP and Debt Liabilities have a low figure in absolute values due to the reservations of investors abroad, thereby explaining the debt liabilities as percentage of GDP figure. It is pertinent to note that the debt liabilities of Brazil have been on the rise, it has increased steeply from 17.1% in 2008 to 44.1% in 2020.

External debt

The following graphs have been plotted using Brazil's World Bank Data for the years 1995-2021. Empirically, higher the share of short-term credit is in overall debt, the larger and more vulnerable is the annual flow of debt-service obligations. But clearly, Figure 2-27 shows that Brazil's share of short-term external debt is only 20% of the total external debt as compared to the share of long-term debt (80% of the total external debt).

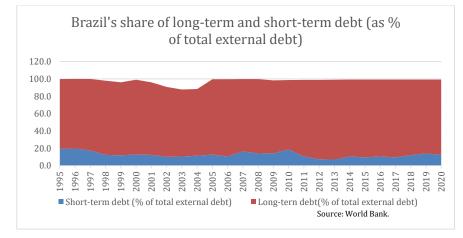
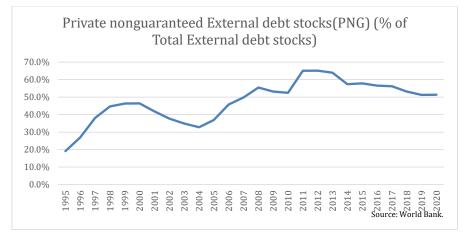


Figure 2-27: Brazil's share of long-term and short-term debt (% of total external debt)









The volume of private non-guaranteed debt has been greater than volume of public and publicly guaranteed debt for majority of the years in study. (Figure 2-28) External debt of the private sector that is not contractually guaranteed by the public sector resident in the same economy is classified as Private nonguaranteed sector external debt. PNG Debt of Brazil (as a percentage of Total External debt stocks) reaches its peak of 65% in 2011 in Brazil's economic boom. (Figure 2-29) A public corporation is defined as a nonfinancial or financial corporation that is subject to control by government units, with control over a

corporation defined as the ability to determine general corporate policy by choosing appropriate directors. External debts of the pubic corporation are known as Public and publicly guaranteed debt.

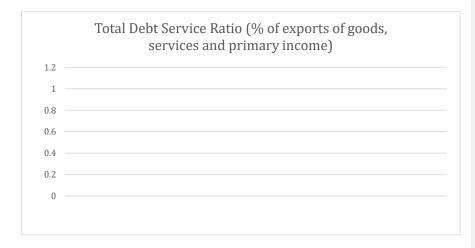


Figure 2-30: Brazil's Total Debt Service Ratio

The debt service ratio for a country is defined as the ratio of external debt-service payments of principal and interest on long-term and short-term debt at the end of the year to the economy's exports of goods and services for the same year. This ratio is a possible indicator of debt sustainability because it indicates how much of a country's export revenue will be used up in servicing its debt and thus, how vulnerable the payment of debt service obligations is to an unexpected fall in export proceeds. (IMF, 2003) Figure 2-30 shows a peak in the debt service ratio in the year 1999. This was known as the 'Samba effect' caused as an aftereffect of the Asian crises in 1997 which led to a fall in the value of Brazilian Real and high interest rates over 40 per cent in order to prevent further capital outflows from the country. (Hirsh, 1999) Brazil's TDSR saw its low levels in the periods from 2004 to 2011 as the external debt of Brazil as a percent of GDP was in its lowest numbers from 2005-2013, reaching 15.5% in 2008 and 2011. (World Bank, 2021) This was the period of economic boom in Brazil seeing a decline in its external debt vulnerability and a steady growth in export income and real GDP till 2014. (IMF,

2022) There has been a steep increase in debt-servicing ratio from 15.7% in 2012 to 50.6% in 2020 due to a continuous increase in debt service payments and exports averaging around the same values. (World Bank, 2022)

Conclusion

Brazil is an upper middle-income country. It is one of the world giants of <u>mining</u>, agriculture, and <u>manufacturing</u>, and it has a strong and rapidly growing <u>service sector</u>. The Trade Openness Ratio of the country has been lower than its BRICS peers indicating Brazil's closedness of the economy. But Brazil is an important country in the world economy due to its exports of oil, soybeans and iron ore. Brazil's volume of exports is directed to China in the largest volume and is concentrated in a narrow range of products. NIIP for Brazil has remained negative for the years in study indicating that the external liabilities are more than the assets.

From 2001 to 2007, income inequality in Brazil declined at an unprecedented rate: The Gini coefficient fell from above 0.60 to below 0.55, reaching its <u>lowest figure</u> in more than 30 years. The incomes of the poorest tenth of Brazilians grew by 7 percent per year and in less than a decade, Brazil had managed to cut the proportion of its population living in extreme poverty in half. (Özler, 2014)

However, between about 2004 and 2014, the state-run energy firm Petrobras — which is Brazil's largest company and one of the largest corporations in the world — engaged in a corruption scheme popularly known as the 'Petrobras Scandal' or 'Operation Car Wash'. A <u>number of other Latin American countries</u>, also have similar corruption problems but Brazil is a much bigger country so the scale of the problem is larger as well. The country's meteoric growth from 2004 to 2011 was run on exports of commodities like soy, iron, and oil, which were quite expensive during the 2000s owing to the commodity boom. But around the beginning of 2012, prices fell considerably, tanking Brazil's economy. (Lyons, 2016)

Brazil's economy returned to slow growth in 2017 after <u>two years of contraction</u> as investment spending, agriculture and industrial production helped pull the country out of

its worst recession on record. Gross domestic product grew 1.0% during 2017 and increased 2.1% in the fourth quarter of 2017 from the same period a year earlier.

However, this slow recovery did not provide respite to the citizens from the economic crises of 2014-16 with the entry of the COVID-19 pandemic in the scene. Brazil was hit hard by the pandemic which claimed the lives of more than 550,000 Brazilians. Rates of unemployment and poverty remained high along with surging inflation.

The government implemented one of the largest direct income transfer programmes in the world with a disbursement of about 4.5% of GDP, reaching more than 60 million Brazilians in need. The sizeable fiscal package also included measures to facilitate and subsidise credit to small and medium-sized firms as well as programmes aimed at retaining workers, postponing loan payments and others. (Nechio & Serra Fernandes, 2021) Supported by this, Brazil's economy returned to pre-pandemic levels of growth.

For the lower income sections of the country, however, the 2014-16 economic crisis never ended and their situation has been further aggravated by the pandemic.

Chapter 3

<u>China</u>

China, officially the People's Republic of China(mentioned as PRC or China henceforth), is the fastest growing major economy in the world. The east Asian country is the most populous and the third largest in terms of area, in the world. Geographically, the PRC borders fourteen countries by land and boasts of rich natural resources estimated to be around \$23 trillion.

According to (Statista, n.d.)Statista, "In 2021, China's total population ranged at around 1.41 billion. Although the population is still growing, fertility rates are low and the number of people in working age is already shrinking since 2014. The labor force of China, which refers to the population aged 16 and over and capable of working, stood at around 784 million in 2020. The labor force participation rate in China, meaning the share of the Chinese working-age population that participated in the labor force, has slightly decreased, dropping from 72.3 percent in 2007 to 66.8 percent in 2020."

The country's real rate of growth has been impressive, it had a 2.3% real growth rate in 2020, a year wherein most of the countries had a negative growth rate owing to the pandemic-induced lockdowns and economic disarray.

As of 2021, the developing country recorded a GDP (at current prices) of \$17,458 bn and a per capita income of \$17,200 PPP, thus belonging to the category of upper-middle income countries. We will now attempt to explain the economic and financial performance of China with the help of some indicators, calculations and graphs.

Balance of Payments (BoP)

1. Current Account

Figure 3-1 attempts to show the condition of the Balance of Payments of China by disaggregating the current account into several components, namely BoG,BoS,BoPI and BoSI. As evident from the consistently surplus BCA, the country has been doing amazingly well through the years. It achieved the highest surplus BCA in 2008 when the West was trying to recover from the 2007 global economic crisis. The graph clearly depicts that the share of BoG in the BCA surplus has been increasing while that of BoS is a component of the deficit. This trend indicates the increasing exports of goods and import of services of China. We can observe a reverse trend in the BoG and BoS buckets as BoG which was majorly negative until 2002 has been increasingly positive while BoS which remained positive until 2008 has been continuously decreasing ever since. BoPI and BoSI have not showed any discernible trends.

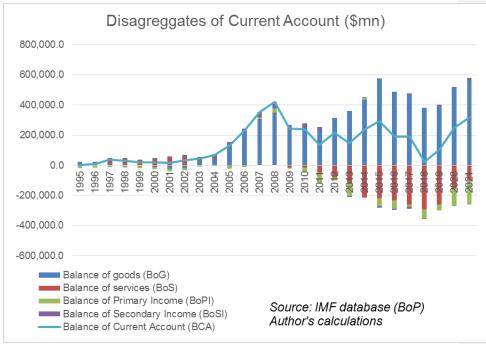
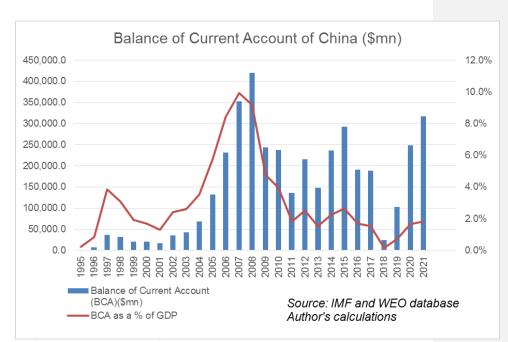


Figure 3-1: Disaggregates of the Current Account

The graph below displays the BCA as a percentage of China's GDP. Starting with an infinitesimal BCA as a percentage of GDP, the country went through several cycles of up and down spanning over a period of almost two decades, currently standing at 2%. It touched the zero level in 2018, this can be attributed to the then tensions between the US and China. The maximum level that the economy reached to, was in 2007-08. This is particularly remarkable as PRC achieved this milestone in the period of the global economic recession of 2007. Furthermore, COVID-19 and the slowdown henceforth was managed well by the nation, which is evident from its positive BCA figures in 2020.

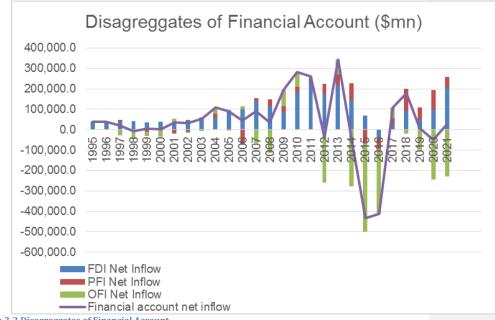




2. Financial Account

The graph below aims to show the condition of the Balance of Payments of China by disaggregating the financial account into several components, namely FDI Net Inflow,PFI Net Inflow and OFI Net Inflow. The net financial account inflow has been through many cycles of negatives and positives and currently stands at an almost equilibrium level. The financial account net inflows plummeted deeply in 2015-16 majorly due to a substantial decrease in OFI Net Inflow. The FDI Net Inflows have been constantly positive over the years except for the year 2016, proving that the Chinese economy has always been a hot market for international companies and investors. The ever-changing

trends in OFI Net Inflow is a factor worth deep study. The OFI started as a 0 in 1995 and has been in negative ever since, except the years of 2001, 2006, 2009-10,2013 and 2017. Its proportion in the Financial account of the economy has undoubtedly increased over the years and thus plays an important role in the nation's BoP.





The graph below plots the BFA as a percentage of GDP. Unlike the always-positive BCA trend line, the BFA exhibits a volatile nature over the years. Contrary to the surplus BFA in 1995, China currently has a deficit BFA which might also suggest the increasing affinity for China wrt foreign investors. The country achieved the highest surplus BFA in 2004 while it reached the lowest in 2015-16, the year when OFI Net Inflows plummeted. The sharp decrease from a surplus of about 4% in 2013 to a deficit of 3.5% in 2015 is a topic of concern. The possible reasons can be the advent of digitalisation and an increase in ease of business in the nation.

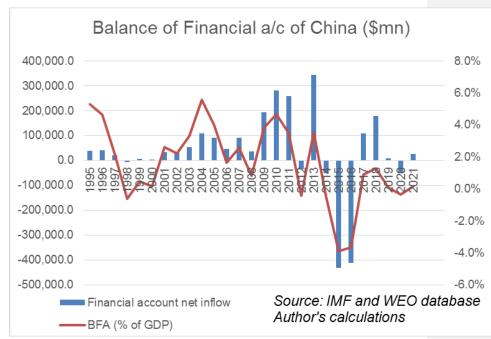


Figure 3-4 Balance of Financial account

Trade openness ratio

Trade Openness Ratio is the ratio of exports plus imports over GDP. It shows the extent to which a country is flexible and accessible to foreign investors for international trade. China has been a hot market for foreign companies and investors for a long time, mainly because of the availability of skilled but cheap labour. The country's trade openness ratio has shown some declines and rises in the past few years. The steep increase in the trade openness ratio from 2002 to 2006 to reach the peak level of almost 58% was

remarkable. As noticeable, the ratio trends since 2007 have not been quite encouraging as it currently stands at about 34%. The increasing attractiveness of Indian, Indonesian and Vietnamese markets have been the probable causal reasons of this disheartening decline in the Chinese economy.

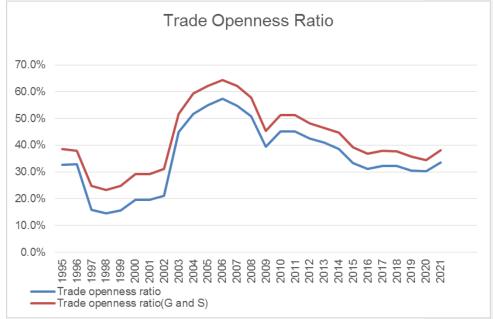
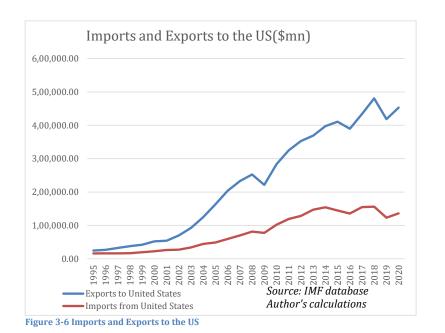


Figure 3-5 Trade Openness Ratio

Exports and Imports

The given graph shows the record of China's imports from and exports to the US. The author specifically chose the US because of its large share in China's exports. Starting from an almost zero level in 1995, both imports and exports have increased substantially. The rise in exports of China has been greater than that in imports. Exports to the US reached its peak level in 2018 while the imports from US were the highest in 2017. The exports



market has been more volatile than the imports market throughout the years, noticeable through the sharp rises and drops.

Imports and Exports to Taiwan

The given graph shows the record of China's imports from and exports to Taiwan. The author specifically chose Taiwan because of its large share in China's imports. Starting from an almost zero level in 1995, both imports and exports have increased substantially. The rise in imports of China has been greater than that in exports. Imports to Taiwan and exports from Taiwan reached their respective peak levels in 2020. The imports market has been more volatile than the stable imports market throughout the years, noticeable through the sharp rises and drops in the red curve.

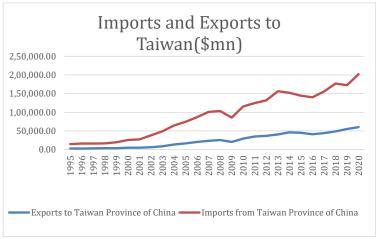
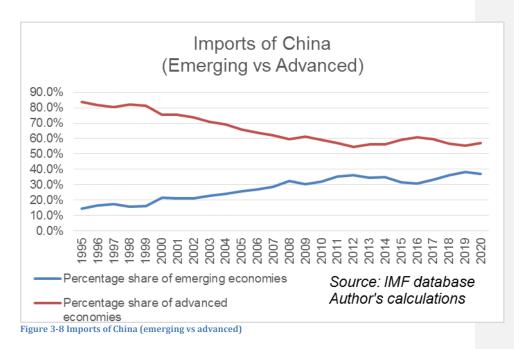


Figure 3-7 Imports and Exports to Taiwan

Imports of China (emerging vs advanced)

The graph below shows the percentage share of emerging and advanced economies in China's import profile. The share of advanced economies has always been higher than that of emerging economies but the two curves appear to converge in the near future. The lateral distance between the two curves has been decreasing for a long time.



Exports of China (emerging vs advanced)

The graph below shows the percentage share of emerging and advanced economies in China's export profile. Unlike the imports profile, the share of emerging economies has always been higher than that of advanced economies. According to the recent trends, the two curves are parallel to each other even though the difference between the two has been steadily decreasing.

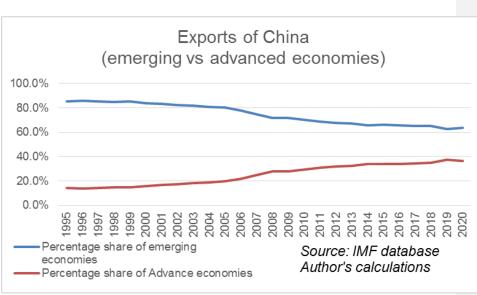


Figure 3-9 Exports of China (emerging vs advanced economies)

Countries' share of exports and imports of China in 2020

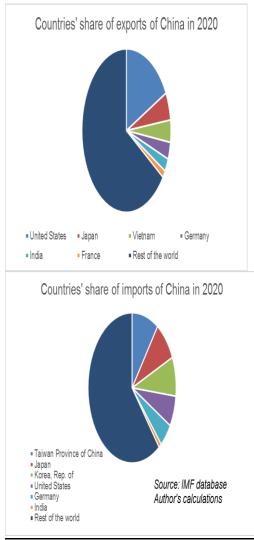


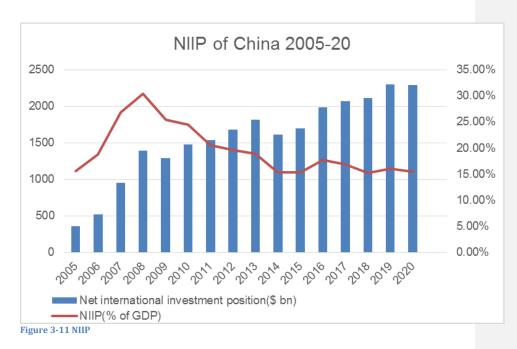
Figure 3-10 Countries' share of exports and imports of China

The two graphs mentioned above depict the share of the top 6 countries in the exports and imports profile of China. The US is the largest exporter of Chinese goods while Taiwan is the largest importer. The US is the fourth largest importer of China. Japan, Germany and India are active merchants both in the exports and imports market of China

while Vietnam and France are other large exporters. Korea is also an important importer of the Chinese market.

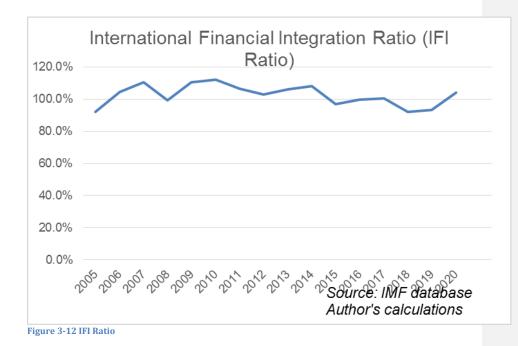
International Investment Position

China has had a fairly strong NIIP as a percentage of GDP since 2005 which kept on increasing until 2008 and has been on a decline since then except the nominal increase in 2016 and 2019. The absolute figures have nonetheless increased and stands today at about \$2300bn. The decreasing trend line of NIIP as a percentage of GDP suggests that the gap between a nation's stock of foreign assets and a foreigner's stock of that nation's assets has been decreasing.



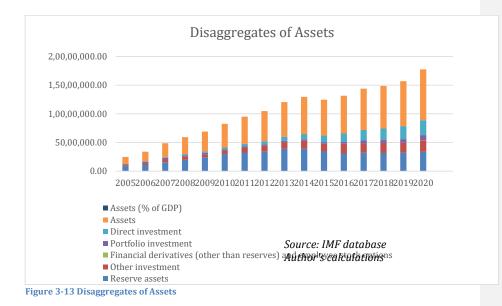
International Financial Integration Ratio

The IFI Ratio of China has shown a zigzag pattern throughout the years but it has always been above 90%. It currently stands at above 100% indicating an unimpeded access of participants to various market segments. Moreover, the always high IFI ratios signify the easy integration of international markets in the Chinese economy thus making it a favourable destination for international investors.



Disaggregates of Assets

The graph depicts the assets as a percentage of GDP and attempts to explain it through the different disaggregates of assets. In China, the total assets as a percentage of GDP have almost always been above the 50% mark. Moreover, reserve assets had been the major component of assets until 2020 when direct investment marked the highest share of assets. Portfolio investment has been increasing steadily over the years and may be the most important factor in the coming years. Currently,the assets as a percentage of GDP stand at about 60% while the absolute value is at about \$9mn.



Disaggregates of Liabilities

The graph depicts the liabilities as a percentage of GDP and attempts to explain it through the different disaggregates of liabilities. Over the years, direct investment liabilities have been increasing at a constant rate and are now at an all-time high level. The data is not available for the year 2011. The components of liabilities have shown the same trend of increasing at a constant rate over the years. Financial derivatives have been 0 since 2006 while direct investment liabilities and portfolio investment liabilities have been

constantly increasing indicating a favourable condition of international investment in China.

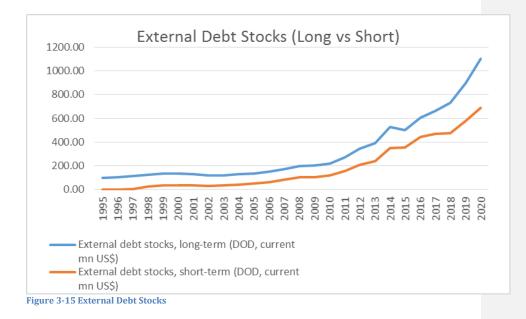


Figure 3-14 Disaggregates of Liabilities

International Debt Situation

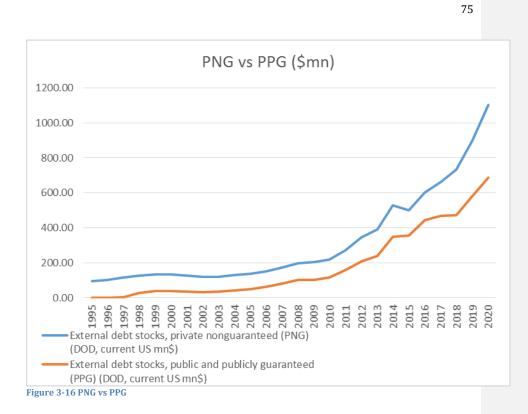
External Debt Stocks (Long vs Short)

The graph depicts the external debt stocks situation of China, both in the long term and short term. The curves increased parallely until 2014. After 2014, the long term external debt stocks have been increasing at an increasing rate while the short term external debt stocks increased at a somewhat constant rate until 2018, it started growing linearly henceforth.



PNG vs PPG

The graph below attempts to explain the components of External debt stocks namely PNG and PPG. The curves increased parallely until 2014. After 2014, the PNG external debt stocks have been increasing at an increasing rate while the PPG external debt stocks increased at a somewhat constant rate until 2018, it started growing linearly henceforth.



International Liquidity Foreign Exchange Reserves of China

The foreign exchange reserves increased at a constant rate from 1995 to 97, remained constant for the next three years and then began increasing at an increasing rate reaching the peak level in 2009-10. It has been decreasing since then and currently stands at an amount less than 20% of the nation's GDP. This is a matter of concern for the Chinese economy and needs to be addressed to.

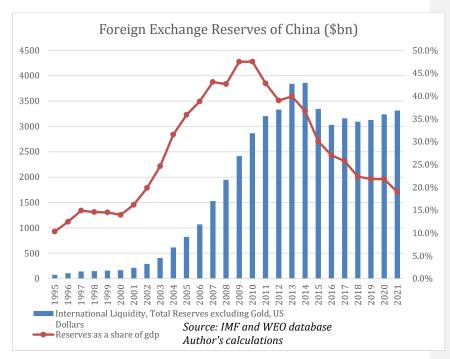


Figure 3-17 Forex Reserves of China

Conclusion

China has shown immense economic and trade growth over the years and has arguably remained untouched by global crisis like the 2007 Global recession and COVID induced slowdown. The country's volume of trade vis-à-vis exports and imports from other countries has increased tremendously, thus strengthening the position of PRC in the global economy.

Chapter 4

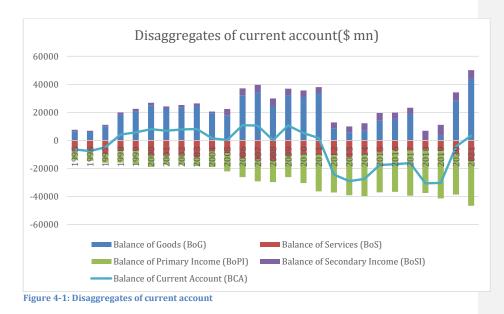
Indonesia

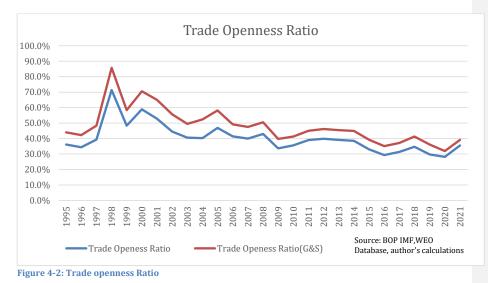
Overview

Indonesia's economy is the largest in South East Asia and ranks 17th in the world in terms of nominal GDP. The GDP of Indonesia is \$1.186 trillion dollars. Indonesia is regarded as one of the emerging markets and its GDP is expanding at a rate of 3.68% (The World Bank, 2021). Indonesia is a middle-income nation with the seventh-largest GDP (PPP) (International Monetary Fund, 2022).

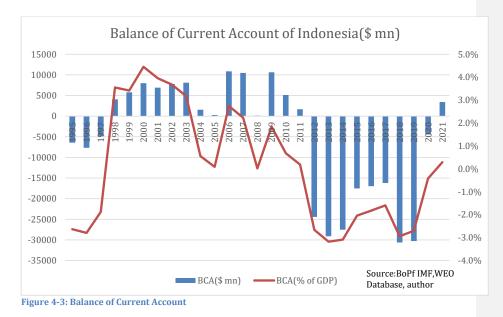
The Asian Crisis started in Thailand, when the Bank of Thailand decided to unpeg the Thailand Baht to the US Dollar. According to IMF, "their very success led foreign investors to underestimate their underlying economic weaknesses. Partly because of the large-scale financial inflows that their economic success encouraged, there were also increased demands on policies and institutions, especially those safeguarding the financial sector; and policies and institutions failed to keep pace with these demands. Only as the crisis deepened were the fundamental policy shortcomings and their ramifications fully revealed. Also, past successes may have led policymakers to deny the need for action when problems first appeared." (International Monetary Fund, 1998)

Indonesia was the hardest-hit country because the crisis not only had economic but also stirred political crisis in the country. The exchange rate depreciated by 270%, which made Indonesian countries with US dollar debt struggled to pay back loans and many of the companies went bankrupt. Even though IMF came for the rescue package of \$23 Billion USD but the rupiah dropped further.





In 1997 due to the East Asian Crisis, the trade openness ratio more than doubled, from 39.7% in 1997 it went up to 85.7% in 1998. Since then, the trade openness has recovered and currently at 39.2% (Same at 1995).



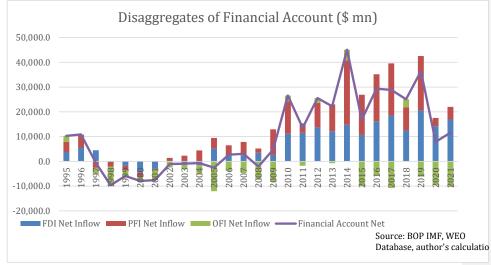
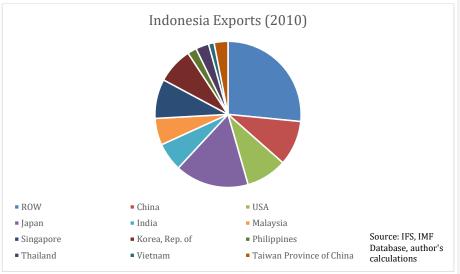


Figure 4-4: Disaggregates of Financial Account





From Figure 4-5, Net Financial Account in 1995 at 10,000 (\$ Mn) and Balance of Financial Account (% of GDP) was 4.2%, but after the East Asian Crisis, Net Financial Account went to -9,000 (\$ Mn) and Balance of Financial Account (% of GDP) fell to - 8.4%. After the East Asian Crisis, Balance of Financial Account (% of GDP) started to improve but Net Financial Account remained the same for the following decade. In 2021, Net Financial Account (\$ mn) is 11,586 and Balance of Financial Account (% of GDP) at 1%.





According to Figure 4-6, Indonesia's top three export destinations in 2010 were Japan (16%), China (10%), and the United States (9%). The three main exports from Indonesia to Japan are petroleum oil, <u>copper ore</u>, and coal briquettes. Palm oil, <u>Rubber</u>, and coal briquettes are the main exports from

Indonesia to China, whereas crustaceans are the main export from Indonesia to the United States. (Observatory of Economic Complexity, 2022)

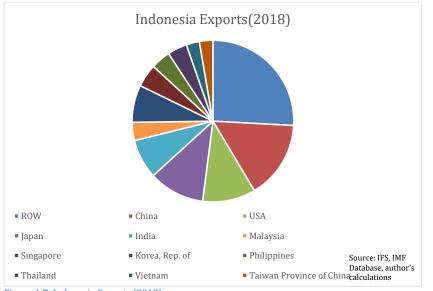


Figure 4-7: Indonesia Exports (2018)

According to Figure 4-7, China (16%), the USA (11%), and Japan (11%), were Indonesia's top three export destinations in 2018. The amount that Indonesia exports to Japan has drastically decreased. The primary factor may be because Copper ore exports decreased from 10.2% to 6.6% and petroleum gas exports decreased dramatically from 21.7% to 12.6%, while coal briquette exports climbed from 10.8% to 14.2%.

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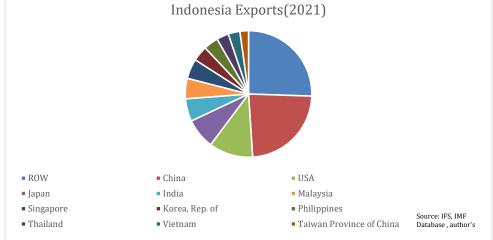


Figure 4-8: Indonesia Exports (2021)

When Figure 4-6 and Figure 4-8 are compared, Indonesian exports to Japan have decreased dramatically, from 16% to 8%, mostly because less petroleum oil is being exported. Exports to China, however, have greatly increased. Since 2014, Indonesia has increased its exports of ferroalloys, which are presently the primary material going to China.

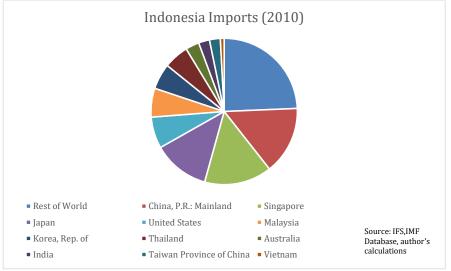


Figure 4-9: Indonesia Imports (2010)

Figure 4-9 shows that the top three countries from where Indonesia imported goods are China (15%), Singapore (15%), and Japan (13%). Refined petroleum (8%) Computers (4.8%) and Telephones (4.2%) are the three largest imports from China (Observatory of Economic Complexity, 2022). In the year 2010, Indonesia imported a lot of refined petroleum from Singapore and a lot of commercial automotive components from Japan.

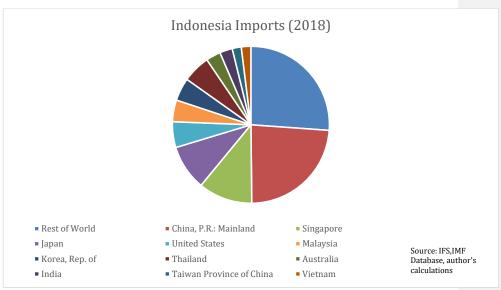


Figure 4-10: Indonesia Imports (2018)

According to Figure 4-10: Indonesia Imports (2018)Figure 4-10, there has been increase in the imports of Indonesia with China from 15% in 2010 to 24% in 2018, whereas there has been fall in the imports with Japan (4% \downarrow) and Singapore (4% \downarrow). The major goods imported by Indonesia from China were Telephones(4.31%), Broadcasting equipment's (3.72%) and Computers (3%) (Observatory of Economic Complexity, 2022).

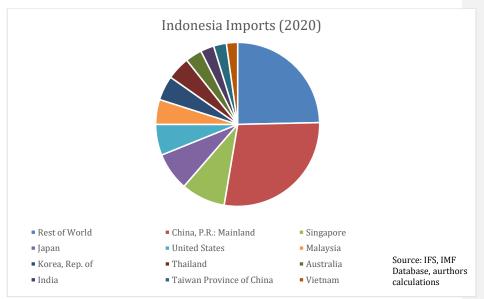
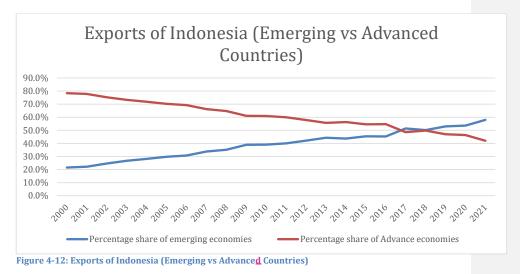
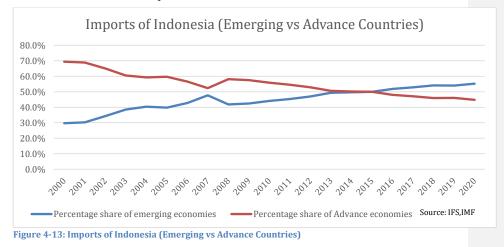


Figure 4-11: Indonesia Imports (2020)

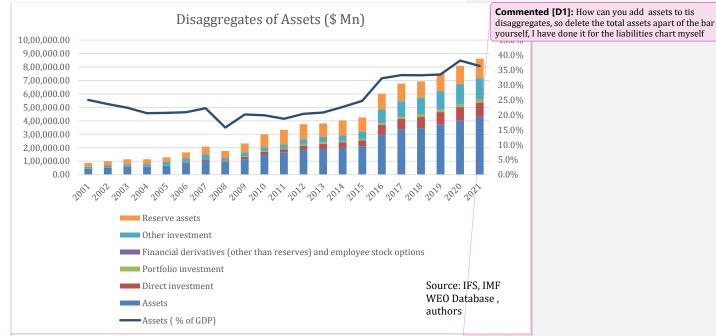
Comparing Figure 4-9 and Figure 4-11, reveals a sharp decline in Indonesian imports from Singapore and Japan, primarily due to a fall in the importation of commercial vehicle parts from Japan (Observatory of Economic Complexity, 2022). Large decline in imports from Singapore has been brought on by a significant drop in the importation of refined petroleum (41% to 26%). Despite a decline in the imports of refined petroleum over the past ten years, Indonesia has seen a large increase in the imports of electrical components, machinery, and chemicals from China.



In 2000, Indonesia was majorly exporting its goods to the advance economics with 80% of the exports made to advance economics (In 2000) primarily consisting of United States of America, Japan whereas only 20% of the exports were to the emerging economics. In 2021, Indonesia is majorly exporting to emerging economics such as China and India and whereas the exports with the advanced economics have decreased to 42%.



It is the same case for the imports too. Indonesia was majorly imported from the advance economics in year 2000, with 69.4% of all the imports were made from the advance economics and only 29.7% of all the imports were made from the emerging



economics. But in 2021, Indonesia is importing more from the emerging nation (55%) compared to the advanced economies (44.8%).

Figure 4-14: Disaggregates of Assets

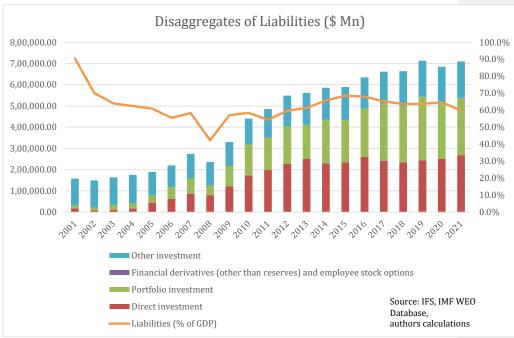
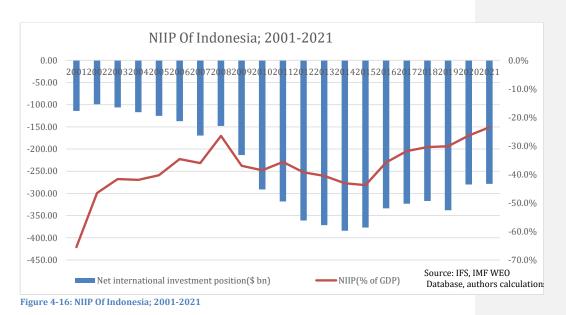


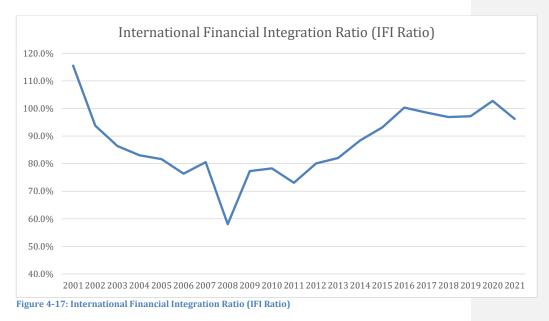
Figure 4-15: Disaggregates of Liabilities

From Figure 4-14, assets in absolute terms have increased by approximately ten times in the last two decades from \$ 43,633 million to \$ 430,979 million but assets as % of GDP has only increased by 11.3% only. Even though in the early 2000s Assets % of GDP was in the range 20-25%, there was sharp decline in the year 2008, Assets fell from 104522 million USD to 88034 million USD whereas Assets as % of GDP fell from 22.2% to 15.8%. Direct Investments were same but there was decline in Reserve Assets and Other Investments. After 2008, there has been growth all the disaggregates of Assets.

From Figure 4-15, in case of liabilities as % of GDP, there is a decline in early 2000s, from 70% in 2001 to 42% in 2008. But there has been sharp increase in 2009 in the liabilities as % of GDP from 42% to 59%, the major factor would be the Global Financial Crisis 2008. Since 2009, Liabilities in absolute terms have increased from 329,973 million USD to 709,589 million USD but liabilities as % of GDP has been more or less constant at 59.8%.



Net international investment position in absolute terms(\$ bn) was more or less equal from 2000 to 2008 but the Net international investment position as % of GDP has improved from -65.5% in 2000 to -26.5% in 2008 but after 2008, there was 50% increase in the Net international investment position in absolute terms (\$ bn). The net international investment position as % of GDP had a sharp fall from 26.5% in 2008 to 37% in 2009. The major factor contributing could be the Global financial crisis of 2008.



The international financial integration ratio has declined from 115.5% to 58% from 2001 to 2008, but there has been sharp decline in the year 2007-2008 from 80.5% to 58%. The major reason causing the sharp decline would be the Global Financial Crisis of 2008, from 2008 the International Financial Integration Ratio had made the recovery and went up from 58% to 96.2% in 2021. The IFI of an economy. The IFI of an economy generates some positive effects. However, the benefits of global integration are dependent on size, composition and quality of capital flows (RBI, 2007). Further, it generates benefits like international risk sharing, meeting the domestic saving-investment gap and maintaining macroeconomic discipline (Agénor, 2001). In addition, IFI helps in increasing factor productivity, increasing the efficiency of the financial intermediation process and lowering the cost of investments. (Levine, 1996)

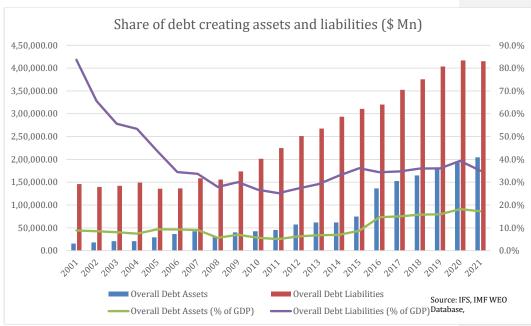


Figure 4-18: Share of Debt creating Assets and Liabilities

According to Figure 4-18, there has been decline in the Overall Debt Liabilities as % of GDP in the early 2000s from 83.6% in 2001 to 27.9% but since 2008 Overall Debt Liabilities as % of GDP has increased from 25% in 2011 to 35% of the GDP in 2021. On the other hand, Overall Debt Liabilities (\$ Mn) was constant in the early 2000s, but after 2009 the overall liabilities (\$ Mn) have increased from 201,121 million USD in 2009 to 415,065 million USD in 2021. Overall Debt Assets both in million USD and % of GDP has remained constant in till 2015, after 2015 there was 83% increase in the Overall Debt Assets and Overall Debt Assets as % o of GDP increased from 8.7% 2015 to 14.6% in 2016.



Figure 4-19: Foreign Exchange Reserve of Indonesia(\$ mn)

There has been escalation in the reserve as a share of GDP from 6.4% in 1997 to 19.7% in 1998, even though the International Liquidity (US Dollar only) has been the same. The main factor contributing would be the East Asian Crisis. Due to East Asian Crisis, it caused GDP to fall from 215.75 billion USD in 1997 to 95.45 billion USD (The World Bank , 2022). In 2010-2011, there has been 50% increase in the International Liquidity, Total Reserves excluding Gold whereas the reserves as a share of GDP have remained constant.

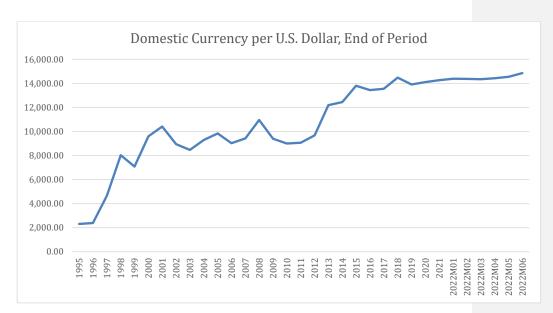


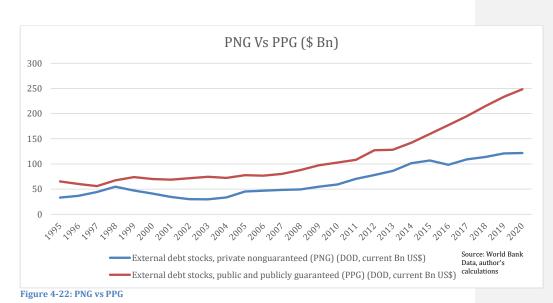
Figure 4-20: Domestic Currency per U.S. Dollar, End of Period

Throughout 1997, there has been a steep Depreciation of the rupiah. The Asian Financial Crisis of 1997 was a significant factor in this. The domestic currency of Thailand started to depreciate, the stock market fell, and import receipts decreased as a result of the unpegging of the Thai Baht from the US Dollar. Later, this affected the west as well as all of East Asia. Before the Asian Crisis of 1997, when the rupiah was trading at 2383, it depreciated to 8025 in 1998, a depreciation of 237%. The Indonesian government did not take any steps to demonetize the currency. In 2010, Bank Indonesia (Central Bank of Indonesia) proposed to redenominate the rupiah by truncating the last three zero digits.





The External Debt stock (Both long and short) was constant for the period 1995-2005, and then there has been increase in the long-term external debt stocks whereas short term external debt stock has been more or less constant. In 2020, Indonesia longterm external debt stock was \$370 Billion whereas short term external debt stock was \$44 billion.



Private nonguaranteed (PNG) and public and publicly guaranteed (PPG) both have increased, PNG was 65.1 billion USD in 1995 and went to 248.5 billion USD in 2020 that is 281% increase in the PNG over 2 decades. Whereas, PPG was 33.1 billion USD in 1995 and went to 121.7 billion USD that is 267% increase in the PPG from 1995 to 2020

Chapter 5

Mexico

Overview

According to the International Monetary Fund, the developing market economy of Mexico is the 16th largest in the world in terms of nominal GDP and the 13th largest in terms of purchasing power parity. It consists of rapidly expanding industrial and service sectors, with increasing privatization. Mexico's Gross Domestic Product (in nominal terms) was estimated to be \$1.3 trillion in the year 2021 (Figure 5-1).



Figure 5-1: Nominal GDP of Mexico in \$ Trillions

The Mexican Currency Crisis of 1994

In December 1994, the economy of Mexico was struck by a currency crisis sparked by a sudden devaluation of the peso against the U.S. Dollar. Domestic and international economic factors, coupled with political instability helped precipitate the crisis. The incumbent administration in Mexico embarked upon an expansionary monetary and fiscal policy during the 1994 presidential elections. These policies were largely inconsistent with the exchange rate rule. Foreign investment increased exponentially when the Mexican Treasury began issuing short-term debt instruments denominated in domestic currency with a guaranteed repayment in U.S. Dollars. Mexico gained access to international capital following the signing of the North American Free Trade Agreement (NAFTA). However, political instability caused by a violent uprising in the state of

Chiapas and the assassination of Presidential candidate Luis Donaldo Colosio increased the risk premium placed on Mexican assets.

In response, the Mexican Central Bank, Banco de Mexico, intervened by issuing shortterm dollar-denominated debt instruments called 'tesobonos', which replaced almost the entire short-term government debt from peso-denominated to dollar-

denominated. Tesobonos were meant to deter capital outflows; as investors buying the tesobonos were to be protected from a potential devaluation of the peso, the outflow of foreign currency would stop while the foreign exchange rate stabilizes. However, the issuing of the tesobonos vastly increased the default risk, and consequently, over \$3bn was pulled out of Mexico in November 1994 (Molen, 2013). The Peso's declining value caused the demand for imports to rise substantially in Mexico, resulting in a trade deficit. The Central Bank's dollar reserves declined substantially when Mexico purchased its own treasury securities to maintain the money supply.

The consistent increase in tesobonos held by the public was an indubitable sign of the lack of credibility of the exchange rate policy. Between March and June of 1994, the sum of tesobonos increased from US\$ 3.1 billion to US\$ 12.6 billion. It further increased to US\$ 29.2 billion in December. Throughout the year, the composition of the government's debt held by foreigners had varied radically. In December, 1993, 70% was in CETES and 6% in tesobonos; in December, 1994, 10% was in CETES and 87% in tesobonos (Lustig, 1995). The massive conversion of CETES to Tesobonos and the determination to avoid devaluation at any cost were driven by the elections. Given that these short-term obligations were indexed to the dollar, it also implied that a large proportion of the exchange rate risk was undertaken by the Mexican government. One of the principal causes of the financial crisis which was followed by the peso devaluation was the \$17 billion of tesobonos held by foreigners. Since a large magnitude of the short-term debt was indexed to the dollar, investors resorted to panic selling as they feared a default. When the peso was devalued in 1994, the Central Bank also raised the interest rate to prevent excessive capital outflow. Short-term interest rates rose to 32% and the high cost of borrowing resulted in economic instability (Chen, 2021). The sudden devaluation of the Mexican peso caused the currencies in other Latin American countries such as Brazil

to decline as well. The spillover effect caused by the financial meltdown in Mexico on other South American countries is popularly known as the Tequila Effect.

In 1995, the United States, with the support of the International Monetary Fund, initiated a \$50 billion bailout for Mexico. In the years following the crisis, numerous Mexican banks collapsed amidst widespread mortgage defaults in addition to a severe recession and bouts of hyperinflation.

Mexico maintained excessive levels of poverty for the remainder of the nineties. Since the currency crisis, the Mexican administration has improved the country's macroeconomic fundamentals. However, it was one of the Latin American countries that were most affected by the subprime mortgage crisis in 2008 with its GDP contracting by

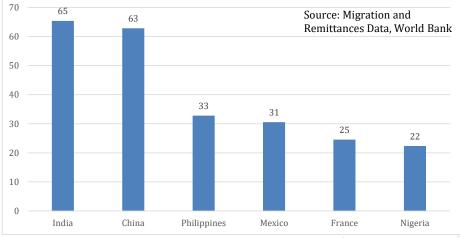
more than 6% that year. With high volatility in global and domestic financial markets as a result of the spread of

COVID-19, risk aversion increased significantly in the year 2020. As a result, the Mexican financial market exhibited a negative performance in 2020. The trading conditions in foreign exchange and fixed-income markets deteriorated, exhibiting low levels of liquidity. The significant decline in oil prices due to weaker economic activity, excess inventories, and coordination failures among the main oil suppliers furthered the deterioration in the financial markets. As a result, all of the main rating agencies downgraded the Mexican sovereign debt and Pemex credit ratings in 2020. Foreign holdings of equity and fixed-income assets denominated in pesos exhibited a substantial decline as a result.

Balance of Payments Statistics

The current account of Mexico reflects a negative balance in most of the years under consideration. The balance of current account hit its lowest mark of -\$29.6 billion in 1994 during the Mexican peso crisis, owing to the increase in the balance of goods deficits by 28% as compared to 1993. In the following year, the deficit in the current account of Mexico narrowed substantially, owing to the exponential increase (by approximately 109%) in the export of goods in 1995. In the year 2008, during the subprime mortgage crisis, the deficit in the current account widened by 75% as compared to the previous year. The current account of Mexico reflects a positive balance in the year 2020, owing to the increase in exports of goods by over six times the amount in 2019.

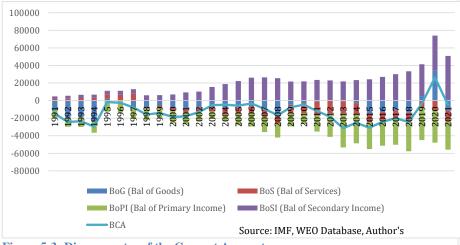
The balance of secondary income is the only component that is positive in all of the years under consideration (Figure 5-3). This is because workers' remittances in Mexico remained positive throughout the period. According to World Bank, secondary income refers to transfers recorded in the balance of payments whenever an economy provides or receives goods, services, income, or financial items without a quid pro quo. Workers' remittances exhibited a 17% growth rate in 2020 and stood at a value of \$3650.0589 million (Economic Information System (SIE), 2020). In the year 2017, Mexico was the fourth largest receiver of remittances in the world after India, the Philippines, and China (Figure 5-2). The growth of remittances has more than doubled since 1997. In 2015, remittances overtook oil to become the largest foreign source of income for Mexico. Remittances or contributions sent by Mexican emigrants, to their families in Mexico amounted to \$30.5 billion in 2017 (Figure 5-2). The balance of secondary income was the highest at \$40,073.9 million in 2020.





The balance of primary income is negative in all of the years under consideration (Figure 5-3). According to World Bank, net primary income refers to receipts and payments of employee compensation made to non-resident workers and investment income (receipts and payments on direct investment, portfolio investment, other investments, and receipts on reserve assets). The deficit reflected in the balance of primary income is indicative of

the fact that the payments associated with employee compensation for non-resident workers and investment exceeded the receipts associated with them. The balance of goods remains negative in most of the years under consideration (Figure 5-3). It reflects a surplus in the years 1995, 2019, and 2020 as the exports of goods exceed the imports of goods during these years. During the Mexican peso crisis in 1994, the deficit in the balance of goods widened by 28% as the declining strength of the domestic currency resulted in an increasing demand for imported goods. Speculators recognized an overvalued peso and capital began flowing out of Mexico to the United States, thereby increasing the downward pressure on the peso.





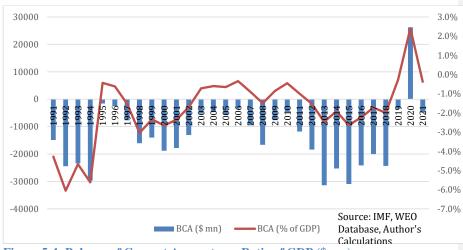


Figure 5-4: Balance of Current Account as a Ratio of GDP (\$ mn)

The quantity and value of Mexican exports, particularly non-petroleum exports grew rapidly after the currency crisis, largely due to the neoliberal economic policies implemented by the Mexican government and the creation of NAFTA (North American Free Trade Agreement), a pact eliminating most trade barriers between the U.S., Canada, and Mexico that went into effect on 1 January 1994. As a result, the current account deficit narrowed substantially in 1995 (Figure 5-4).

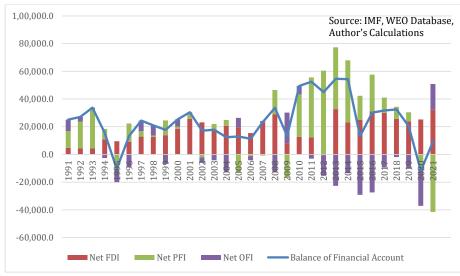


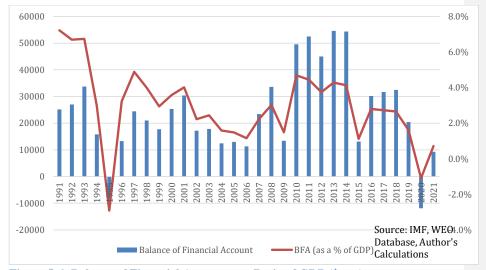
Figure 5-5: Net FDI, PFI, OFI and Balance of Financial Account

Foreign direct investment remained positive throughout the years under consideration (Figure 5-5). As the Mexican government has created an open and secure environment for foreign investors, Mexico has emerged as the world's ninth largest FDI recipient. The United States is Mexico's primary source of foreign direct investment. Apart from the U.S., investments to Mexico also come from Spain, Canada, Japan, and Germany. Manufacturing (particularly the automobile industry), transport, mining and quarrying, financial and insurance services, communication, retail and wholesale trade are the main sectors in Mexico that receive significant foreign investment.

Net PFI has remained positive for most of the years under consideration (Figure 5-5). The Mexican government is generally open to foreign entities trading actively in its public and private asset classes. It encourages foreign portfolio investments by allowing foreign investors to hold 100% of the capital stock in any Mexican corporation or partnership, except in a few selected sectors that are subject to limitations under the law. Following the devaluation of the Mexican peso in December 1994, foreign portfolio investment took a serious blow in 1995 due to the increased risk premium on Mexican assets. Net PFI and OFI in 1995 reflected a negative balance of -\$10,376.9 and -\$9636.7 respectively (Figure 5-5). Consequently, the balance of financial account reflected a negative balance in the

year 1995 (Figure 5-6) indicating that there was an inflow of investment. Following the intervention by Banco de Mexico in the foreign exchange markets to maintain the peso's peg to the US Dollar by issuing dollar-denominated public debt, the peso's value declined substantially. To prevent capital flight, the central bank increased the interest rates, but the increased cost of borrowing worsened economic stagnation. Mutual funds began liquidating Mexican assets as a result of high inflation in Mexico which to amounted to 52%.

Net PFI reflected a negative value in 2009 (Figure 5-5) as the global financial crisis in 2008 had a significant negative effect on Mexico. It resulted in a climate of extreme risk aversion among international investors and the net PFI was as low as -\$16,830.4 in 2009. In 2020, Net PFI and Net OFI reflected negative balances of -\$10,343.6 and -\$26,781.6 respectively. Consequently, the balance of financial account reflected a negative balance in the year 2020 (Figure 5-6) indicating that there was an inflow of investment.





The net acquisition and disposal of financial assets is reflected by the net financial account. Balance of financial account is positive in most of the years under consideration except in the years 1995 and 2020 (Figure 5-6). The Mexican financial system has shown resilience in the face of the adverse conditions resulting from the devaluation of the domestic currency and the global pandemic.

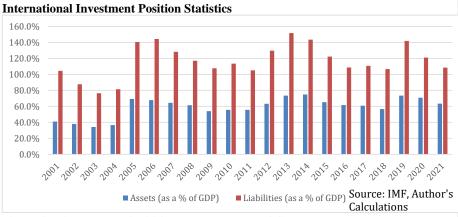
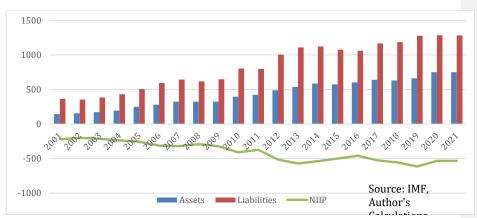


Figure 5-7: Assets and Liabilities as a percentage of GDP

As we move from 2001 to 2021, there has been an increase in gross assets as well as liabilities as a percentage of GDP. The value of gross assets as a percentage of GDP has increased from 41.1% to 63.4% over a span of two decades. The value of gross liabilities as a percentage of GDP has increased from 104.5% in 2001 to 108.5% in 2021. Net international investment position has remained negative in all of the years under study. It is an important indicator of a nation's financial condition and creditworthiness. Mexico's negative NIIP indicates that foreign nations own more of its assets that it does of foreign assets, thus making it a debtor nation. In absolute terms, the NIIP was lowest at -\$615.01 billion in the year 2019 and highest at -\$200.17 billion in 2002. The largest gap between assets and liabilities (of negative \$6,15,006.93 million) was observed in 2019 and the smallest gap (of negative \$2,00,174.13 million) was observed in 2002. As of the second quarter of 2018. As the pandemic unfolded, portfolios were reallocated to less risky assets owing to an increase in global and domestic volatility.



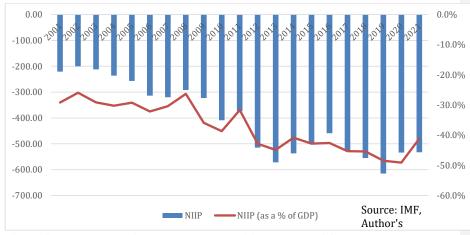




Figure 5-9: Net International Investment Position (as a % of GDP)

Net international investment position as a percentage of GDP was observed to be the highest at -25.9% in 2002 and the lowest at -49.1% in 2020.

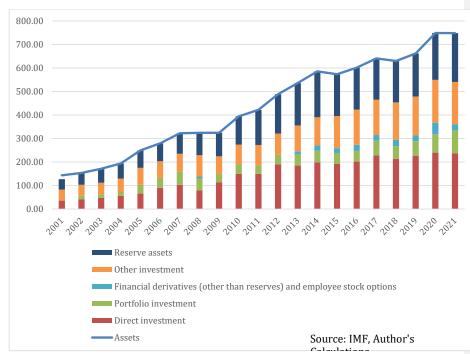


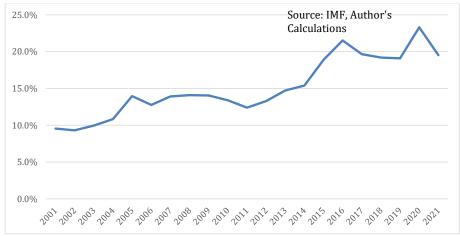
Figure 5-10: Disaggregates of Assets

The disaggregates of assets chart (**Error! Reference source not found.**) shows that reserve assets and other investments accounted for a major proportion of the total assets in most of the years under study. The outflow of Foreign Direct Investment accounted for a major proportion of the increase in assets over the two decades under consideration. Financial derivatives (other than reserves) and employee stock options account for an extremely low proportion of the total assets in all of the years under consideration. Despite the Mexican administration being open to foreign entities actively trading in its assets, the value of portfolio investments has also remained low for most of the years under consideration. Portfolio investment was observed to be the lowest at \$35.45 billion in 2011.



Figure 5-11: Disaggregates of Liabilities

The disaggregates of liabilities chart (Figure 5-11) shows the composition of total liabilities over the two decades under study. The various components of gross liabilities have exhibited an increasing trend over the years under consideration. It can be inferred from the figure that financial derivatives (other than reserves) and employee stock options account for the lowest proportion of the total liabilities over the years starting from 2013 to 2021. Other investment liabilities account for a lower proportion of total liabilities from 2001 to 2012. Portfolio investment and direct investment liabilities account for the larger proportion of total liabilities in all of the years under study. The value of portfolio investment liabilities was highest at \$522.17 billion in 2019 and lowest at \$126.62 billion in 2002. The increasing trend exhibited by the overall stock of



liabilities over the two decades under study indicate that the total borrowings by Mexico have increased exponentially.



The value of debt assets as a percentage of GDP was highest at 23.3% in 2020 and lowest at 9.3% in 2002. The value of total debt assets is given by the sum of the debt instruments of direct and other investments (assets), the debt securities of portfolio investments (assets), and other reserve assets. The value of debt assets as a percentage of GDP exhibited an increase from the year 2011 till 2016, after which it declined to 19.1% in 2019. The value increased substantially from 2019 to 23.3% in 2020 and then dropped to 19.5% of the GDP in 2021, as can be inferred from Figure 5-12.

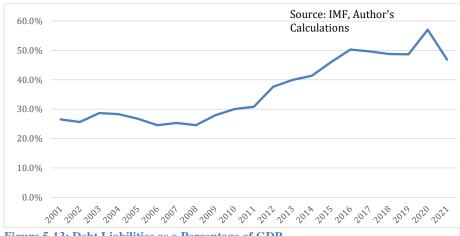


Figure 5-13: Debt Liabilities as a Percentage of GDP

The value of total debt liabilities as percentage of GDP has exhibited an increasing trend over most of the years under study (Figure 5-13). This indicates that the overall borrowings of Mexico has increased significantly over the two decades under study, which is a matter of concern as increasing levels of liabilities have a direct effect on the economic opportunities available to the people. The value steadily increased from 24.6% of GDP in 2008 to 50.3% of GDP in 2016, after which it decreased. The value of total debt liabilities as a percentage of GDP is lowest at 24.55% in 2008 and highest at 57.06% in 2020, after which the value declined. After 2020, the value of GDP increased at a greater proportion as compared to the increase in liabilities and hence, the value of debt liabilities as a percentage of GDP exhibits a decline from 2020 to 2021.

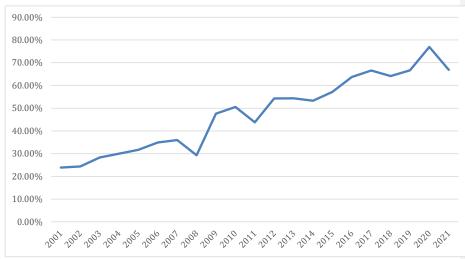


Figure 5-14: International Financial Integration Ratio

The international financial integration ratio is the ratio of the sum of assets and liabilities of a country to the Gross Domestic Product. IFI ratio, also known as the gross investment ratio, measures the degree of closeness between the domestic financial market and the global financial market and shows how well-integrated the domestic financial market is with the financial markets of the rest of the world. The IFI ratio was observed to be the highest at 76.93% in 2020 and lowest at 23.87% in 2001. The IFI ratio for the Mexican economy exhibits an increasing trend over the two decades under study, as can be inferred from Figure 5-14.

After seven years of steady increase, the IFI ratio declined in the year 2008, amidst the global financial crisis. This decline was precipitated by the increase in risk aversion among investors and the high volatility in the domestic and international financial markets at the time. Another steep decline in the IFI ratio was observed in 2021, owing to the cumulative effects of the global pandemic and the market instability that it caused.

External Debt

Long-term external debt refers to financial obligations that are required to be repaid after one year from the measurement date. As opposed to long-term external debt, short-term external debt refers to the financial obligations that are to be paid off within a year.

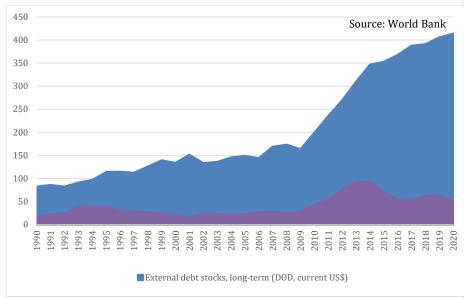


Figure 5-15: Short-term and Long-term External Debt

The value of long-term external debt stocks exhibits an upward trend throughout the period under study. After the global financial crisis in 2008-2009, the long-term external debt stocks increased exponentially. Its value was highest at \$413.69 billion in 2020 and lowest at \$71.29 in 1992. The value of short-term external debt stocks was highest at \$92.51 billion in 2013 and lowest at \$16.08 billion in 1990.

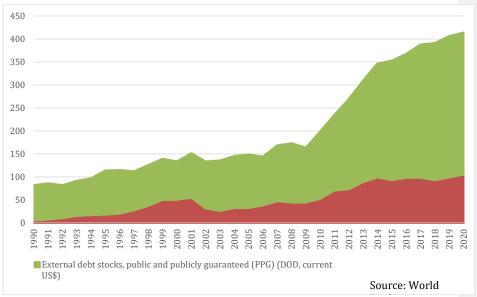


Figure 5-16: PNG and PPG Debt

Private nonguaranteed (PNG) external debt constitutes long-term external obligations of private debtors that are not guaranteed for repayment by a public entity. The value of PNG Debt stocks has exhibited an increasing trend over the two decades under study. It was lowest at \$5.835 billion in 1995 and highest at \$105.16 billion in 2020. Public and publicly guaranteed (PPG) debt constitutes the long-term external obligations of public debtors, inclusive of the national government and political subdivisions (or an agency of either) and autonomous government bodies, and the external obligations of private debtors that are guaranteed for repayment by a public entity. The value of PPG debt was the highest at \$308.53 billion in 2020 and the lowest at \$76.14 in 1990.

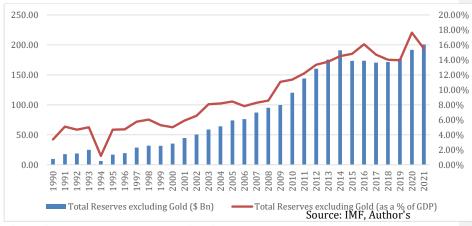


Figure 5-17: Total Reserves excluding Gold

The value of total reserves excluding gold as a percentage of GDP exhibits an upward trend over the period under consideration (**Error! Reference source not found.**). In 1994, the value declined by 3.82%, owing to the depletion in foreign exchange reserves during the Mexican peso crisis, when the Mexican Central Bank devalued the peso by 13 to 15%. The value of total reserves excluding gold as a percentage of GDP contracts exhibits a steep decline in the year 2019.

The value of the total reserves excluding gold in absolute terms is the is the highest at \$200.7 billion in the year 2021 and lowest at \$6.2 billion in the year 1994. The stock of foreign exchange reserves excluding gold contracted by \$18.83 billion in 1994, owing to the Mexican currency crisis in this year.

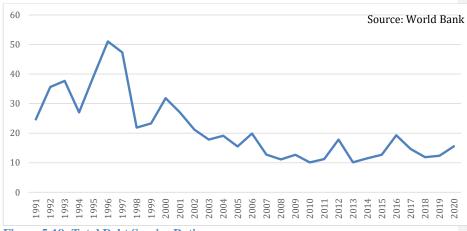


Figure 5-18: Total Debt Service Ratio

The debt service ratio for a country is defined as the ratio of external debt-service payments of principal and interest on long-term and short-term debt at the end of the year to the economy's exports of goods and services for the same year. This ratio is an indicator of debt sustainability because it indicates how much of a country's export revenue will be used up in servicing its debt and thus, how vulnerable the payment of debt service obligations is to an unexpected fall in export proceeds. (IMF, 2003) As can be observed from Figure 5-18, the total debt servicing ratio exhibits an irregular trend, with numerous ups and downs over the period under study. During the years 1994-97, the value of total debt servicing ratio exhibits a sharp increase after which it declines. The highest value for total debt servicing ratio was observed in 1997 when it increased to 47.34%. The total debt servicing ratio was lowest at 10.15% in 2013. The ratio almost doubles from 10.15% in 2013 to 19.26% in 2016.



Figure 5-19: Total External Debt as a % of GDP

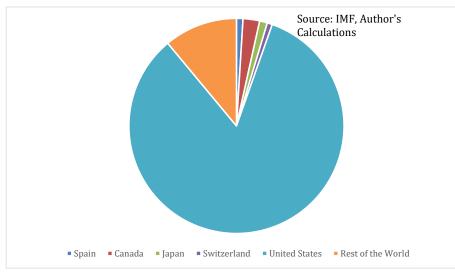
Total external debt, also known as foreign debt comprises of the debt of a country that was borrowed from foreign lenders, including commercial banks, governments or international financial institutions. Total external debt as a percentage of GDP has exhibited an irregular trend of growth over the period under study. Growth of total external debt was the highest at 27.19% in 2010, following the global financial crisis. The value of total external debt declined by 9.18% in the year 2000.

Direction of Trade Statistics

In the mid-1980s, the Mexican economy saw a radical reorientation of trade policy, shifting from a highly protectionist approach that focussed on the domestic market to an intensive deregulation of the import tariff and licensing system. The first stage of the liberalisation programme in Mexico was implemented when licenses were eliminated on almost 3600 tariff lines. This did not accelerate the imports immediately as the economy was in a recession at the time, owing to the currency devaluation crisis.

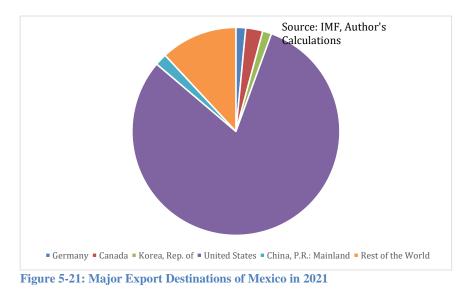
Apart from the relaxation and elimination of import restrictions, export promotion programmes were also initiated. Three facilitation programmes were implemented to expand export industries in the manufacturing sector. Pitex, a facilitation programme launched in 2985, allowed for the provision of duty rebates to firms with a high level of imported inputs embodied in exports. Altex, which was launched in 1986, gave special administrative, fiscal, and financial treatment to firms with a high level of exports.

Compex was launched in 1989 to help overcome bureaucratic difficulties for producers selling goods abroad (Penélope Pacheco-López). The cumulative effect of these initiatives helped expand the trade sector of Mexico over the years under study. With the implementation of trade liberalization policies, such as free-trade agreements, the value of exports from Mexico increased exponentially.

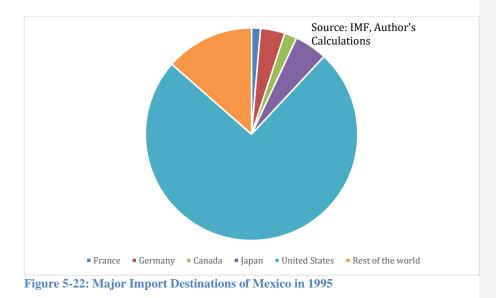




Export growth in Mexico increased from 8% in 1993 to 18% in 1994 and 30% in 1995. The primary exporters of Mexican goods and services in 1995 were the United States, Japan, Canada, Switzerland, and Spain. In 1995, the value of exports to the United States amounted to 84% of the total exports while Canada accounted for 2% of the total exports. Previous agreements signed with the U.S. to facilitate more trade and investment such as the NAFTA (North American Free Trade Agreement) which came into effect in 1994 are an important contributing factor to the U.S. being the primary exporter of Mexican goods. Machinery, transport equipment, steel, electrical equipment, chemicals, food products, crude petroleum, etc. are some of Mexico's major export commodities (Griffin, 2020). In 2020, Mexico was the world's biggest exporter of delivery trucks, beer, tropical fruits and tomatoes (OEC, 2020). The United States is reliant on Mexico as one of its principal sources of oil. About four-fifths of Mexico's petroleum is exported to the United States.

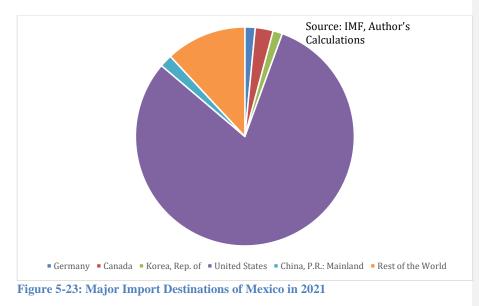


The main exporters of Mexican goods and services in the year 2021 were the United States, China, Canada, Germany, and Korea. Of the total exports of Mexico in 2021, the value of exports to the United States amount to 81%. Canada accounts for 3% of the total exports of Mexico in 2021. With the signing of one of its most influential foreign trade agreements, i.e., the United States- Mexico-Canada Agreement (USMCA), which came into effect in 2020, the trade with the U.S. and Canada accounted for almost 90% of its exports and 55% of its imports in 2020.



In the year 1995, Mexico sourced its imports mainly from the United States, Canada, Japan, France and Germany. Of the total imports, 75% was sourced from the United States and 5% from Japan. In 1994, Mexico saw a huge increase in import growth. The main import commodities of Mexico are refined petroleum, vehicle parts, integrated circuits, computers, and broadcasting accessories. In 2020, Mexico was the world's biggest importer of corn, corrugated paper, aluminium pipes, stranded copper wire, and cyanides (OEC, 2020). Imports responded more quickly to trade liberalisation as compared to exports. Trade liberalisation in Mexico resulted in an increase in the propensity to import, unfavourably impacting the balance of payments. In response to the liberalistic policies that were implemented in 1985, the amount of imports grew by 11%. With the consequent decline in the value of the Mexican peso during the currency devaluation crisis in 1994, there was a surge in the demand for imports.





In the year 2021, 81% of the total imports to Mexico were sourced from the United States. Canada's share in the total imports of Mexico in 2021 amounted to 3%. Despite having signed free trade agreements with other countries such as Colombia, Venezuela, European Union, Israel, etc., Mexico continues be highly dependent on the United States for its exports and imports.

In order to obtain preferential access to the US market, Mexico was forced to agree to a liberalized trade regime that primarily focused on maximising advantages for the U.S. With the signing of the NAFTA, Mexico was forced into low-wage manufactures, coupled with an extremely high import content.

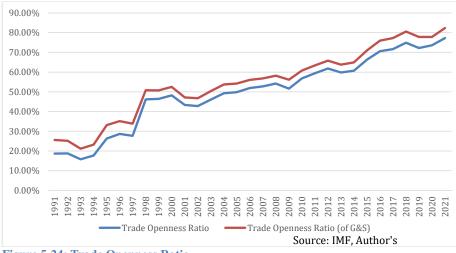


Figure 5-24: Trade Openness Ratio

The Trade Openness Ratio, which is an indicator of the relative importance of international trade in the economy of a country, has consistently increased in most of the years under consideration. After liberalization in the 1990s and the signing of NAFTA, the trade openness ratio increased substantially. With over 90% of its trade under free trade agreements with over 40 countries, the Mexican economy has been largely export-oriented since the currency crisis.

Conclusion

With a rich cultural history and diversity, ample natural resources, remittances from the United States and a population of over 130 million, Mexico is one of the largest economies in Latin America. Mexico is considered an export-oriented country with strong macroeconomic institutions. The Mexican government promotes and encourages greater financial inclusion and the strengthening of consumption as part of its economic development strategy. It is the leading exporter in Latin America with a Foreign Direct Investment of \$29.3 billion.

With economic liberalisation in the mid-1980s, along with the signing of the NAFTA in 1993, the economy of Mexico saw a considerable increase in Foreign Direct Investment (FDI), particularly from the United States and Canada. Sectors such as machinery and equipment, chemicals, textiles, and leather products accounted for 80% of manufacturing FDI between 1994 and 2001. The result of the proliferation of free tree trade agreements

in terms of financial trade was remarkable. Exports grew at an average rate of 7.9% a year from 1980 to 2000. Among the various sectors, manufacturing exports registered the fastest growth during this time period. The share of manufacturing exports increased from 16% of the total exports in 1982 to 87% in 2000.

As compared to similar countries, Mexico has underperformed over the last three decades in terms of poverty reduction, financial inclusion and overall economic growth. In the year 2020, the Gross Domestic Product (at current prices) of Mexico contracted by 14% owing to the cumulative effects of supply chain shortages, the decline in investment, and a surge in the number of COVID-19 cases in the country. Among many other countries, Mexico has yet to reverse the losses that it suffered during the global pandemic. The consequent surge in the prices of a range of commodities due to the Russo-Ukrainian war added to the inflationary pressures induced by the pandemic. To bring prices back under control, the Central Bank of Mexico has been moving toward a policy of sharp interest rate hikes and progressive reduction of fiscal and monetary support. After a sharp contraction of 8.2% in 2020, the Mexican economy experienced a 4.8% growth in 2021. Meanwhile, GDP per capita experienced a greater setback at the end of 2020. Based on the projections provided by the National Institute of Statistics and Geography (INEGI), GDP per capita is only expected to recover from 2023 onwards.

As long as the Russo-Ukrainian war, supply-chain disruptions, high inflationary pressures and interest rates continue, the global economy will continue to suffer and this would have adverse effects on the economy of Mexico as well. Regional integration and implementation of industry-policy efforts could potentially help achieve higher productivity growth in Mexico.

Chapter 6

Russian Federation

Overview

The Russian Federation came into existence after the dissolution of The Union of Soviet Socialist Republics in December 1991. With a Gross Domestic Product of US \$ 1,775.55 Billion as of 2022, it is the eleventh_largest in the world by nominal GDP, and the sixth<u>in terms of</u> purchasing power parity. The GDP growth rate of this low middle income country was estimated to be 4.8% in 2021 and the per capita GDP was US \$ 12,172.8 in the same year.

With the foreign exchange reserves standing at US \$ 4,97.55 <u>b</u>illion, the central bank of Russia, The Bank of Russia has maintained a key rate of 8.0 % since July 2022 and has an inflation target of 4.0%. The mission of the Bank of Russia is to ensure financial and pricing stability of its national currency, Russian Ruble and to contribute to the development of a competitive financial market.

The Russian economy experienced a major currency crisis in1998 the unfolding of which reflected mismanagement of the opening of the country's financial markets to foreign lenders and investors which left the country vulnerable to the risk that domestic financial difficulties could be transformed into a full-blown currency crisis. As a result, the ruble plunged to one third of its value losing two third of it in a period of <u>three</u> weeks. However, the Russian economy recovered relatively quickly from the 1998 crisis, with growth rates of 6.4% in 1999 and 10% in 2000. The Russian Ruble with respect to the dollar was at a period average of 73.65 in 2021. However, Russia was faced with another economic upheaval in the early months of 2022 following its invasion of Ukraine which showed a sharp depreciation from 77.34 in February 2022 to 103.68 in March 2022. This was short lived, as the currency appreciated to 57.18 in the sixth month and in spite of the western sanctions Russia seems to be doing better than was expected.

Balance of Payment Statistics

The Balance of Current Account has been positive throughout since 1995 except for the year 1997 where it showed a deficit of \$ <u>835</u> million owning to the Asian financial crisis. The <u>decline in the</u> world commodity prices <u>coupled</u> with a decrease in the demand for nonferrous metals <u>resulted in this</u> deficit. Of the disaggregates of current account, balance of goods continued to be the only positive component throughout the years under consideration, while the balance of primary income, balance of secondary income and balance of services all continued to be negative (Figure 0_1). The predominantly large numbers of the balance of goods compensated for the negative values of the other components and led to a positive <u>balance on the current account</u>. The current account as a percentage of GDP increased from 2.2% in 1995 to 6.9% in 2021. (Figure 0-2)

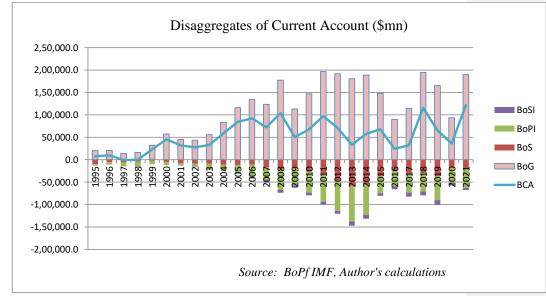
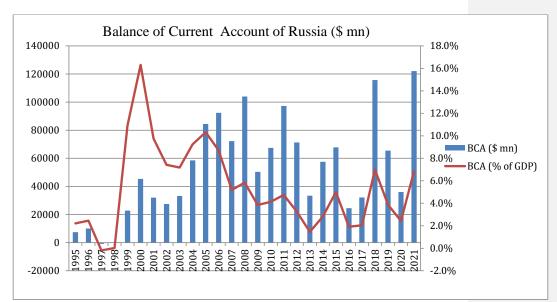


Figure 0-1: Disaggregates of Current Account



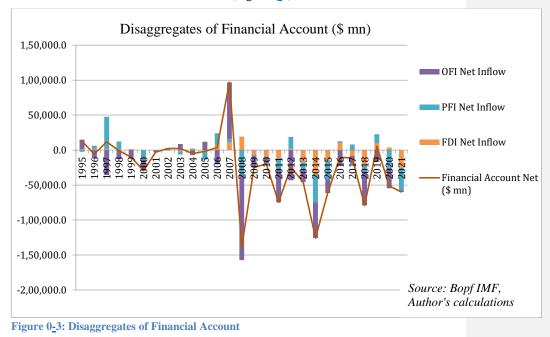


It is noteworthy that Russia is a major exporter of crude petroleum,

refined petroleum, petroleum gas and gold. In

2020, Russia was the world's biggest exporter of <u>wheat,semi-finished iron</u>, <u>non-fillet frozen fish, raw nickel</u>, and <u>pig iron</u>. On the other hand, its major imports <u>include cars</u>, <u>motor vehicles</u>; parts and accessories. In 2020, Russia was the world's biggest importer of <u>a</u>luminum <u>o</u>xide. The top services exported by Russia in 2018 were Miscellaneous business, professional, and technical services, Air transport and Personal travel.

Foreign Direct Investment net inflow in the year 2021 was US \$ -25.36 million, indicating that the liabilities created by the investment in the country is less than the assets created by the investment done by Russia abroad (Figure 0-3). Among the major countries investing in Russia are Germany, China and the USA. The Russian government had launched an incentive program in 2015 for foreign investors called Special Investment Contracts (SPICs). SPICs offered foreign investors who concluded contracts eligibility for preferential customs treatment, opportunity to compete for government



sole-source contracts, and incentives. The financial account as a percentage of GDP varied from 3.7% in 1995 to -3.4% in 2021. (Figure 0_{-4})

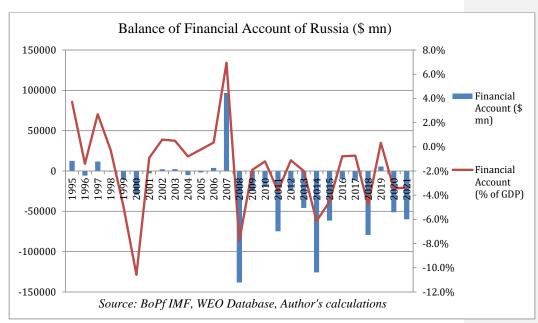
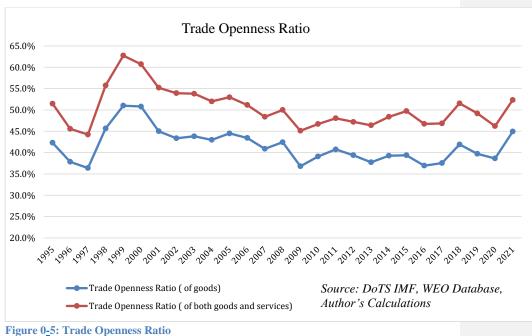


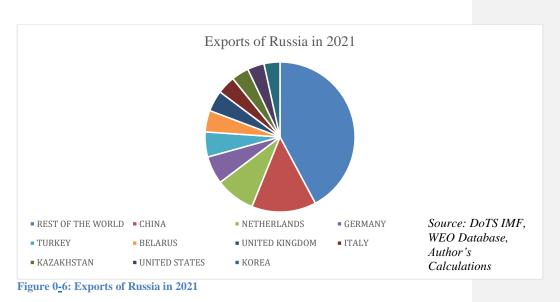
Figure 0-4: Balance of Financial Account of Russia

The Trade Openness Ratio has been calculated in two different ways (Figure 0_5). One, where only the exports and imports of goods is considered and another where both goods and services are considered. Both the ratios have shown a similar trajectory with a major increase in the starting months of 1998 when it increased from 36.4% and 44.2% in 1997 to 45.6% and 55.7% in 1998. This was the time of structural reforms like updating the tax code with increased efficiency of government spending.



Direction of commodity trade

Russian exports to the world stood at US \$ 492.05 billion in 2021. The major export partners of Russia are as follows: China, Netherlands, Germany, Turkey, Belarus and United Kingdom, with the largest export partner being China (Figure 0_6). The country with a majority of the Russian exports has changed over the years with it being Germany in 2000 and Netherlands in 2010. The share of emerging and developing economies has increased from \$37.12 billion in 2000 to \$248.6 billion in 2021. the share of advanced economies has increased from US \$ 65.56 Billion in 2000() to US \$ 242.87 Billion in 2021<u>()</u>.



Among the major countries that Russia imports from are: China, Germany, US, Belarus, Italy and France (Figure 0_7). <u>Though China is</u> the largest importing partner<u>as of now</u>, this status was held by Germany in 2000. Russian imports from the world are worth \$ 231.43 <u>billion</u>. The share of advanced economies has increased from \$ 16.84 <u>billion</u> in 2000 to \$109.06 <u>billion</u> in 2020 and the share of emerging and developing economies has increased from \$ 16.66 <u>b</u>illion in 2000 to \$ 122.32 billion in 2020.

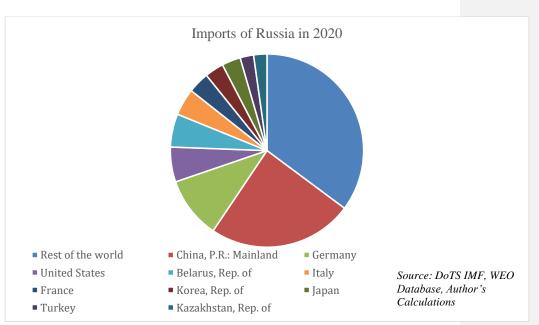


Figure 0<u>-</u>7: Imports of Russia in 2020

Since China is a major import and export partner of Russia, it is imperative that we look at how the imports from and the exports to China have changed over the years (Figure $0_{\pm}8$). Both have increased significantly over the years under consideration.

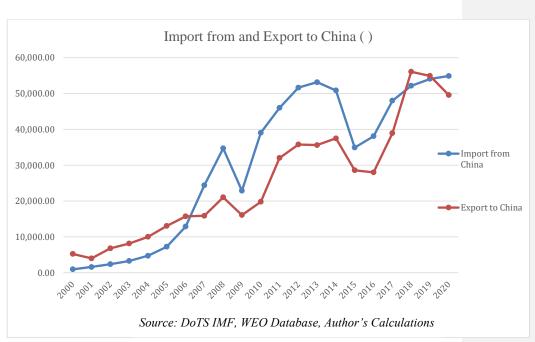
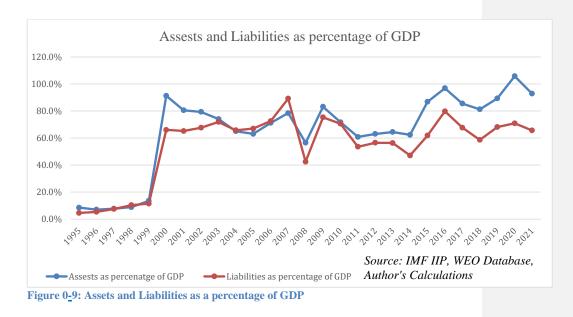


Figure 0-8: Import from and Export to China

International Investment Position and International Debt Situation

The assets and liabilities of Russia have increased substantially over the years under consideration. Assets as a percentage of GDP has increased from 8.5% in 1995 to 98.2% in 2021 with a similar figure for liabilities being 4.6% in 1995 and 65.6% 2021 (Figure 0_9). A major increase occurred in 2000 when these figures increased by almost 7 times and 6 times respectively.



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Assets in nominal terms have increased from \$28.65 billion in 1995 to \$1648.15 billion in 2021(Figure 0_10) and liabilities have increased by \$15.49 billion in 1995 to \$1164.72 billion in 2021 (Figure 0_11).





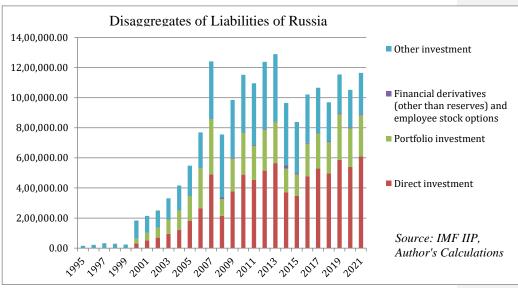
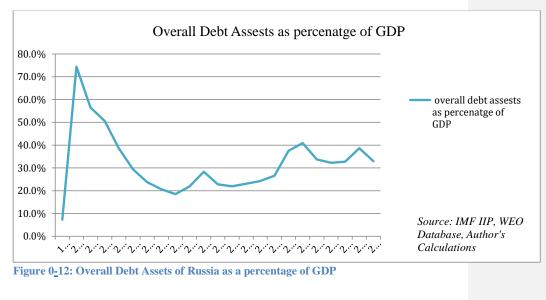


Figure 0-11: Disaggregates of Liabilities of Russia

Overall debt assets calculated as a sum of debt securities, debt instruments and other investment, has increased significantly over the years. Overall debt assets as a percentage of GDP have increased from 3% in 1995 to 32.9% in 2021 (Figure 0-12). A similar



calculator for liabilities indicates that the ratio has increased from 11.2% in 1999 to 27.4% in 2021 (Figure 0_{-13}).

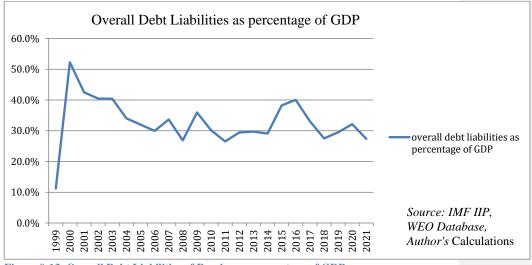
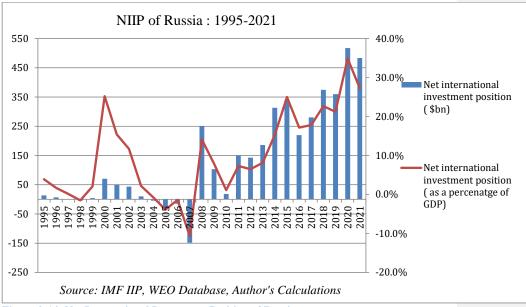


Figure 0-13: Overall Debt Liabilities of Russia as a percentage of GDP

The net international investment position (NIIP) provides an aggregate view of the net financial position (assets minus liabilities) of Russia vis-à-vis the rest of the world. The

Net international investment position as a percentage of GDP has increased from 3.9% in 1995 to 27.2% in 2021, with it being negative in 1998 and from 2004 to 2007 (Figure 0_14 and Figure 0_15).





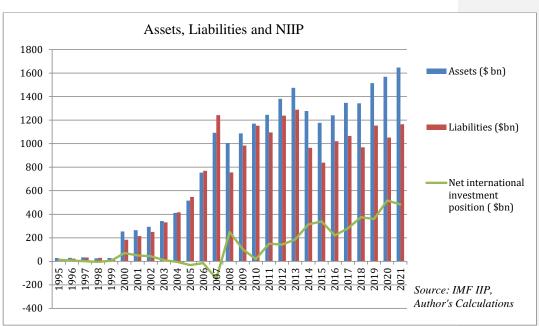


Figure 0-15: Assets, Liabilities and NIIP of Russia

The international financial integration ratio, calculated as the ratio of the sum of total assets and liabilities to the GDP of the country, has increased from 145.8% in 2001 to 158.4% in 2021 (Figure $0_{-}16$). A sharp decline was seen at the start of the year 2008 owing to the Asian financial crisis when the ratio dipped from 167.6% to 99%.

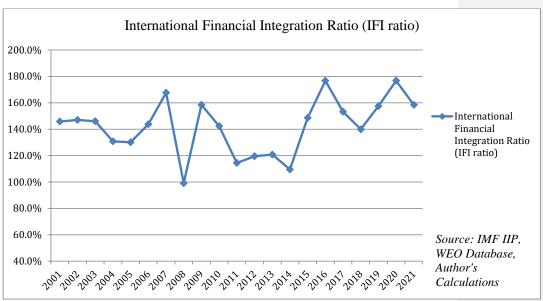
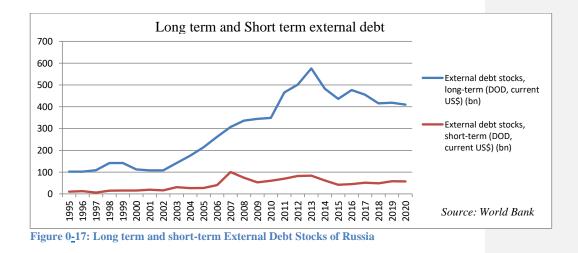
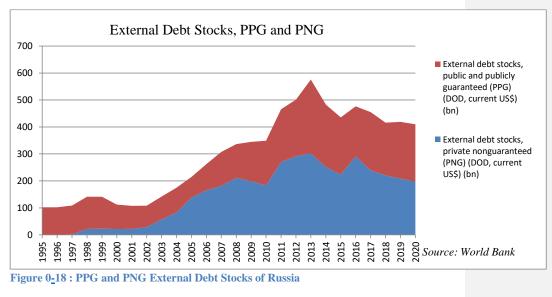


Figure 0-16: International Financial Integration Ratio

International Debt Statistics

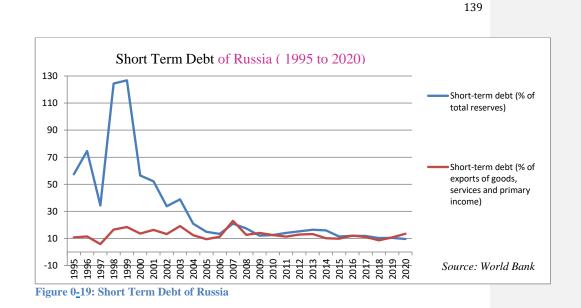
The long-term external debt stocks of Russia peaked in 2013 with US \$ 575.778 billion and the short-term debt sticks peaked in 2007 with US \$ 100.2626 Billion. The volume of long-term debt is more than the short-term debt (Figure 0_{-17}).





The volume of private non-guaranteed external debt is greater than the volume of public and publicly guaranteed external debt (Figure 0_{-1} 8).

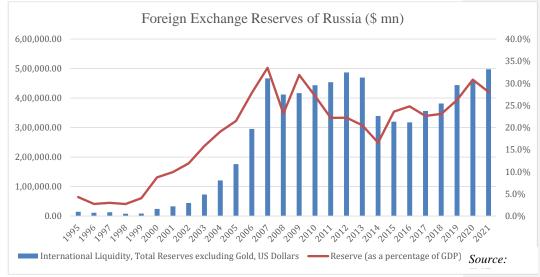
The short-term debt as a percentage of total reserves has primarily shown a downward trend (Figure 0_19). The ratio showed a sharp increase in the year 1998<u>amidst the financial crisis</u>, it increased from 34.44% in 1997 to 124.38% in 1998<u>, ever sicne there has been a steep decline</u>.



Exchange Rate and International Liquidity

The foreign exchange reserves of Russia have increased significantly from \$14.38

<u>b</u>illion in 1995 to 4,97.55 <u>b</u>illion in 2021 (Figure 0_21). Reserves as a percentage of GDP has increased from 4.3% in 1995 to 28% in 2021 (Figure 0_20).





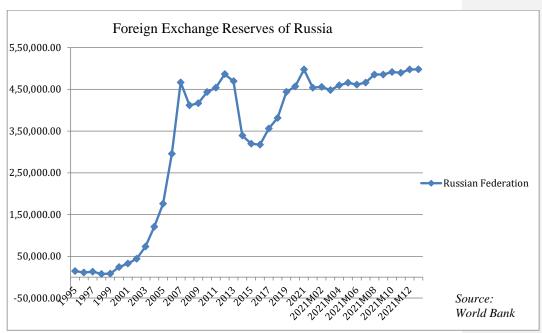


Figure 0-21: Foreign Exchange Reserves of Russia

The foreign exchange reserves of the Advanced Economies have increased from 1.01 trillion in 1995 to 6.12 trillion in 2021 and that of the Emerging and Developing Economies have increased from US \$ 0.47 trillion in 1995 to US \$ 7.82 trillion in 2021 (Figure 0_22). It can be seen that prior to 2005 the reserves of advanced economies surpassed the reserves of emerging and developing economies, however after 2005 the phenomena seem to have been reversed with Emerging and Developing Economies having greater forex reserves than advanced economies.

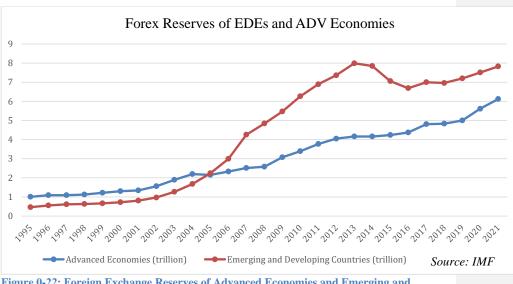


Figure 0<u>-</u>22: Foreign Exchange Reserves of Advanced Economies and Emerging and Developing Economies

The exchange rate of the Russian Ruble to the US Dollar has varied over the years, with a sharp depreciation seen in March 2022 after the invasion of Ukraine in February (Figure 0_23). The nominal effective exchange rate decreased by almost 3 times in 1999 (Figure 0_24).

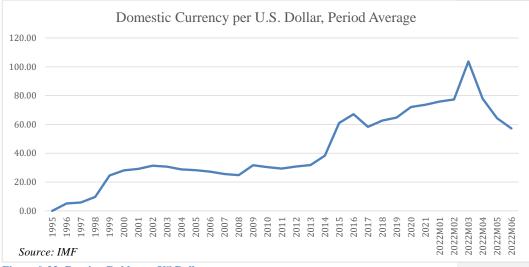


Figure 0-23: Russian Ruble per US Dollar

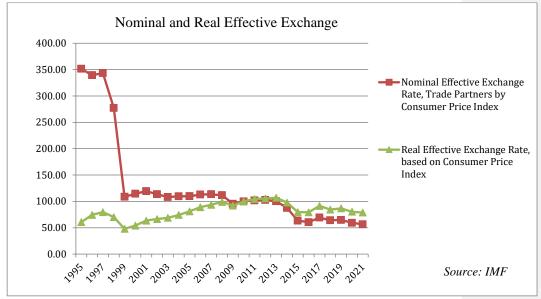


Figure 0-24: Nominal Effective and Real Effective Exchange Rates of Russia

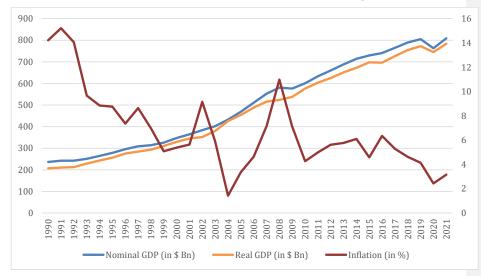
Chapter 6<u>Chapter 7</u>

SOUTH AFRICA

Recovering from the economic setback caused by COVID-19 outbreak, South African economy recorded pre-pandemic level of real GDP growth of 5.23% in 2021. In 2020, the real GDP growth rate had plunged to -3.63%. The South African economy was already in a weak position when it entered the pandemic after a decade of low growth. Structural challenges and weak growth have undermined progress in reducing poverty, which have been heightened by the COVID-19 pandemic. The achievement of progress in household welfare is severely constrained by rising unemployment, which reached an unprecedented 35.3% in the fourth quarter of 2021. The unemployment rate is highest among youths aged between 15 and 24, at around 66.5%.

Commodity prices remain important for South Africa, a major net exporter of minerals and net importer of oil. However, strengthening investment, including foreign direct investment, will be imperative for growth and creation of jobs.

Inflation had been on the decline in South Africa 2016 onwards until 2020, the year the Covid-19 pandemic hit the world, impacting multiple economies adversely, including South Africa. Inflation rose from 2.34% in 2020 to 3.16% in 2021. (Figure 7-1)





Balance of Current Account

The Balance of Current Account of South Africa stood at \$15,528.7 million in 2021. Of this, the only positive component of Balance of Current Account was the Balance of Goods which \$30,512 million. While all other components, namely Balance of Services, Balance of Primary Income and Balance of Secondary Income were reported in negative. (Figure 7-2)

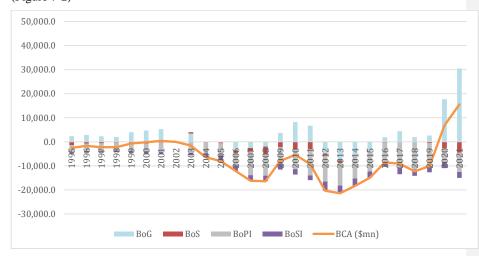


Figure 7-2: Disaggregates of Current Account of South Africa (in \$ Mn)

After a negative Balance of Current Account (BCA) for several years, South Africa recorded a positive Balance of Current Account equal to 0.58% of GDP in 2020 and 1.77% of GDP in 2021 (Figure 7-3). In absolute terms, the BCA in 2021 stood at \$15,528.7 million, an increase of \$8729.8 million over the BCA in 2020, which can be explained by the decline in imports of South Africa due to supply chain disruptions during Covid-19 outbreak. The level of imports from each of the top three source

countries of South Africa, namely the USA, Germany and China, declined in 2020. However, imports from Nigeria, Ghana and Saudi Arabia increased during the same period, but not enough to outstrip the decrease in imports of automobile parts and technology products from the USA, Germany and China.

The trade surplus of South Africa can also be attributed to a rise in exports of the country in the past two years. Coal, the main export product of the country up till 2019, was dwarfed by export of semi-manufactured gold which caused the export value to double. But, the rise in value of gold exports is found to be linked to the rise in price of gold during the pandemic, whereas the quantum of gold exports increased by a margin of only 2.3 tonnes in 2020 as compared to 2019.

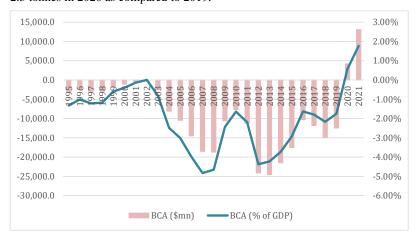


Figure 7-3: Balance of Current Account of South Africa (in \$ Mn)

Net Financial Account

In 2020, the Net Financial Account dropped to its all-time low since 1995 and recovered only marginally to be at -\$47,012.65 in 2021. Net Foreign Portfolio Investment has shown a declining trend over the past five years, finally dropping to a negative \$19,751.65 in 2021 whereas Net OFI has been consistently above \$16,000 during the same period. (Figure 7-4)Figure 7-4: Disaggregates of Financial Account of South Africa (in \$ Mn)

Net FDI Inflow has been worsening relentlessly over the past many years, even turning negative 2014 onwards. Such a trend of declining FDI Inflow can be attributed to a

number of reasons in the case of South Africa- inconducive political environment, the financial crisis, moratorium period for payment to external creditors as well as imposition of financial sanctions that isolated the country from capital markets of the world. The outbreak of Covid-19 pandemic and the fall in prices of commodities, particularly oil, have further worsened the situation for the African country.

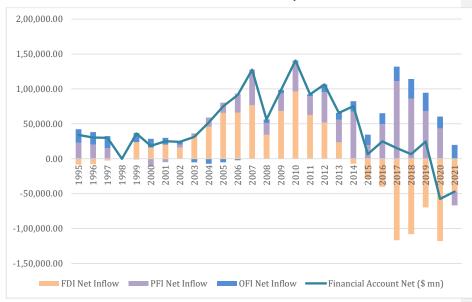
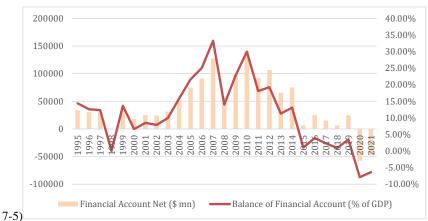


Figure 7-4: Disaggregates of Financial Account of South Africa (in \$ Mn)

Net Financial Account of South Africa as a percentage of its GDP was the highest in the year 2007, however by then end of 2008, it had reduced to less than half. Such a steep



decline can be attributed to the distress caused by the Financial Crisis of 2007-08. (Figure



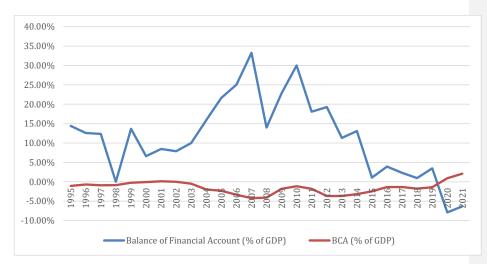


Figure 7-6: Balance of Financial Account & Balance of Current Account (as % of GDP)

The year 2010 onwards Balance of Financial Account shows a downward trend as the Balance of Current Account gradually rises. Consequently, the reserve of foreign exchange reserves with South Africa have been rising continuously over the past six years. In 2021, the reserve assets stood at USD \$57,544 million. (Figure 7-6)

International Investment Position

Both, Assets and Liabilities of South Africa touched their highest levels in 2017, \$558 billion and \$523 billion respectively. While Assets declined thereafter and rose again, liabilities remained more or less the same after their decline in 2018 and hovered over \$430 billion.

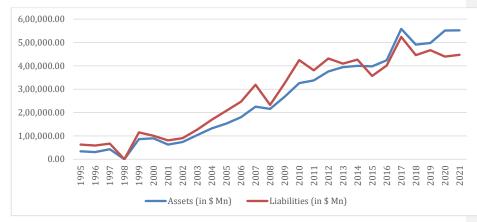


Figure 7-7: International Investment Position- Assets and Liabilities (in \$ Mn)



Figure 7-8: International Investment Position-Assets and Liabilities (% of GDP)

While Assets have shown an overall increasing trend as a percentage of GDP, liabilities have shown a declining share in GDP lately, with occasional spikes like that in the year 2017, when it touched 79.35% of GDP only to drop back to 64.79% next year.

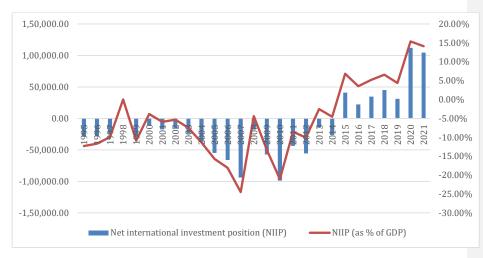
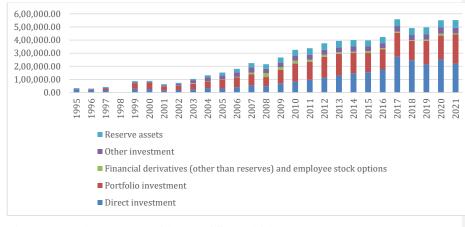


Figure 7-9: Net International Investment Position of South Africa (as % of GDP)

South Africa was a net debtor nation up till the year 2015 as its liabilities were consistently higher than its assets. The year 2015 has been a turning point in the financial record of South Africa as it marks the change of the country's net international investment position from a net debtor to a net creditor nation. (Figure 7-9) South Africa's net international investment position changed from -4.55% of GDP in 2014 to 6.82% of GDP in 2015. This shift was a result of exchange rate depreciation, which reduced the U.S. dollar value of rand-denominated external liabilities. In 2015, South Africa's foreign assets stood at 66.20% of GDP, and external liabilities totalled 59.37% of GDP. Even though a positive net international investment position is a mark of financial strength, the gross liabilities of South Africa continue to be large compared to other emerging markets. Additionally, about 40% of total external assets are hard-to-liquidate foreign direct

investment, while about 50% of the liabilities are portfolio investments by non-residents, which could be sold off quickly in the event of a shock.





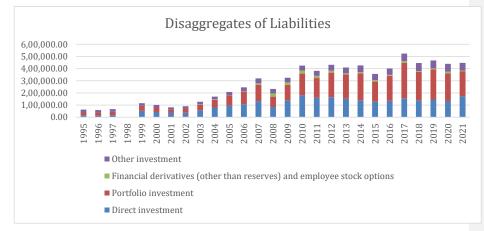


Figure 7-11: Disaggregates of Liabilities of South Africa

(IMF, 2016) South Africa used to rely more on portfolio and direct investment flows to finance its current account deficit. However, the external financing mix changed in recent years owing to: (i) a rise in outward foreign direct investment by South African companies that turned net foreign direct investment flows negative (- 0.8 percent of GDP on average in 2014–15); and (ii) a moderation in net portfolio flows amid a significant

decline in portfolio debt flows, as observed also in other emerging markets. Since 2013, other investment flows and unrecorded transactions rose significantly, and became the main sources of financing of the current account deficit.

International Financial Integration Ratio

International Financial Integration Ratio has been calculated as a ratio of the sum of total assets and total liabilities to the GDP of the country. The ratio has increased for South Africa from 48.55% in 2001 to 134.93% in 2021. The ratio undergoes a steep decline from 141.64% in 2007 to 111.36% in 2008 which can be attributed to the reduction in FDI liabilities in recent years in South Africa. (Figure 7-12)



Figure 7-12: International Financial Integration Ratio (IFI Ratio)

Foreign Exchange reserves

Foreign Exchange reserves of South Africa have more than tripled from 13,141.25 in 2004 to 50,262.15 in 2021. In terms of percentage of GDP, the level of international liquidity has been nearly constant for the past five years, that is, in other words, most of the tripling occurred prior to 2014. (Figure 7-13)



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Figure 7-13: Foreign Exchange Reserves of South Africa (in \$Mn)

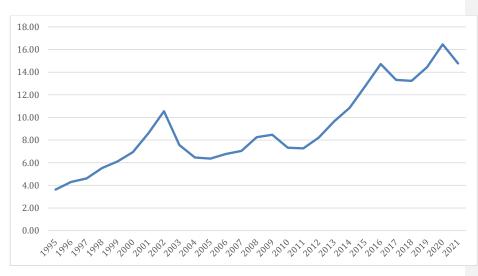


Figure 7-14: Domestic Currency per U.S. Dollar, Period Average

In 2001, as per the Myburgh Commission of Inquiry, there were a number of reasons that contributed to the depreciation of Rand- the sluggish growth of global economy, the

falling current account balance as well as the change of financial account balance from positive to negative. The sluggish global economic activity reduced foreign currency availability in the rand market and reduced capital inflows to emerging markets, including South Africa. In addition to this, the crisis in Argentina led to a rise in global risk aversion towards emerging markets, impacting South Africa adversely. It is noteworthy that the acceleration in depreciation in the final quarter of 2001 remains indecipherable, even by the Commission. (Figure 7-14)

In their working paper (Ashok Bhundia, 2004, pp. 9, 10), Ashok Bhundia and Jan Gottschalk, by means of a historical decomposition show clearly that almost all of the unexpected depreciation in the fourth quarter of 2001 and the first quarter of 2002 is due to nominal disturbances. Since the impulse response analysis demonstrated that nominal disturbances have their strongest effect on the exchange rate on impact, the nominal disturbances that led to the strong depreciation in 2001: Q4 and 2002: Q1 must have occurred in these two quarters. The impulse response analysis also shows that the effects of nominal disturbances on the exchange rate dissipate relatively quickly; after two quarters about half of the initial effect has dissipated.

After the recession started in South Africa in 2008, the domestic currency began depreciating and continued to lose value up till 2016. The sudden 2% devaluation of yuan by China coupled with slow economic growth in South Africa resulted in 26% depreciation of Rand in June 2015. The fall in Rand's value is also attributable to the improvement in USA's economy and interest rate hikes by the Federal Reserve resulting in outflow of money to the USA. Investor confidence was further dampened when the South African government replaced its Finance Minister, Mr Nene with Mr van Rooyen. However, the depreciation of Rand has given an impetus to industries such as wine, tourism and outsourcing.

The monetary policy decision of South African Reserve Bank (SARB) of reducing interbank lending rates, for the fourth time in the first quarter of 2020, to 3.75%, caused the depreciation of the Rand by nearly 20% against the USD. For the same period, South Africa turned out to be the world's largest exporter of Platinum (\$11.9B), Manganese Ore (\$2.59B), Chromium Ore (\$1.56B), Other Precious Metal Products (\$1.32B),

and Titanium Ore (\$569M). It was also a top exporter of Gold and Diamonds, trading mostly with China, India, the UK, Germany and the USA.

In addition to this, the coronavirus (COVID-19) pandemic served as a Black Swan event that worsened the situation for South Africa, sending the Rand tumbling by another 10.2% during 2020-21.

Real Effective Exchange Rate (REER)

The Real Effective Exchange Rate (REER) of a country compares the nation's currency value against the weighted average of the currencies of its major trading partners. South Africa shows a declining trend in its REER. It implies a gain in trade competitiveness for the country as the REER depreciates exports become cheaper while the imports become expensive.

South African NEER had been depreciating up till 2001 but underwent a quick recovery after 2001 because of decline in inflation. It also became the reason for appreciation in REER from 2002 to 2006. (Figure 7-15, Figure 7-16)

The second dip in REER occurred due to the financial crisis of 2007-08 which had impacted the risk perception towards emerging markets, including South Africa, adversely. The REER recovered gradually and reached a level of 106.72 in 2010. It was followed by a period of depreciation from 2011 to 2016. However, exports continued to fall during this period because of rise in government debt and cost of credit post the financial crisis.

(Ndou, 2022) Foreign income demand has a bigger effect than the exchange rate on the export volumes. The 2007 global financial crisis reduced the size of the impact of the REER and the nominal effective exchange rate (NEER) depreciation on export volumes, while it increased the impact of foreign income demand. The South African government had borrowed more to finance expenditures to mitigate the adverse effects of the 2007 global financial crisis and since then the gross government debt has kept rising. The rising government debt post-2008 impacted the sovereign credit default spreads which are the cost of insurance, and this impacted the cost of credit needed to finance the exports. Thus, the rising government debt effects were transmitted to export volumes mainly through the cost of credit channel.

After the outbreak of Covid-19, the Rand depreciated by nearly 11% within two months. This period also saw a rise in exports, especially of gold and platinum which accounted for 12.8% and 11.7% of the total exports. It was also a period of increase in imports, however the surge in imports remained lower than the increase in exports. The value of total exports in 2020-21 stood at \$102 billion and that of imports at \$72 billion, resulting in a Balance of Current Account surplus.





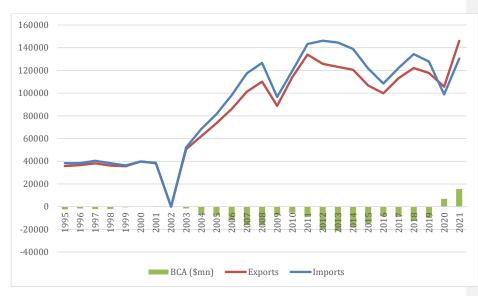


Figure 7-16: Balance of Current Account, Exports and Imports (in \$mn)

Chapter 7Chapter 8

We are all well versed with the economic and political crisis that Sri Lanka has been facing majorly since 2020. Although the country has liberal trade policies, it has been struggling to stay afloat, i.e managing the forex reserves required to meet the nation's massive import demand. The depreciation of the Sri Lankan Rupee (LKR) to over three times from 54.05 LKR/\$ to 186.41 LKR/\$ only made matters worse. Here is an in depth analysis of a few macro-economic factors from 1995-2020 that led to the severe crisis of Sri Lanka.

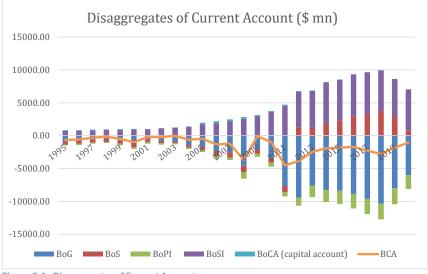


Figure 8-1: Disaggregates of Current Account

This chart is an appropriation of the net outflows and inflows of Sri Lanka from the period 1995 to 2020. It has been calculated on the basis of 5 factors as shown in the graph above (Figure 8-1), i.e. balance of goods, balance of services, balance of primary income, balance of secondary income and balance of capital account. We can infer that the balance of current account (BCA) started from -\$653.73 mn in 1995 to -\$3706.50 mn in 2009. It increased manifold in a span of 14 years and kept rising further to -\$4530.69 mn in 2011. The government kept borrowing to meet the deficit in its BOP account and the rising cost of debt just led to an increase in this deficit.

Moreover, the balance of primary income which consists of investment income flows, has risen from -\$972.40 mn in 2009 to -\$2101.23 mn in 2020, indicating disinvestment or capital outflow.

The deficit in BoG and BoPI account for a big chunk of the economic crisis that is happening in Sri Lanka.

While the BoS account had a deficit from 1995-2011, the situation reversed and Sri Lanka was able to increase exports of services from 2012. However, BoSI has been positive for the entire period of analysis, i.e 1995-2020.

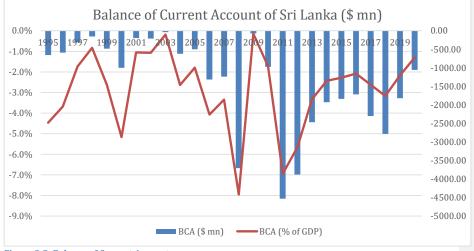


Figure 8-2: Balance of Current Account

It can be inferred that the deficit of current account was definitely within narrow limits before the current crisis of Sri Lanka. Huge fluctuations can be seen in BCA and BCA as a percentage of GDP. The low BCA leads to lower GDP of the economy and results in lower consumption by the public. This is one of the reasons why the country has depleting foreign exchange reserves, huge external debt, falling value of currency and negative GDP growth over the past years.

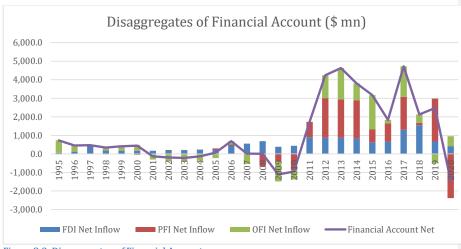
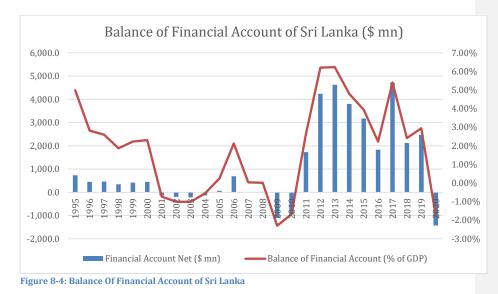


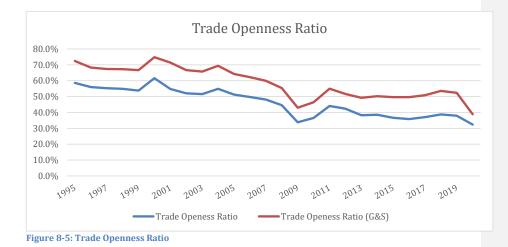
Figure 8-3: Disaggregates of Financial Account

It can be seen that the FDI net inflow has grown at a slow pace during the past 25 years, signifying stagnant economic growth. From \$430.1 mn in 1997 to \$419.3 mn in 2020, the nation has seen no growth in foreign investment inflows. This can be identified as a major reason for the forex reserve collapse as well as deficit in BOP account.

PFI refers to portfolio investment. While PFI was absolutely negligent from 1995-2007 and negative from 2008-2010, we can see a rise in PFI from \$828.5 mn 2011 to \$2313.1 mn in 2019 and a fall to -\$2382.9 mn in 2020. This signifies huge disinvestment from the Sri Lankan markets with the coming of COVID. Coming to Other Financial Investments (OFI), they have been highly fluctuating since 1995.

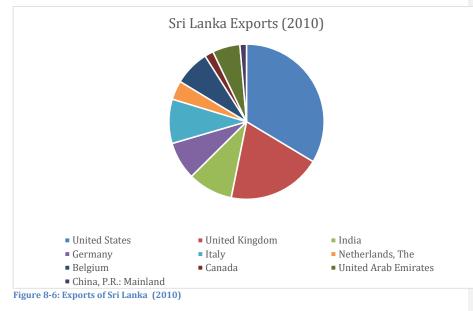


The net aggregates of financial account have been highly fluctuating. They started at 4.99% in 1995 and fell to -2.30% in 2009, only to rise up to 6.21% in 2012 and again fall to -1.77% in 2020. The massive instability of inflows and outflows led to a destabilised economy, high inflation rates and depreciation of LKR.



Trade Openness Ratio signifies a country's openness to international trade and globalisation. In 1995 it started at 72.4% and fell to 38.9% in 2019. It can be seen that over the years, Sri Lanka has become more hostile towards international trade.

It experimented with control over export of its products and tried organic farming, which only resulted in lesser cash inflows and a dwindling economy.



USA accounts for the largest share of exports (34%) from Sri Lanka, valued at \$1697.66 mn, followed by United Kingdom (20%) and India (9%). Germany, Italy and Belgium also account for a considerable portion of exports.

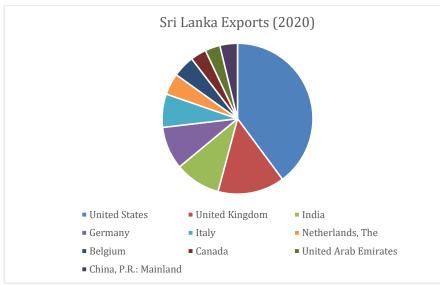
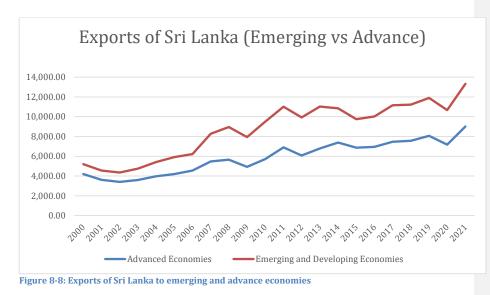


Figure 8-7: Exports of Sri Lanka (2020)

Over the course of 10 years, Sri Lanka's exports to USA have increased massively to \$2658.22 mn, ie 40%, while the exports to UK have decreased to 14% and to India have increased to 10%. Due to the increased exports to USA, the exports to other countries have declined.



It can be seen that the exports of Sri Lanka have risen steadily to both advance as well as emerging economies. Exports have reached the value of \$9009.55 mn in 2021 from a mere \$4197.29 mn in 2000 for advance economies.

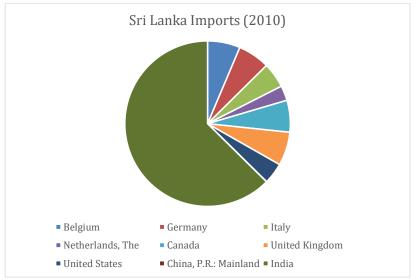


Figure 8-9: Imports of Sri Lanka (2010)

In 2010, India accounted for 63% of Sri Lanka's imports at a value of \$2547.74 mn. This signifies that the country relied heavily on India to meet the needs of its locals. Followed by India are various countries with small portions of imports, like Belgium (6%), Germany (6%) and Italy (5%) with China nowhere to be seen.

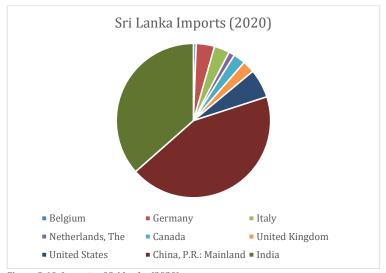


Figure 8-10: Imports of Sri Lanka (2020)

Something very interesting can be observed from the imports of Sri Lanka in 2020. It can be seen that while China was not in the top importers in 2010, over the duration of 10 years it has increased exports to Sri Lanka to a value of \$3581.77 mn, accounting for 43% of the nation's imports. This means that although in 2010 India was Sri Lanka's biggest import, in 2020 India's share has declined to 43%. All of this has been taken up by China, which strategically made an alliance with Sri Lanka.

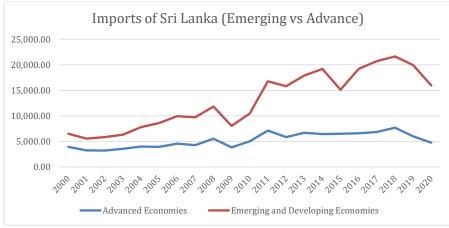
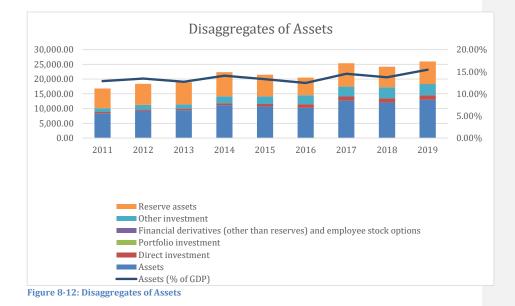


Figure 8-11: Imports of Sri Lanka from emerging and developing economies

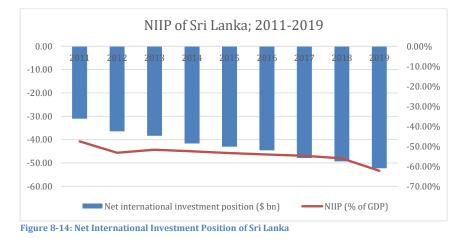
It can be observed that the imports of Sri Lanka from emerging and developing economies has increased by more than 100%, its imports from advanced economies has remained more or less constant over the span of 20 years.



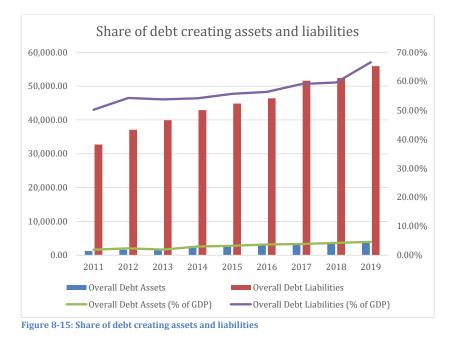
Here, it can be seen that Sri Lanka does not have a huge base of assets. In a span of 9 years (due to the limited availability of data), the assets have barely increased, from \$8414.38 mn in 2011 to \$12985.33 mn in 2019. Even assets as a percentage of GDP have risen from 12.89% in 2011 to 15.46% in 2019. It's direct investments went from \$423.73 mn in 2011 to \$1497.34 mn in 2019 and reserve assets from \$6749.28 mn in 2011 to \$7642.34 mn. Due to the consistency in level of assets and income generating investments and a rise in the level of debt taken up by the nation from primarily China and the IMF, the economy of Sri Lanka crashed.



After analysing the disaggregates of asset, we can see more clearly that Sri Lanka has a lot more debt than it has assets. While assets comprised of 15.46% of the country's GDP in 2019, liabilities account for 77.69%. This signifies the grave condition of the economy which was drowning in debt with rising costs and no way to swim to the shore. The constant help from IMF without due diligence only increased the debt burden of Sri Lanka. Moreover, while portfolio investment was negligent as an asset, it holds a noticeable share as a liability.

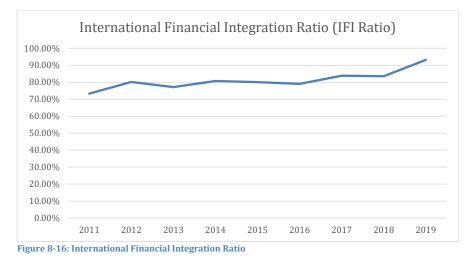


The net international investment position of Sri Lanka is not commendable. It is in the negative and this has only increased with each passing year, from -53.25% in 2011 to - 62.23% in 2019. This shows that the country does not have good asset management or portfolio management and its liabilities have increased with no good investments in assets.

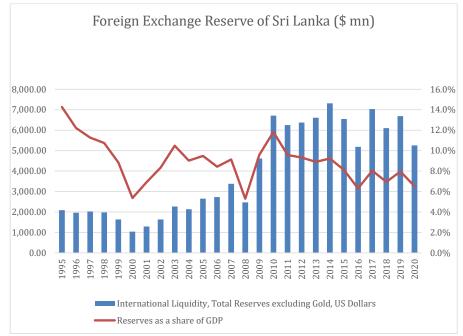


This shows clearly that the country has debt multiple times of its assets. In 2011, it had debt assets at 1.91% of the GDP while the debt liabilities stood at 50.18%. To make matters worse, debt assets as a percentage of GDP were 4.62% in 2019, while debt liabilities were 66.58%.

As a result, its interest payments keep increasing with no substantial income to make up for it. This shows why the country has a major imbalance in its BoP and has to deal with massive deficit financed by external borrowings.



Just like all other aspects, the IFI Ratio of Sri Lanka has also made minor improvements, from 73.31% in 2011 to 93.15% in 2019.





It can be observed that the International Liquidity, which comprises of Total Reserves has increased from \$1961.55 mn in 1995 to \$5256.67 mn in 2020. This indicates slow economic growth at the micro and macro level in a span of 25 years. We can also see the dwindling reserves as a share of GDP, starting from 14.3% in 1995 to 6.5% in 2020. The fall in the reserves of the country is a major reason for its inability to pay back its external debt.

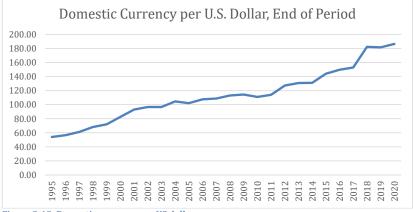


Figure 8-18: Domestic currency per US dollar

This chart shows that the currency of Sri Lanka has only depreciated over the past 25 years. What started from 54.05 LKR/\$ in 1995 has depreciated to 186.41 LKR/\$ in 2020. The nation observed a slow depreciation from 102.12 LKR/\$ in 2005 to 110.95 LKR/\$ in 2010. From there, the currency fell rapidly, from 113.90 LKR/\$ in 2011 to 152.85 LKR/\$ in 2017, and a steep rise to 182.28 LKR/\$ in 2018. This was the maximum rise the country saw in 1 year.

As of September 2022, the rate of LKR is 358.92 LKR/\$. This massive fall is owed to the political, economic and humanitarian instability of the nation. The coming of COVID-19 left the island of Sri Lanka in a turmoil. Being a nation that heavily relied on tourism and exports as a source of revenue and foreign exchange, the economy came crashing down when tourism stopped and exports declined massively. Due to curbing the imports, the production in agriculture and industry declined and this, in turn led to a shortage of essential commodities.

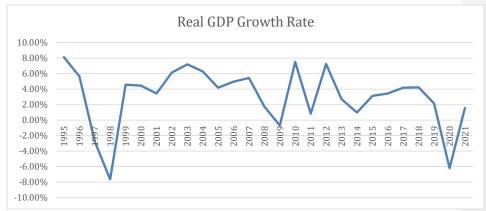
Moreover, constant payments for imports of essentials like crude oil and food led to a sharp fall in the foreign exchange reserves, which were at a mere \$1.82 billion in August'22. (Source: Bloomberg)

Through this study, we have analysed the major factors that led to the economic crisis of Sri Lanka and the country's performance and management of its finances over a period of 25 years.

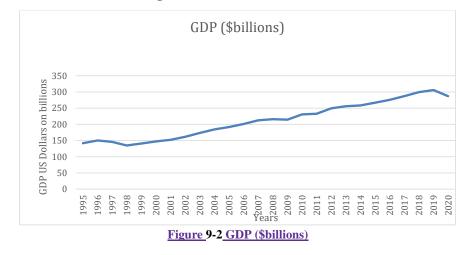
Chapter 8Chapter 9

Thailand

Thailand is a Southeast Asian country officially known as the Kingdom of Thailand. Thailand is a middle power in global affairs and a founding member of ASEAN, and ranks high in the Human Development Index. Thailand's real GDP growth rate was -6.195 % (Figure 9-1) in the year 2020, bringing down the real GDP to \$286.903 billion (Figure 9-1) in 2020 from \$305.852 billion in 2019. It also had the per capita income of 7,167.52 US Dollars in 2020.







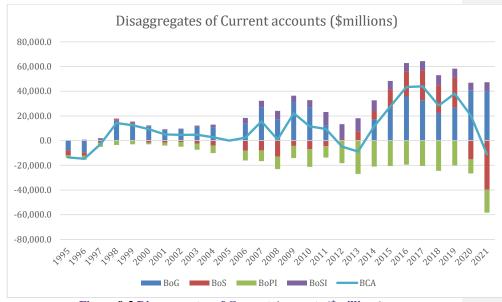


Figure 9-3 Disaggregates of Current Accounts (\$millions)

In the Figure 9-3 we can see, that the Balance of Primary Income has remained negative over the years while the balance of services improved between the periods of 2012 to 2019. However, it took a sharp dive to in the year 2020 to negative US\$ 15,191.7 million from the previous year balance of US \$38043.9 million, which might have been a result of the Covid-19 pandemic. The overall balance of the current Accounts has been fluctuating over the years with a negative balance of US \$11018.4 million in 2021. The balance of Secondary Income as well as the balance of Goods have remained mostly positive, with an all-time high of US \$40,855.6 million in 2020 between 1995 and 2021.



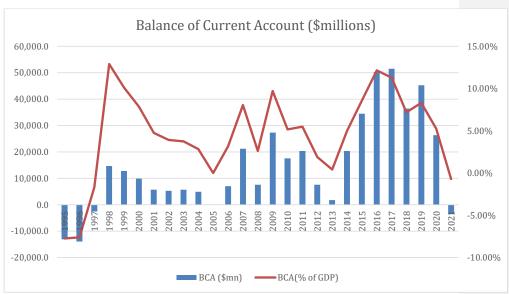
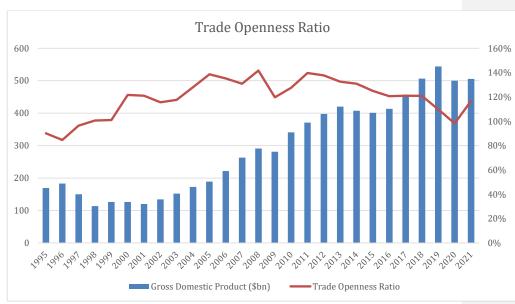


Figure 9-4 Balance of Current Account (\$millions)

Balance of Current Account was negative initially in 1995 at -7.74% of GDP and remained positive over the years (Figure 9-4). However, it declined sharply in the years 2020 and 2021 reaching to a balance of US \$ -3,580.6 million in 2021, the cause of which could be related to the Covid-19 pandemic.



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Figure 9-5 Trade Openness Ratio

Trade Openness Ratio is the ratio between total of imports and exports of a country to its GDP. It has mostly been more than 100% of the GDP while gradually declining to 98% in the year 2020. It took a sharp rise in 2021 to 117% of GDP. (Figure 9-5)

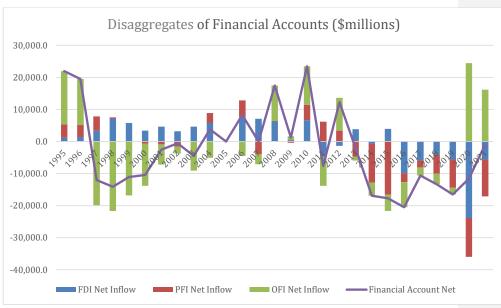
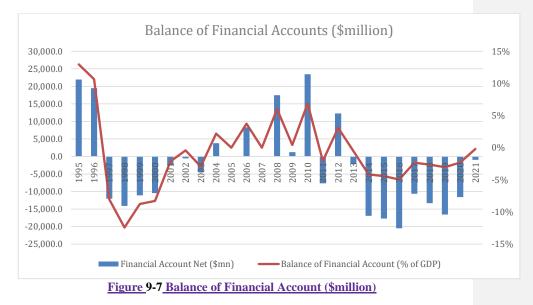


Figure 9-6 Disaggregates of Financial Accounts (\$millions)

FDI Net Inflow in Thailand has been mostly positive during the period of 1995 to 2021 with negative balances in the years 2011, 2012 and from 2014 to 2021(Figure 9-6). While the PFI Net Inflow has been declining after 2013 with the lowest of -12,147.6 in 2020. OFI Net Inflow is the only aggregate of the three which has remained positive during 2020 and 2021 at an all-time high of US \$24,413.8 million in 2020. The overall balance of Financial Account has been negative since 2012 and has been gradually recovering since 2019. In 2021, it was at US \$-969.7 million.



The overall balance of Financial Account as a percentage of GDP has mostly remained positive after 2003 while taking a sharp decline between 2012 and 2014 to remain negative ever since. It has improved a little in the year 2021 to -0.19% as compared to -2% in 2020. It can be seen that the Asian crisis of 1997 had a lasting impact on the financial accounts of Thailand from which, it could briefly recover in 2002 only to have a negative balance again in 2003. (Figure 9-7)



Figure 9-8 Exports 2020

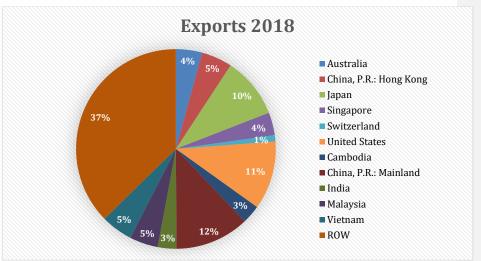


Figure 9-9 Exports 2018



Figure 9-10 Exports 2010

Over the years China, USA and Japan have held a significant a significant share of exports from Thailand of around 10-15%. Exports to Australia, Vietnam, Singapore,

and Malaysia have fluctuated between 3-6%. Exports to rest of the world have slowly decreased from 38% in 2010 to 32% in 2020. The major exports of Thailand are mainly capital goods including machine parts as well as automobile parts and accessories. Agricultural exports only account for almost 8% of the total exports of Thailand but it is still is a leading food exporter. (Figure 9-8, Figure 9-9, Figure 9-10)

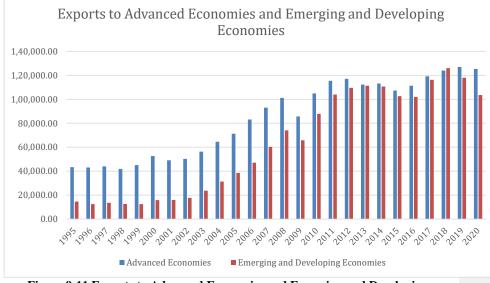


Figure 9-11 Exports to Advanced Economies and Emerging and Developing Economies

It can be seen that the exports to advanced economies has always been more than the exports to emerging and developing economies with an exception in the year 2018 when the exports to emerging and developing economies were US \$1,26,063.88 million (Figure 9-11) while to the advanced economies was US \$1,23,947.97 million. There has been a noticeable change in the amount of exports to emerging and developing economies as compared to the exports to the advanced economies.

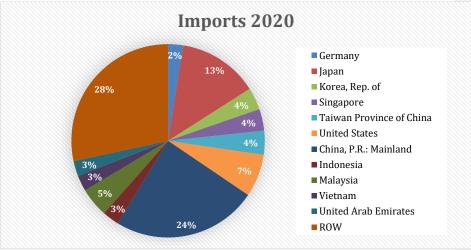


Figure 9-12 Imports 2020

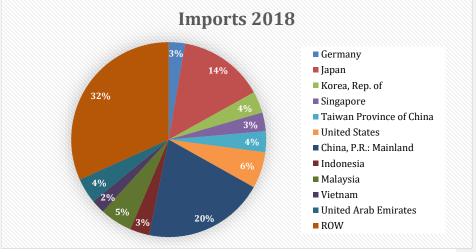
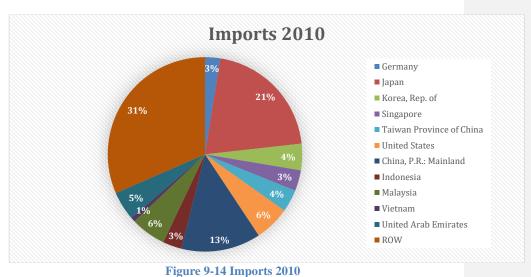
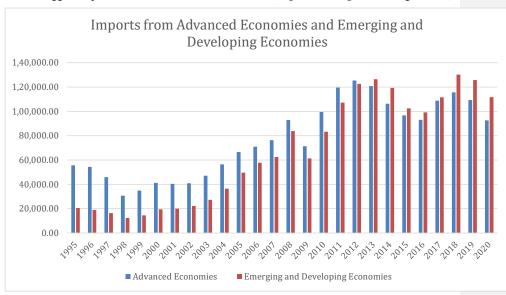


Figure 9-13 Imports 2018



China has gradually become a major source of import for Thailand from just 13% in 2010 to 24% in 2020 while Japan was the largest source of imports in 2010, which came down to 13% in 2020. Imports from USA have remained consistent around 6 percent of the total imports. Significant amount of imports have also occurred from Taiwan, Germany, Korea, Indonesia and Vietnam. Imports from rest of the world have decreased by 4% from 32% in 2010 to 28% in 2020. Thailand is a major importer of crude petroleum as well as capital goods like automobile and machinery parts. Thailand



was the biggest importer of steel bars and carbon in 2020. (Figure 9-12, Figure 9-13, Figure 9-14)

Figure 9-15 Import from Advanced Economies and Emerging and Developing Economies

It can be seen (Figure 9-15) that most of the imports were initially made from the advanced economies only which has gradually shifted to the emerging and developing economies. Imports from emerging and developing economies was at its highest in 2018 at US \$1,30,171.92 million while from advanced economies was highest in 2012 at US \$1,25,379.05 million.

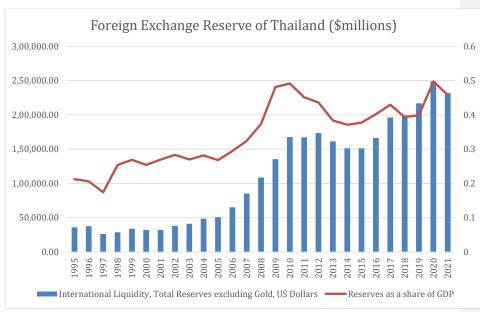


Figure 9-16 Foreign Exchange Reserve of Thailand (\$millions)

Foreign Exchange Reserves of Thailand have increased over the years while seeing a decline from 2020 to 2021 which could be linked to the Covid<u>-19</u> pandemic. Reserves as a share of GDP have always been less than 0.5 with the highest being at 0.49 in the years 2010 and 2020 (Figure 9-16). Foreign Exchange Reserves were also at their lowest in 1997 which led to the 'Tom Yam Kung Crisis'.

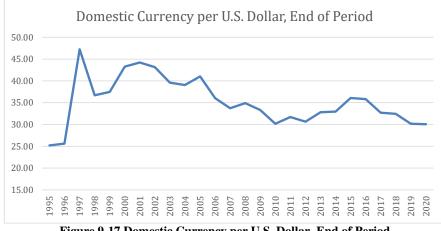


Figure 9-17 Domestic Currency per U.S. Dollar, End of Period

It can be seen (Figure 9-17 Domestic Currency per U.S. Dollar, End of Period) that the exchange rate took a sharp rise between 1996 and 1997 from 25.61 per US Dollar to 47.25 per US Dollar in 1997. The exchange rate also declined sharply from 47.25 per US Dollar in 1997 to 36.69 per US Dollar in 1998. The fall of the domestic currency in 1997 could be linked to the 'Tom Yam Kung' crisis when the Thai government was forced to float the domestic currency. The overall exchange rate has appreciated over the

Tom Yam Kung Crisis

It is also known as the 'Asian Financial Crisis' which gripped much of East Asia and Southeast Asia in 1997 when the Thai government was forced to float the domestic currency 'baht' as they lacked the foreign currency needed to peg baht against US Dollar. This led to the rise in foreign debts and falling currencies of not just Thailand but other Asian countries also. However, the economies started to recover rapidly from 1998 only which mitigated the risks of a global economic crisis.

years and was at 30.04 per US Dollar in 2020.

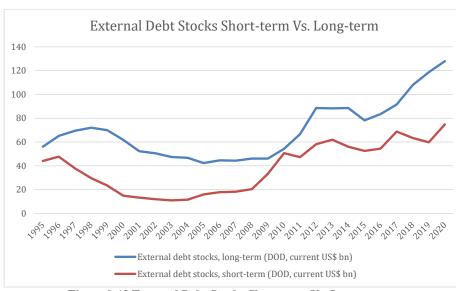


Figure 9-18 External Debt Stocks Short-term Vs. Long-term

Short-term and long-term debts, both have increased from 1995 to 2020, while seeing a decline in between 2000 and 2005. The long-term debts have always been more than the short-term debts. The debts have gradually decreased after the economic crisis in 1997 as the economy started to recover quite rapidly. (Figure 9-18 External Debt Stocks Short-term Vs. Long-term)

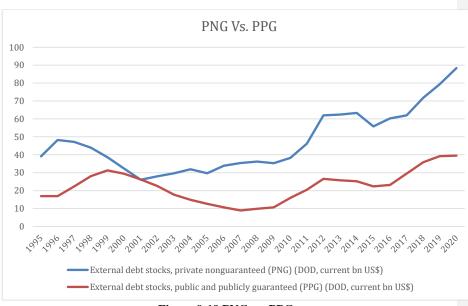


Figure 9-19 PNG vs. PPG

Private Non-guaranteed Debt (PNG) has always been more than the Public and Publicly Guaranteed Debt (PPG) with an exception in the year 2001 when both of them are nearly equal. The amount of PPG and PNG has been rising over the years along with the difference between the two kinds of debts with PPG being on the lower end. (Figure 9-19)

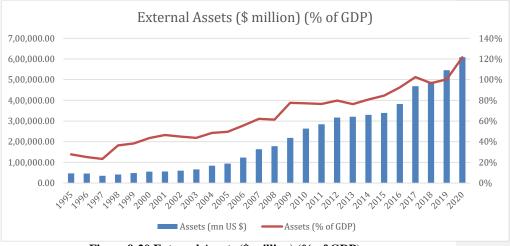
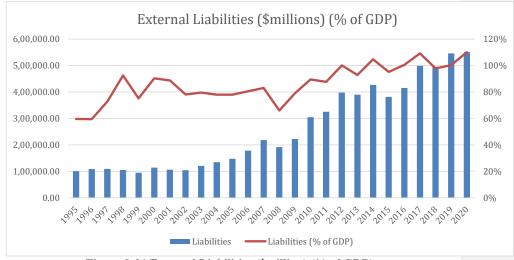
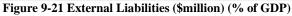


Figure 9-20 External Assets (\$ million) (% of GDP)





Liabilities have always been at least 59% of GDP with the highest being at 110% in 2020. The amount of liabilities has also increased over the years with the highest being at US \$5,50,940.02 million and the lowest being US \$95,167.47 million in 1999. There is a steep rise in the external liabilities as a percentage of GDP between 1997 and 1998 which could be linked to the decline of GDP in the same period. (Figure 9-21, Figure 9-1)



Figure 9-22 Net International Investment Position (% of GDP)

Net international investment position has been positive only in the year 2020 when it was almost 12% of the GDP. It has been lowest in the year 2014 at US \$ - 97,278.66 million. It had been gradually decreasing since 2014 and was at 0.02% of GDP in 2019 and finally became positive in 2020 when the Covid-19 pandemic had hit the world. (Figure 9-22)



Figure 9-23 Assets

In Figure 9-23, it can be seen that the amount of all assets has increased overtime. However, the percentage of direct investments as a part of total assets has increased while seeing a decrease in the percentage of other reserve assets. Other reserve assets has increased to US \$2,46,033.56 million in 2020 from US \$25,697 million in 1997. There has been exponential growth in the amount of direct investments from merely US \$401 million in 1997 to US \$1,73,437.28 million in 2020.

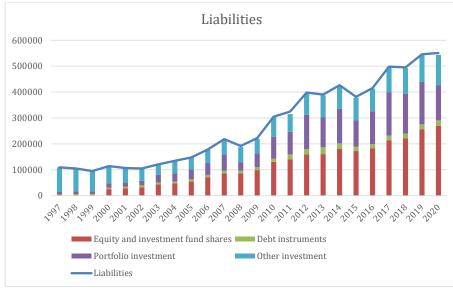


Figure 9-24 Liabilities

Figure 9-24 shows that the liabilities in equity and investment fund shares have increased significantly to US \$ 2,70,009.14 million in 2020 and have also acquired a major share at more than 49% of the total liabilities. Simultaneously, the percentage of other investments has decreased gradually while it increased only to US \$1,17,930.54 million in 2020 from US \$94,877.87 million in 1997. (Figure 9-24)

Chapter 9Chapter 10

Vietnam or officially known as Socialist Republic of Vietnam is a Southeast Asian lower-middle income country. It has a mixed socialist oriented economy and today Vietnam is one of the gems of the emerging markets. It has an economic growth of 6-7% which evidently rivals China.

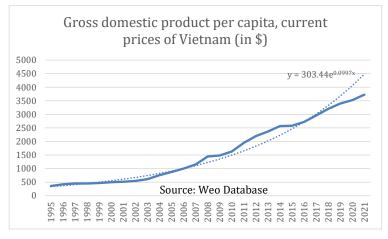


Figure 10-1 Gross Domestic Product per Capita of Vietnam

As per our calculation, Vietnam registered a trend rate of growth of 9.97% during the period from 1995 to 2021. It plateaued in 2008-09 during the global financial crisis after which it again picked up. It started with per capita income of below \$500 and is now almost reaching \$4000 which is significant for a developing country like Vietnam.

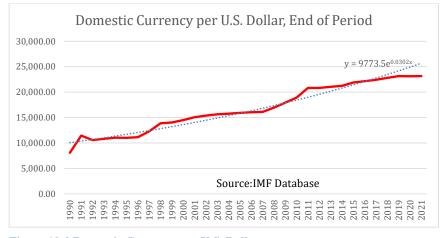


Figure 10-2 Domestic Currency per U.S. Dollar

The exchange rate of Vietnam has been rising since 1990 at rate of 3.02 percent and hence the domestic currency of Vietnam has been depreciating. This gives Vietnam an edge with respect to exports as the Vietnamese goods become cheaper in the world market and hence exports rise. This also translates into the current account surplus of Vietnam and an overall favorable balance of trade.



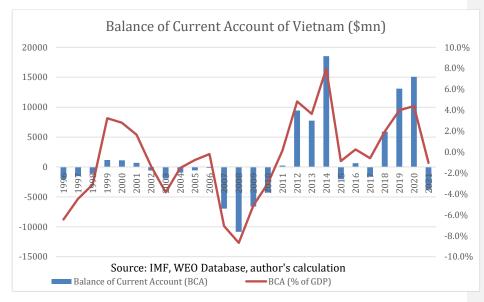


Figure 10-3 Balance of Current Account of Vietnam

Vietnam started out with a balance of current account deficit in 1996 which it brought to a surplus by 1999 and stayed in surplus till 2002 after which it again hit a deficit in 2003 though not as negative as 1996. It had barely gone to a surplus after which it again went into deficit and with the global fiancial crisis in 2008, the deficit hit an all time low being more negative than the 1996 level. It gradually again started recovering and post 2010 it has been in surplus with hitting all time high in 2014. It has seen another dip in 2020-21 presumably due to the Covid-19 pandemic. In terms of a general trend, it seems to be rather oscillatory with period of highs and lows, surplus and deficits yet since 2011, it seems to be much more stable.

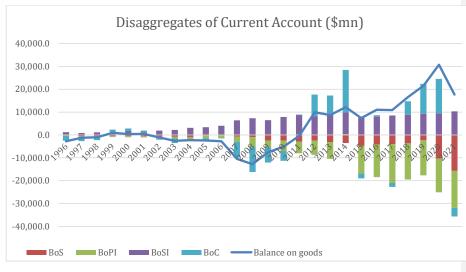


Figure 10-4 Disaggregates of Current Account

The balance on goods started out with an almost zero mark and went into a deficit during the global fiancial crisis in 2008 after which it has been in surplus though we do see it sliding down a little in 2020-21 during the Covid-19 pamdemic. In terms of disaggregates of current account, balance of goods and balance of secondary income (BoSI) are conspicous. We see that BoSI has consistently been in surplus since 1996 with its individual share rising especially since 2006. Further, BoSI was in surplus even during the global financial crisis and it is a major component of the positive balance of current account.

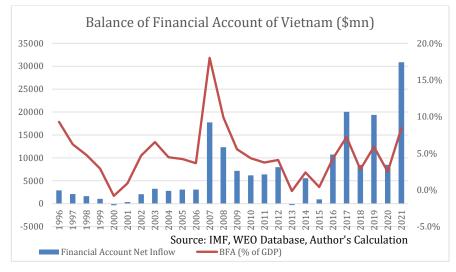


Figure 10-5 Balance of Financial Account of Vietnam

Vietnam started out with a balance of financial account surplus in 1996 and it has been in surplus since. We see it dipping after 1996 till 200- after which it started growing again. The balance of financial account as percent of GDP peaked in 2007 after which it saw a sharp fall during the global finacial crisis. The finacial account net inflow has been the highest in 2021. Vietnam has witnessed the BFA to GDP ratio being as high as 18% in 2007.

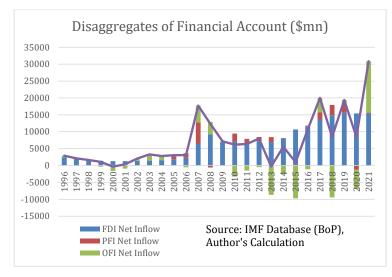


Figure 10-6 Disaggregates of Financial Account

In terms of disaggregates of financial account, the foreign direct investment (FDI) is very significant. We see a positive FDI since 1996 and its individual share has been rising considerably since 2007. The large financial account net inflow in Vietnam can be attributed to the large and rising foreign direct investment in Vietnam. There are 19 key sectors that attract the FDI inflow in which processing and manufacturing sector accounts for the largest proportion followed by electricity production and real estate as second and third respectively. The Compressive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) went into effect in 2019 and the EU-Vietnam Free Trade Agreement (EVFTA) was approved by the Vietnam government in 2020 to further ease the FDI inflows in the country. Another important mention is the large and positive OFI net inflow in 2021 contributing to the highest financial net inflow so far along with FDI. The period since 2010 has been a witness to a steep increase in the exports of goods which invariably is related to the increase in the FDI inflows into the region. Therefore too, the balance of current account has also been witnessing steep increase in the balance on primary account. (Investment Trends Monitor, 2022), (World Investment Report, 2021), (Report on foreign direct investment, 2021) (Business Enabling Environment).

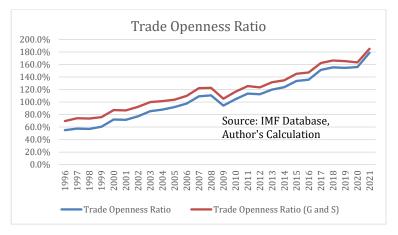


Figure 10-7 Trade Openness Ratio

Trade Openness Ratio is the ratio of exports plus imports over GDP. It shows the extent to which a country is flexible and accessible to foreign investors is linked to international trade (What is Trade Openness). Trade Openness Ratio has been increasing for Vietnam almost linearly in the last two and half decades from around 55.1 % to 185.1%. Vietnam has had steady and stable growth rate, a strategic location (near China) and a fast-growing skilled workforce. Agreements such as the CPTPP and EVFTA further make Vietnam more accessible in terms of trade. A slight dip in the trade openness ratio is observed in 2008, the period after global financial crisis. The recent Covid-19 pandemic in the year 2020-21 did not impact Vietnam adversely, instead we see a slight steepness in the graph indicating the rise in the rate of growth.



Figure 10-8 Countries share of Exports of Vietnam 2010 and 2020



Figure 10-9 Countries share of Imports of Vietnam 2010 and 2020

Vietnam has a current account surplus indicating a huge roll of increasing exports. As shown in the graph, the countries to which Vietnam primarily exports have remained same in the year 2010 and 2020 with US and China taking the major share though the share itself has clearly grown in a decade. Similarly, for imports, China and Korea remain conspicuous and we also see that the share itself has also grown decreasing the 'rest of the world' share both in imports and exports. Vietnam's top exports include electrical machinery (equipment and computers), footwear, clothing, furniture and fish and imports include iron and steel and plastic etc. (Daniel Workman, 2021)

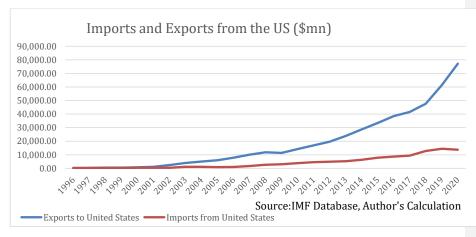
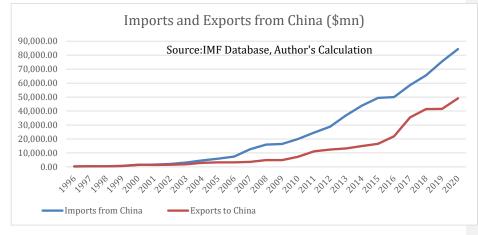


Figure 10-10 Imports and Exports from the US

The exports to US have steadily risen as compared to imports from US since 1996. Vietnam primarily exports broadcasting equipment, integrated circuits, textile footwear and office machine parts. There is a slight dip in exports observed due to the global financial crisis after which it has picked up. We see the graph (of exports) becoming steeper post 2018 indicating a rise in the rate of growth of exports.





The imports from China have been rising steadily as compared to exports to China since 1996. We see the graph of imports plateauing in the year 2008-09 presumably due to

the global financial crisis and again in 2015-16 while the graph of exports plateaued in 2018-19 after which it again picked up. The difference between exports and imports with respect to China aren't as large and diverging as USA. Major exports to China include smartphones, machinery and wood and imports from China include electrical equipment, plastics and iron and steel etc.

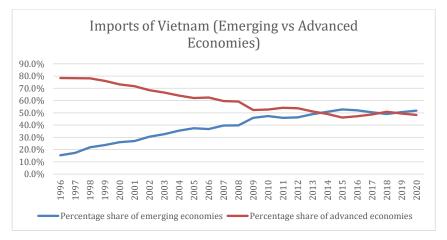


Figure 10-12 Imports of Vietnam (Emerging vs Advanced Economies)

Imports of Vietnam as a percentage share of emerging and advanced economies respectively had a huge difference in 1996 but it showed a converging trend since around 1997 and post 2008 the converging trend became more obvious and evident and it finally did converge in 2014 and is seeing an almost overlapping and oscillating (slightly) trend with the share of emerging economies being slightly more than advanced economies since 2013.

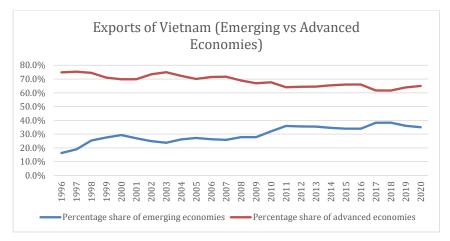


Figure 10-13 Exports of Vietnam (Emerging vs Advanced Economies)

The exports of Vietnam as percentage share of emerging and advanced economies respectively have had a very erratic trend where in 2009 and then in 2016, they did show some possibility of eventual convergence but after 2018 they seem to have a more divergent trend. As is evident from the graph, the percentage share of advanced economies for exports of Vietnam is higher than that of emerging economies though the difference has slightly reduced since 1996.



Figure 10-14 External Debt Stocks (Long vs Short term)

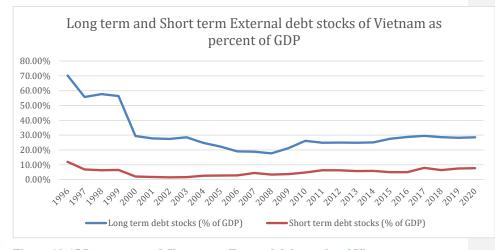


Figure 10-15 Long term and Short-term External debt stocks of Vietnam

The long-term debt stocks have been rising considerably since around 2006 while short-term debt stocks were almost constant till around 2006 after which they too have increased though not as much as the former. Further, if we see long term and short-term debt stocks as percent of GDP, initially in 1996, long term debt stock was around 70% of GDP while short term debt was around 11% of the GDP. There was a considerable fall in the long-term debt stock (% of GDP) post 1996 to below 20% in 2008 after which it increased yet has remained below 30% since. The short-term debt stock (% of GDP) has remained below 10% after 1996.

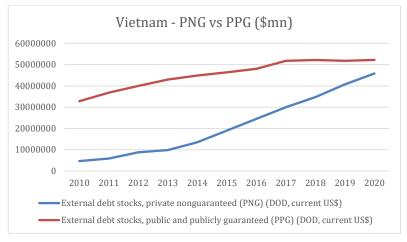


Figure 10-16 Vietnam - PNG vs PPG

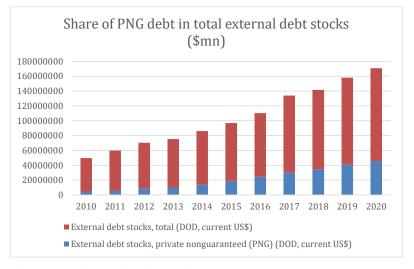


Figure 10-17 Share of PNG debt in total external debt stocks

PNG debt stocks have been rising almost linearly since 2013 with its share in total external debt stocks also rising while PPG debt stocks plateaued since around 2017 and they seem to be moving towards convergence as is evident from the graph.

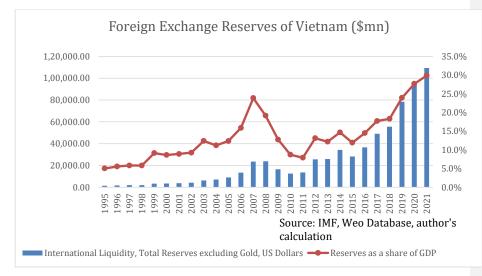


Figure 10-18 Foreign Exchange Reserves of Vietnam

There has been a considerable increase in the foreign exchange reserves of Vietnam where the increase picked up pace since around 2003-04. It is also seen that from 1995-2010 that the forex reserves peaked in 2007-08 and then saw a slight dip post the global financial crisis yet not completely offsetting the previous growth trend and continued to grow to an all-time high (since 1995) in 2021. Similarly, the reserves as a share of GDP have been rising and there was a downward slip around the global financial crisis but it again picked up its pace to a point where Covid-19 doesn't seem to have impacted its growth. The reserves have been positive or in surplus which can be attributed to the consistent current account surplus of Vietnam.

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