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Financial Scams – Deception Concealed in Sincerity

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i. Real Life Scenario:

‘Asha’, a 21-year-old young girl had only one dream: to pursue higher studies abroad. In the process of applying for a scholarship to make her dream come true, she develops a friendship with Dr. Carl, a foreigner. Asha who is usually skeptical in trusting strangers, however does not hesitate to trust Dr. Carl since he supports her only dream. They share contact numbers and become friends on social media.

Their friendship blossoms over time and one day Dr. Carl informs Asha that he needs to send her a gift of gold jewelry and a 100,000-dollar cash prize. He sends her a photograph of the gift and promises to deliver it as soon as possible. Asha is delighted and three days later she receives a call from a person named Harry who introduces himself as a friend of Dr. Carl and says that he is at the Bandaranaike International Airport, Katunayake and is in the process of clearing the gift. Harry requests Asha to deposit Rs. **100,000** to a local bank account as clearance charges. Asha, without any second thoughts, trusting her friend Dr. Carl and the photograph he sent, deposits the said amount. A short while later, Harry contacts Asha again and

requests Rs. **295,000** to be deposited to the same bank account as Customs clearance charges to clear the dollar cash prize from Sri Lanka Customs (SL Customs). Asha inquires about this from Dr. Carl and upon his confirmation, deposits the same. Later, on the same day, Harry contacts Asha once again and informs that clearance must be obtained from the United Nations (UN) to bring dollars to the country at a fee of Rs. **900,000**. Harry sends an image of the UN Clearance Certificate to confirm his statement and Asha, believing the UN official logo in the Certificate, deposits the sum of money to the same bank account. Harry further informs Asha that the UN clearance process will take around three days. After three days, Harry calls Asha and says as the final step to claim her gift, Rs. **500,000** needs to be paid to the Central Bank of Sri Lanka (CBSL) to convert the dollar cash prize to Sri Lankan rupees and sends her an image of a Certificate issued by the CBSL. During this entire process, Asha places her trust on Dr. Carl who constantly sends her messages assuring that his gift for her will be received soon and all these clearance charges are normal costs incurred when sending gifts from abroad.

At last, fulfilling the wish of Asha, Harry calls and informs that the gift is ready to be delivered to her doorstep. But after a little while, Harry calls Asha again and says that SL Customs has just now informed that the gift comprises of another 900,000-dollar cash prize in addition to the initially confirmed 100,000-dollar cash prize. However, Asha does not trust Harry since Dr. Carl had initially promised only 100,000 dollars. She inquires about the new cash prize from Dr. Carl and he says that he did not disclose it since he wanted to surprise her.

However, at this point, Asha starts suspecting about the credibility and honesty of the promises made by Dr. Carl and requests made by Harry. She is tired and frustrated of paying large sums of money to unknown and unseen people which totals to Rs. 1,795,000 by now. As the last resort, she contacts CBSL and becomes aware that she has been a victim of a large-scale financial scam. Subsequently she takes necessary steps to inform the relevant Law Enforcement Authorities. Even so, she has now lost her savings, her dream, her trust in people and faith in herself.

ii. What is a Scam:

In a constantly changing world, human actions of sincerity and deception have continued, developed, and expanded via numerous avenues. Different eras show different ways and means used by humans to execute such actions. Scamming is one such way in which deceptive nature of humans comes into play. Scams have been defined by different sources in different perspectives. A scam can be a dishonest way to make money by deceiving people (Merriam-Webster's Learners Dictionary) or it could be a trick a con artist plays on an unsuspecting victim with the goal to extort money (American Bankers

Association). Effective financial scams 'sell a story' and scammers are not only good story tellers, but they really understand human nature and how to push the right buttons to get people to do things that otherwise normally they wouldn't want to do (Carlson, 2019).

After considering the different definitions and opinions about scams, it can be deduced that a financial scam is an act designed by one or several persons in such a way to cheat money by deceiving people. Financial scams have been in operation at a low level in the past but now have surged to a greater extent penetrating all societal groups. Advancement in technology and human traits such as illiteracy, greediness, self-centeredness, limitless expectations, and infinite curiosity as well as the easiness and quickness of earning money have largely contributed to the increase in financial scams. Financial scams generally have a short life span where a small to large financial loss happens in the blink of an eye.

iii. A Glance at the World:

Financial scams have now become a global issue which has affected all regions in the world. During the year 2020, there had been more than 20,000 arrests in relation to mainly phone and internet scams across the globe (News and Events, 2020). Even the USA, a global superpower, has identified several types of financial scams tormenting the society where gender wise, males and age group wise, the older generation are the most vulnerable groups to such scams (Phil Catlett, 2017). At the same time, authorities of the global superpower educate the public about common scams and how to be safe (Common Scams and Crimes). Australia has identified vehicle scams, romance scams, online scams to be on the rise continuously (News

& alerts, 2021). Fraud and financial crime is on the rise in the Middle East (PwC's Global Economic Crime and Fraud Survey, 2020). Research conducted in the area of financial scams shows that only a minority of victims actually report to the relevant authorities which clearly undermines the gravity of the growing problem of financial scams in the United Kingdom (Financial Scamming - Our Campaign and Research to Date). Not only individuals, but the corporate world has also suffered in the hands of scammers (PwC's Global Economic Crime and Fraud Survey, 2020).

iv. Parties to a Scam:

A financial scam usually involves two parties: the scammer and the target group. This can be identified as the simplest form of financial scams where the scammer will act alone and will directly approach the innocent victim/s. However, in the case of advanced financial scams, there can be several parties to the scam comprising of the scammers, which includes the scam initiator/s as well as intermediaries and the target group. The scam initiator/s shall plan the scam by providing the necessary intellect and resources and will seek the assistance of one or more intermediaries to execute the plan. Generally, in advanced financial scams, it will be the intermediaries who will directly deal with the target group whereas the scam initiator will be acting behind the scene. There have been instances where foreign nationals have been the masterminds of financial scams. The world has witnessed complex and well-planned large scale financial scams where it had been almost impossible to identify and capture the scam initiator. Such scams are similar to spider webs where once entangled, it will require great effort and will power to disentangle from the mess. Ranging from minute level to mass scale, scams

are being used by random individuals as well as organized criminal groups to cheat money out of people.

v. Areas being Targeted:

Financial scams are executed in diverse areas.

o Employment

Scammers target the job-hunting need of people by promising local or foreign employment for a fee. The job hunter, in desperate need for a job will pay the requested fee at once without performing any background search of the supposed job supplier. However, in the end, the job hunter shall be left with a financial loss and without the promised job.

o Romance

This is an area where mostly women are targeted. Scammers approach both unmarried as well as married women by being kind and helpful and win their love and trust. Scammers then make false promises to marry them and plan the future together with the victimized woman. Then the scammer asks for money to make arrangements for the wedding / buy a house / migrate etc. and steals it.

o Assets and Products

Assets such as houses, vehicles, computers, musical instruments etc. and products such as cosmetics, medicines etc. are advertised through various media such as newspapers, social media etc. Initially the scammer will request for an advance fee payment to be deposited to a bank account. After the advance payment is deposited, the scammer will disappear with the money and become non-contactable.

○ *Winnings and Gifts*

A supposed foreigner falsely promises lottery, gold, BMW, cash prize winnings from abroad. Then the foreigner, with the assistance of an intermediary who acts as his friend, instructs the victim to pay cash to settle courier charges, customs clearance, taxation etc. to a local bank account in order to claim the winnings. By the time the targeted person realizes he/she has been deceived, two or three cash deposits may have already been paid to the scammer resulting in a significant financial loss.

○ *Financial Aid*

Here scammers target the financial needs of people such as poverty, debts, illnesses etc. Scammers act as helpers and try to provide assistance in various ways. In the case of poverty and debts, scammers may promise loans at a very low initial deposit. In the case of illnesses, scammers will try to help by opening bank accounts for cash collection. Once the initial deposit is made/a considerable amount of funds is collected, it will be stolen by the scammer.

○ *Religion and Charity*

Scams follow no ethics. Religious and charity concepts such as priests, nuns, donations, charities and foundations will be used by scammers to manipulate the embedded value system of people. Funds are deceptively collected in the name of donations for religious and charity purposes.

○ *Investments*

Scammers act as financial advisors/fund managers and offer knowledge and assistance to generate high returns, quick profits and

magnified initial capital. Investors are deceived into investing their savings and in the end both savings and potential returns will be lost.

○ *SWIFT messages*

Drawing up fake SWIFT messages is another way used by scammers to deceive people. Here, scammers prepare fake SWIFT messages indicating unusually large sums of money would be transferred but with conditions to pay certain fees before the funds are released. However, it should be noted that these SWIFT messages only provide information about financial transactions hence do not entail such conditions. It is a mere message and not an instruction. However, lack of business acumen makes people victims of this scam, and the scammers also mislead them into believing that financial institutions/regulatory authorities deprive them from receiving this money by holding it back.

○ *Corporate world*

Scammers target not only individuals but companies as well. Scam emails, hacking databases and systems, misappropriation of financial assets are several methods used to steal wealth of companies.

Above-mentioned diverse areas in which scams frequently occur clearly show that the scammers initially identify urgent human needs and wants, life ambitions, dreams and goals. Scammers will subtly approach people with such necessities, and their mind sets will be manipulated. Help and guidance will be offered in order to win their trust and once the trust is gained, the scammer will formulate ways to steal money from these innocent people. Even societal changes and trends such as COVID-19 pandemic have been used as

platforms to execute financial scams which clearly show the high degree of evolution and adaptability of financial scams to environmental and social changes.

vi. Channels used by Scammers:

Financial scams are executed via different channels including but not limited to telephone calls, text messages, emails, social media, newspapers, and magazines. Financial scams target anyone and everyone. Scammers employ different channels to approach different social groups. Telephone calls, text messages and social media are frequently used to lure women in romance scams. Social media together with attractive advertising, motivational speeches and convincing returns is mainly used to approach and deceive the younger generation. The older generation is targeted and captured by scammers through newspapers which is a news media still widely being used by them. Emails and telephone calls are generally used by scammers to target the middle-aged group.

vii. Analysis of the Real-Life Scenario:

The real-life scene faced by Asha is a day-to-day scam taking place in Sri Lanka. It can be seen that this financial scam is executed by an organized group. Several parties namely Dr. Carl, Harry and the local bank account holder act on the surface whereas there can be many other parties operating behind the scene as well. It is not clear who the mastermind behind the scam is. However, there is a possibility of it being Dr. Carl or it could be that all the mentioned parties are intermediaries of the scam and the mastermind not being in the forefront but taking necessary steps to ensure the smooth and flawless conduct of the scam.

Dr. Carl allures Asha through social media by sharing and nurturing her only dream, targeting her

young age, sending her an irresistible gift and by acting as a responsible and educated person holding a Doctorate. Human aspects such as ambition, age, curiosity, and status have been manipulated in this scam. He wins her trust by sending her a photograph of the gift and Asha believing what she is seeing pays out from her life savings to claim a gift from a total stranger.

In financial scams, common English names such as Harry, Carl, William, Mike etc. are normally used. Further, many scams involve foreign nationals and gifts from foreign countries since people believe it to be prestigious and honored and thereby proving it to be a convincing and a reliable way of drawing victims into the trap. Further, this real-life scene can be seen as a large-scale financial scam with a total financial loss of Rs. 1,795,000 spanning over just seven days.

The names and regulatory activities of three main authorities operating in Sri Lanka namely SL Customs, UN and CBSL have been misused in this scam since it is common knowledge that these regulatory bodies charge taxes, fees and issue regulations, circulars, guidelines and many other compliance requirements with respect to many economic activities in the country. Victims of financial scams initially trust the scammer wholeheartedly. Means used by scammers to steal money such as clearance charges, taxes, fees are seen by these victims as hindrances placed by authorities to steal their gifts/cash prizes/financial support. Therefore, victims are reluctant to seek help and support from authorities at the beginning. There have been instances where victims have contacted authorities to inquire about the various charges to be paid but have not listened to the relevant officials educating about scams and have scolded them.

Operating alone and not sharing with anyone is another major factor contributing to scam victimization. The basic human trait causing such behavior is greediness leading to blind trust and reckless action.

viii. Preventive Measures:

As per the Financial Transactions Reporting Act, No. 06 of 2006 (FTRA), scams have been classified as an unlawful activity. In the event an Institution has reasonable grounds to suspect that any transaction or attempted transaction may be related to a possible scam, as per Section 7 of the FTRA, the Institution shall, as soon as practicable, after forming that suspicion or receiving the information, but no later than two working days therefrom, report the transaction or attempted transaction or the information as a Suspicious Transaction Report (STR) to the Financial Intelligence Unit of Sri Lanka (FIU-SL).

Where a person becomes a victim of a scam, he/she should take immediate steps to inform the banking institution in which the scammer's bank account is held (if any) and lodge a complaint with the nearest Police Station. Such victims can also inform any other relevant authorities including the FIU-SL via post to Financial Intelligence Unit of Sri Lanka, No. 30, Janadhipathi Mawatha, Colombo 01 or through email to fiu@cbsl.lk. FIU-SL has also taken several steps to mitigate financial scam victimization such as timely dissemination of STRs received on financial scams to relevant Law Enforcement Agencies, conducting awareness programmes, publishing articles, displaying flyers in banking institutions.

ix. Be Aware:

However, the main responsibility in mitigating the threat of financial scams lies with the public. To

avoid many private and social costs incurred in the event a person becomes a victim of a scam, it is best if people could take preventive steps rather than following subsequent corrective steps to protect themselves from scams.

Following preventive steps can be followed to protect ourselves from financial scams.

- Do not disclose personal financial information such as bank account details, credit/debit card details, One Time Passwords (OTPs) to unknown parties.
- Always authenticate credentials prior to making payments.
- Do not make any advance payments to unseen people or to buy any unseen products.
- Do not open suspicious emails, messages, hyperlinks, pop-up windows etc.
- Do not operate alone. Share and seek help from your family, elders, close friends and authorities in any doubtful financial situation.
- Be updated with the latest positive and negative trends in the financial world.

x. Message to the Public:

‘There ain’t no such thing as a free lunch’. Benefits promised in a financial scam may be alluring at the beginning but will lead to suffering in the end. The public is hereby urged to be alert and cautious to identify, report and protect themselves from financial scams. Always research and inquire into matters unfamiliar to you before dealing with them. Your constant vigilance, timely actions and financial know-how will help to avoid financial scams in the short-run and build a safe and sound country in the long-run.

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The Cinnamon Industry of the Southern Province

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The history of Cinnamon Industry

Exploration of Cinnamon Homelands

This article seeks to discuss the history of the cinnamon industry in Sri Lanka and its impact on the Southern economy of the country, focusing specifically on its production, exportation and issues faced by cinnamon cultivators today.

Sri Lanka's cinnamon industry has been historically tied to geopolitics. As a spice cultivated as a means to illustrate and strengthen the superiority of one country over another, the international trade of cinnamon has been wrought with power struggles, and unethical / forced practices of labour. The Portuguese, Dutch and the British colonial powers used the cultivation of cinnamon as a tool to ensure their dominance over the country through global trade. Their policies and practices, which have left a lasting impact on the cinnamon industry of the country, which are discussed in detail below.

The cinnamon trade was carried out in ancient times by Venetian traders, from Alexandria to Europe, up to 15th century. The cinnamon brought very secretly through cumbersome land routes by the Arabian Muslims into Alexandria was bought by the Venetian merchants and sold at very expensive prices to the European market and the demand for cinnamon grew rapidly in these European markets. Thus, the Arab traders failed to meet the growing demand for cinnamon. As the free trade policy maintained by the Arabs was interrupted by the Turkish in Asia, and the Mamluks of Egypt gained power, there was interest among many European nations to search for a sea route for the spice products, including cinnamon, to get control over the spice trade. While many countries ventured beyond their border to explore new homelands that can produce spices, Vasco da Gama found India and Christopher Columbus discovered America.

Arrival of the Portuguese

Although Sri Lankan cinnamon grew wild in the island nation for many centuries before the arrival of the Portuguese, it was the Portuguese that coordinated with the kings of Sri Lanka to organize and develop its production and sale on a commercial scale. Traditionally, the people of Salagama, who became expert cinnamon peelers, offered the cinnamon manufactured by them to the King. When the Portuguese came to Sri Lanka, the King Dharma Parakramabahu of the Kotte Kingdom had entered into an agreement with the Portuguese; to provide 400 Bahara (1Bahara = 176.25 kg) on an annual basis. In return, the Portuguese agreed to provide protection to the coastal areas to the Sinhalese King. After the Portuguese invaded the maritime provinces of Sri Lanka, they wanted to increase the production of cinnamon, and changed the traditional production patterns, enabling them to reap larger harvests, with expectations of exporting the excess production. Until 1518, the monopoly over cinnamon trade was among Muslims and the King. However, this monopoly had collapsed with the construction of the Portuguese Port in Colombo in 1518. This gave the Portuguese an opportunity to make large profits through cinnamon trade, often committing acts of brutality to protect their cinnamon trade monopoly.

Arrival of the Dutch

The Portuguese cinnamon trade monopoly started to collapse with the arrival of the Dutch to Asia in the 17th century. The Dutch obtained the support of the Sinhala King to defeat the Portuguese. As a result, the Portuguese were expelled from Sri Lanka in 1658 and the Dutch gained control of

cinnamon production and trade. This incident has contributed to the celebration of the famous saying “inguru dee miris gaththa wage”. The Dutch too engaged in violence, to increase the production of cinnamon. Although, they exported about 270 tonnes of cinnamon annually, due to an annual increase in market demand, forest-grown supply of cinnamon alone was not adequate. A solution to this problem was presented by De Coke, an employee of the Holland East Indian Trading Company which operated from 1602 to 1798. He believed the harvesting of cinnamon can be commenced 08 years after saplings are planted. Accordingly, the first cinnamon estates in Sri Lanka were established in Colombo, Cinnamon Garden, Kadirana and Awariwatta, laying the foundation of the Sri Lankan cinnamon cultivation industry. Since the establishment of these estates resulted in a large harvest of local cinnamon, European markets were faced with a risk of falling cinnamon prices. Therefore, the Dutch burned their own extra cinnamon stocks and deliberately delayed merchant ships to maintain prices despite them having the monopoly of cinnamon production. The governance structure of the Dutch was designed to enhance cinnamon production capacity. Accordingly, there was a separate department for cinnamon under a Captain and there were four vidanes of cinnamon peelers under the Captain and four Headman under a Vidane. Kosgoda, Welithara, Madampe, Ratgama, Dadalla, Magalla and Lonumodara were the villages of cinnamon under the Captain or Mahabaddage of the Department of Cinnamon.

The Dutch maintained a controlled administration system extending to the village level in order to ensure the high quality of cinnamon production.

According to the famous Hanguranketha Agreement signed between King Keerthi Sri Rajasingha of the Udarata Kingdom and the Dutch on 14 February 1766, it is clear that the cinnamon cultivation in Sri Lanka was flourishing.

Arrival of the Englishmen

With the defeat of the Dutch by the British in 1796 and the acquisition of the coastal areas by the British, the cinnamon monopoly of the Dutch collapsed completely. Then two years later, the Holland East Indian Trading Company became inactive by 1798 and it was completely shut down due to losses made in 1800. By the mid-19th century, the British gained the production of up to 1,000 tonnes of cinnamon. Also, the European market was wider and more democratic than the medieval times, and at the beginning of the early nineteenth century, cinnamon fetched lucrative prices. However, at the time that the price of cinnamon products peaked, the attention of consumer diverted to cheaper substitutes such as Cassia. As a result, several new countries entered the field of cinnamon production. With the commencement of cinnamon cultivation in Java, Sumatra, Mauritius and Guyana from the early 19th century, the increase of cinnamon supply drove down the prices. As a result, the state monopoly of the cinnamon production by the British collapsed. According to the Colebrook-Cameron reform proposals, some cinnamon plantations were sold to the private sector. Although a pound of cinnamon was 9 shillings and 9 pennies in 1835, it had come down to 3 shillings and 6 pennies by 1848. At 3 shillings per pound of cinnamon, the duty in Ceylon were relatively low compared to other cinnamon producing countries. Although the duty was further reduced to 2 shillings in 1841, due

to a protest by the cinnamon cultivators, the tax was completely removed in 1853. The economic crisis that affected the British and other Europeans in the late 1840s led to the further deterioration of the cinnamon industry, as it was unable to face this situation. Although 100,000 UK pounds were earned by exporting 500,000 pounds of cinnamon in 1830, only 91,000 UK pounds were earned by exporting two million pounds of cinnamon in 1890.

Collapse of Sri Lanka's Cinnamon Monopoly

The above situation resulted in the collapse of the cinnamon monopoly that existed in Sri Lanka over a long period of time, and adversely affected not only cinnamon but also other spice crops. As such, new crops such as coffee, tea, cocoa took over the place of pride occupied by the traditional spices, including cinnamon. In the year 1850, the cinnamon cultivation in Sri Lanka was about 50,000 acres. By the year 1928, the total cinnamon cultivation in the country had dropped to about 25,000 acres due to the use of cinnamon estates for coconut cultivation. Out of that, there were about 14,538 acres in the Galle and Matara districts and about 8,000 acres in Negombo area. Therefore, a steady decline of land available for cinnamon cultivation in the country can be observed over the years. However, the Southern part of the island has managed to remain a stronghold of cinnamon production up to the present day.

Cinnamon Industry in the Southern Province of Sri Lanka

Contribution of the Southern Province to the Agriculture Sector

The contribution of the Southern Province to Sri

Lanka's national income is significant. Prior to the COVID-19 pandemic, the agriculture and tourism sector made significant contributions to the industrial sector of the Southern economy and the country as a whole. Also, at present, free trade zones such as the Koggala Free Trade Zone make a remarkable contribution to the industrial sector in the Southern Province despite the pandemic situation.

In the agricultural sector, rice, coconut and cinnamon are the main crops. Further, the fisheries industry also contributes greatly to the economy of the Southern Province. In addition to this, the Southern Province of Sri Lanka is fringed by the coastal areas such as Hikkaduwa, Unawatuna, Mirissa, Tangalle, Bentota and Koggala, catering to the tourist industry. The traditional industries such as the production of beeralu lace, engraved crafts, masks, etc. have provided additional income generating opportunities to the people of the Southern Province. Southern Province consists of three districts namely Galle, Matara and Hambantota. The total land area of the Galle District is 1,652 square kilometers while the Matara District is 1,283 square kilometers and the Hambantota district is 2,609 square kilometers. Accordingly, the total land area of the Southern Province is 5,544 square kilometers and it is 8.4 per cent of the total land area in Sri Lanka. According to the sources at the Ministry of Agriculture, 19 agricultural zones out of 46 agricultural zones in Sri Lanka the Southern Province, are contributing 41.3 per cent. The agricultural zones in the Southern Province are mostly located at the Matara District and Hambantota District; 8 and 7, respectively. Considering the land use patterns, out of the total

land area of the Southern Province, 75,472 hectares are paddy fields with an extent of 13.4 per cent while tea, rubber, coconut and cinnamon are 10.0 per cent, 1.9 per cent, 7.8 per cent and 3.6 per cent, respectively.

Extent of Cinnamon Cultivation in the Southern Province

The extent of the cinnamon cultivated in the Southern Province is 25,060 hectares in terms

of the 2019 figures. Out of that, the productive land extent is 22,526 hectares and the unproductive land extent is 2,534 hectares. Galle District cultivates the highest number of cinnamon in-terms of land area, which comprises 11,375 hectares; accounting for 50 per cent out of the total land area of cinnamon cultivated in the Southern Province. The next 8,360 hectares of cinnamon is cultivated in the Matara District, accounting for 37.11 per cent from the total land area of the cinnamon cultivated in the Southern Province. The contribution from cinnamon cultivation in the Hambantota District is the lowest among the Southern Province; whose cultivation extends 2,791 hectares (12.39 per cent). Out of the Divisional Secretariats of the Galle District, 3,933 hectares of Karadeniya, 1,513 hectares of Balapitiya and 1,484 hectares of Ambalangoda have given the highest contribution to the cinnamon cultivation. They are 34.6 per cent, 13.3 per cent and 13.0 per cent, respectively, out of the total extent of cinnamon harvested in the Galle District. Accordingly, 61 per cent contribution is made by the three Divisional Secretariats in the Galle District. The highest contributions in Matara District are from 2,459 hectares of Mulatiyana, 791 hectares of Hakmana and 787 hectares of



Kamburupitiya to the cinnamon cultivation. They contribute 48.3 per cent, out of the total extent of cinnamon harvested in the Matara District. Out of the Divisional Secretariats of the Hambantota District, 1,409 hectares of Walasmulla and 886 hectares of Katuwana are cultivated with cinnamon and they contribute to 82.2 per cent of the total extent of cinnamon harvested in the Hambantota District. The total cinnamon harvested in the Galle district was 6,621,092 kilograms in 2019, out of which, the largest contributions came from the Karadeniya Divisional Secretariat, which was 2,458,266 kilograms; Ambalangoda Divisional Secretariat, which was 1,001,901 kilograms; and Balapitiya Divisional Secretariat, which was 748,810 kilograms. They contributed 63.6 per cent, out of the total harvested in the Galle District. The total cinnamon harvested in the Matara district was 7,285,904 kilograms in 2019, out of those, the largest contributions came from the Mulatiyana Divisional Secretariat, which was 1,823,025 kilograms and Athuraliya Divisional Secretariat, which was 1,531,875 kilograms. They contributed 46.0 per cent, out of the total harvested in the Matara District. The total cinnamon harvest for the Hambantota district was 2,071,020 kilograms in 2019; out of those largest contributions came

from the Walasmulla Divisional Secretariat, which was 1,044,825 kilograms and Katuwana Divisional Secretariat, which was 656,700 kilograms. Their contribution was high at 83.7 per cent, out of the total harvested in the Hambantota District.

(Source: සංඛ්‍යාත නිබන්ධන - 2019, Chief Secretary Office - Southern Province)

Importance of Cinnamon Crop

The cinnamon plant is an evergreen, perennial plant that is indigenous to Sri Lanka. The Ceylon cinnamon or true cinnamon is the dried bark of *Cinnamomum Zeylanicum*, belonging to the family Lauraceae. The commercially planted cinnamon type in Sri Lanka is called Cinnamon Verum. The fresh odor of cinnamon which is unique to Cinnamon is a factor that determines the quality of cinnamon. Its color varies from light brown to hibiscus red. The authentic flavor of Sri Lankan cinnamon has supported Sri Lanka to reach the zenith of the world's cinnamon market.

Cinnamon oil is the main cinnamon product which is extracted from cinnamon bark, sticks, bark fragments and cinnamon leaves, cinnamon roots, etc. In Sri Lanka, the cinnamon is used as a spice in home-cooking, and as a sweetener in making cakes and sweets. Further, cinnamon oil is also used as a traditional medicine to relieve dental pains. Given its antioxidant properties, cinnamon powder is used as a healthy drink. Accordingly, cinnamon tea is one of the most popular tea brands among the world's markets. Today, cinnamon is a popular drink among the Sri Lankans too. Based on the quality of cinnamon, it is used as a medicine for various type of non-communicable diseases; such as high cholesterol. Cinnamon is also used

extensively in perfume manufacturing due to its pleasant fragrance. However, cassia cinnamon sales continue to dominate the world market, accounting for 85 per cent, while true cinnamon sales account only for the remaining 15 per cent. Sri Lanka contributes 90 per cent of the total true cinnamon supply in the world market.

Annual production, Export Quantity and Values of Cinnamon in Sri Lanka

Lack of district wise data on quantity and value of cinnamon exports remains a key weakness in maintaining statistics on the cinnamon industry . The following table shows the annual production, export volumes and values of cinnamon in Sri Lanka.

Today, Sri Lanka is the world's number one exporter of cinnamon as it continues to record

the highest export prices for Cinnamon due to its high quality and authenticity. According to the Export Development Board (EDB), Sri Lanka has exported cinnamon valuing to US dollars 175.67 million in 2019; contributing 1.47 per cent to the total export value of Sri Lanka in 2019. About 80 per cent of this export volume has been exported to the world's major markets such as Mexico, USA, Peru, Guatemala, Bolivia, Colombia and Ecuador. In 2019, Sri Lanka exported cinnamon worth of US Dollar 67.81 million to Mexico, accounting for 42.27 per cent of the total cinnamon exports by Sri Lanka. The United States is the next largest buyer of cinnamon exports by Sri Lanka. As a percentage, it is 13.7 per cent of the country's export of cinnamon and the value is US Dollar 24.09 million.

As per the Annual Report 2020 of the Central Bank of Sri Lanka the export income of cinnamon is

Table1: Annual Cinnamon Production, Export Quantity and Values

Year	Production (Metric Tons)	Export Quantity (Metric Tons)	Value	
			(Rs. Million)	(US \$ Million)
2014	17,600	13,949	18,255	132.28
2015	17,707	13,828	19,099	131.18
2016	18,945	14,946	24,973	159.07
2017	22,341	16,967	33,342	202.20
2018	20,398	17,860	37,315	213.25
2019	20,352	17,480	33,583	175.67

(Source: Economic and Social Statistics of Sri Lanka - 2020, Central Bank of Sri Lanka and Export Performance Indicators – 2019, Export Development Board of Sri Lanka)

Table 2: Composition of Exports

Table 5.3
Composition of Exports

Category	2019		2020 (a)		Change in Value US\$ million	Y-o-Y Change %	Contribution to Change %
	Value US\$ million	Share %	Value US\$ million	Share %			
Agricultural Exports	2,461.9	20.6	2,336.2	23.3	-125.6	-5.1	6.6
Tea	1,346.4	11.3	1,240.9	12.4	-105.5	-7.8	5.6
Coconut	329.5	2.8	345.2	3.4	15.7	4.8	-0.8
Spices	312.5	2.6	333.5	3.3	20.9	6.7	-1.1
Seafood	262.5	2.2	189.8	1.9	-72.6	-27.7	3.8
Minor Agricultural Products	120.0	1.0	134.7	1.3	14.6	12.2	-0.8
Vegetables	32.0	0.3	36.6	0.4	4.6	14.3	-0.2
Rubber	24.2	0.2	30.1	0.3	5.9	24.4	-0.3
Unmanufactured Tobacco	34.7	0.3	25.5	0.3	-9.2	-26.6	0.5
Industrial Exports	9,426.3	78.9	7,672.0	76.4	-1,754.3	-18.6	92.7
Textiles and Garments	5,596.5	46.9	4,423.1	44.0	-1,173.4	-21.0	62.0
Rubber Products	866.1	7.3	786.1	7.8	-80.0	-9.2	4.2
Food, Beverages and Tobacco	447.0	3.7	464.0	4.6	17.0	3.8	-0.9
Petroleum Products	521.1	4.4	373.6	3.7	-147.6	-28.3	7.8
Machinery and Mechanical Appliances	400.0	3.3	337.5	3.4	-62.5	-15.6	3.3
Gems, Diamonds and Jewellery	305.7	2.6	181.5	1.8	-124.3	-40.6	6.6
Transport Equipment	145.9	1.2	71.4	0.7	-74.5	-51.0	3.9
Leather, Travel Goods and Footwear	102.9	0.9	53.9	0.5	-48.9	-47.6	2.6
Printing Industry Products	48.3	0.4	47.9	0.5	-0.4	-0.8	0.02
Ceramic Products	30.1	0.3	24.0	0.2	-6.1	-20.2	0.3
Other Industrial Exports	962.8	8.1	909.0	9.0	-53.8	-5.6	2.8
Mineral Exports	33.9	0.3	25.1	0.2	-8.8	-25.9	0.5
Unclassified Exports	17.9	0.2	14.1	0.1	-3.8	-21.4	0.2
Total Exports (b) (c)	11,940.0	100.0	10,047.4	100.0	-1,892.6	-15.9	100.0
Annual Average Exchange Rate (d)	178.78		185.52				

(a) Provisional
(b) Excludes re-exports
(c) Adjusted for lags and other factors of recording
(d) Rupee/US dollar exchange rate

Sources: Ceylon Petroleum Corporation and Other Exporters of Petroleum
National Gem and Jewellery Authority
Sri Lanka Customs
Central Bank of Sri Lanka

(Source: Annual Report 2020, Central Bank of Sri Lanka)

Rs. 42,131 million which is a 25 per cent increase compared to 2019 and it is 68 per cent as a share of total rupee income from spices in 2020. Further, according to the report, earnings from spice exports recorded as US Dollar 333.5 million which was a significant growth of 6.7 per cent compared to 2019, supported by earnings from cinnamon exports.

Cinnamon Production

Removing the cinnamon bark and making the cinnamon quills is an indigenous method for Sri Lanka; which assures the identity of Sri Lankan cinnamon. The cinnamon tree grows to a height



of 10-15 m under natural conditions, and the circumference grows between 60-75 centimeters. Dry climate zones are not usually suitable for cinnamon cultivation, while the low-country reddish brown latopolic and curb brownish woolly soil are ideal for cinnamon. Red and podzolic soil is also suitable for cinnamon cultivation. The most suitable temperature range is 25°C - 30°C. The

annual rainfall ranges from 1,875 mm to 3,750 mm is suitable for cinnamon cultivation.

Based on the taste and pungency of the cinnamon bark, leaf and stem, there are five "traditional cinnamon varieties". They are "Pani-Miris Kurundu", "Pani-rasa Kurundu", "Sevela Kurundu", "Kahata Kurundu" and "Thiththa Kurundu". Among these varieties, "Pani-Miris Kurundu" and "Pani-rasa Kurundu" are deemed to be the best for commercial cultivation. Cinnamon is also classified based on the shape of the cinnamon leaf into seven types; ordinary cinnamon leaf, large leaf, small round leaf, large round leaf, ordinary leaf with inward curves, short thin leaf and long thin leaf.

The Department of Export Agriculture, which carries out research to identify the high quality and high yield cinnamon varieties, has introduced two new cinnamon varieties that are referred to as Sri Gemunu and Sri Vijaya.

Table 3: Special Features of the Improved Sri Gemunu and Sri Wijaya

Description	Sri Gemunu	Sri Wijaya
Bark Harvest (kg/ha)	1200 – 1300	1600 – 1800
Bark Oil %	3.2 – 3.6	1.4 – 1.6
Leaf Oil %	3.6 – 3.9	2.9 – 3.1
Cinnamaldy contained in the bark%	80.0 – 83.0	50.0 – 55.0
Eugenol contained in the leaf %	88.0 – 92.7	90.0 – 94.0

(Source: තාක්ෂණික ප්‍රකාශනය - 5, Department of Export Agriculture)

Cinnamon Processing

High skilled labour is required for cinnamon processing. While there are many cinnamon growers, there are only a handful of people with knowledge and experience in processing cinnamon. Traditional cinnamon processing involves the use of equipment such as "Kapana Ketta", "Thalana Koketta", Brass rod, scissors, "Angili Kopuwa", Measuring rod ("pethi kotuwa") and "Soorana Koketta".

Cinnamon processing equipment



(Source: තාක්ෂණික ප්‍රකාශනය - 5, Department of Export Agriculture)



The initial step in cinnamon processing involves scraping the corn and brushing with a brass rod. Generally, crushing cinnamon is a hard work, especially at the time when new leaves or flowers sprout in cinnamon trees. In the long dry season, more effort has to be taken to bark cinnamon by brushing with the brass rod. Sometimes, cinnamon crushing is suspended for weeks. Cutting can be done after taking the bark to the desired level. After separating the bark from the stem, quills are joined and filled. Finally, the cut quills can be processed.

Definitions of Cinnamon Production

The following definitions are used internationally to identify the different standards of cinnamon.

1. Cinnamon Quills (Full tubes)

Scraped peel of the inner bark of stems of matured cinnamon are placed one over the other and joined together to make cinnamon quills. The inside hollow of these should be filled with small pieces of peeled cinnamon of the same type and be air dried. Typically, a quill is about 105 cm (± 5 cm) in length; which are then separated into different grades.

2. Cut cinnamon Quillings

Cinnamon quills are cut for a specified length. The cinnamon quills are graded as full tube cinnamon quills.

3. Cinnamon Quillings (broken tubes from full tubes)

Different length quills broken from the full tube cinnamon quills and quills less than 200 mm and chips are considered under this category. It can contain feathering and 11 cinnamon chips up to 5 per cent according to the weight. Other things should not be included more than 2 per cent.

4. Featherings

These are small fragments of the cinnamon bark, that is broken in the process of making cinnamon quills. It can contain cinnamon chips up to 10 per cent according to the weight.

5. Cinnamon Chips

Matured, hard, un-peelable and green mixed brownish coloured outer barks are called cinnamon chips. These have to be scraped, as it cannot be peeled off from the sticks.

6. Grind Cinnamon

This is a powder obtained by grinding pure cinnamon.

7. Whole Cinnamon

All commercial cinnamon products except the cinnamon powder are known as whole cinnamon.

8. Flower Crude and Crude

Red beige spots on the surface of the cinnamon sticks are called Flower Crude. Over time, when they become dark brown spots, they are referred to as Crude.

9. Cinnamon Bundle

Cinnamon quills of the same grade are bundled and bound by a suitable material for export purposes.

Generally, these Cinnamon Bundles have standard heights and weights

Challenges Face in Cinnamon Cultivation and Production

1. Increasing Cost

The increasing costs of maintaining the cultivations, arising from the high cost of materials such as fertilizer and other inputs and the rising processing costs associated with cinnamon production in Sri Lanka, in view of the severe shortage of cinnamon peelers, remain the biggest challenges of the cinnamon industry. Currently, around 33,000 hectares of cinnamon cultivation has approximately 30,000 trained cinnamon peelers, as opposed to the 50,000 cinnamon peelers needed for this work. The diversified range of opportunities in the labor market has prompted young employees scattered across the southern coast to move away from the cinnamon sector, partly owing to the low recognition for the job. The sustainability of the services provided by the trained workers in this sector is an indispensable factor in maintaining the standards of the cinnamon production. The increase of production cost over the past decade, has led to insufficient benefits and the lower cooperation extended by the value-added cinnamon manufacturers.

2. Lack of Infrastructure

Although there are 250,000 cinnamon planters across the country, majority of the lands are owned by micro landowners. Lack of infrastructure is a huge concern for producing quality and pure cinnamon without waste out of the cinnamon produced by these micro landowners. Therefore, this has severely affected the quality of cinnamon production.

3. Deficiencies in Value Addition

Sri Lanka produces only few value-added products for the export market. However, cinnamon is a crop that could be used for multi-faceted needs. But, low range of products is a challenge. Prioritizing new trends for cinnamon and to seek new markets are also a challenge.

4. Threats from Low Quality Cinnamon Market

As observed recently, there is a trend of low-quality cinnamon products acquiring the market, as opposed to the standard high quality cinnamon products. Even though high-quality cinnamon products are produced locally, there are no regional level intermediaries to carry these products into local markets successfully. The current cinnamon market is a regional market, which consists of lower grade cinnamon buyers. Sanitary and health issues can be seen due to improper cinnamon storage and transportation. Lack of knowledge on international standards and costs related to cinnamon in the cultivators and intermediates has exacerbated the decreasing quality of cinnamon. Relative to thousands of cinnamon cultivators, there are only few cinnamon collectors in the local market. Hence, there is a higher competition among these collectors for buying cinnamon products which has in turn caused a disregard for the quality of the products. Further, as the cost of obtaining a quality certificate is high, the interest is very low to obtain such standardised quality assurances.

5. Non-standard Planting Methods

The most commonly used method for planting cinnamon is planting through seedlings. This method is mostly used in new planting and deserted planning. But when these seeds are planted, there

is a limited chance to receive good seedling plants of the same quality. Various varieties of plants come in different qualities due to lack of access for cultivators to possess high quality seedlings (or planting materials) which creates this problematic situation. As an alternative method, the plants are cultivated by using branches, as difficulties have arisen owing to the use of technology to obtain enough seedlings.

6. Limited Space for Export

Exporting of cinnamon to a limited number of countries is a challenge. Currently, major markets for exporting cinnamon are Mexico, Colombia, Peru and Germany. Mexico is a key country that exports cinnamon, causing a concentration risk. Also, the lack of a sufficient market for promoting our cinnamon production in the international market and lack of research into cinnamon for market requirements has severely hampered the development of the cinnamon market.

7. Using Traditional Methods of Production

There is an aversion among the traditional cinnamon producers towards changing conventional attitudes and adopting the most effective technology in the production process. Traditional methodologies involve a high labor contribution and given the current price for the labor, the lack of labor has become a major factor that drives up the production costs. Despite the many modern technological developments that could be harnessed for the processing of cinnamon, the traditional producers continue to use the conventional methodologies, which has become a major issue, as cinnamon peelers work for long hours which could impact the quality of the products and their health. Exposure to the environment at this stage of the production

process, gives rise to the risk of combining external impurities (dirt/soil/pieces of rock) to the cinnamon, which impacts the quality of the final product. This task requires a high level of training, which takes time. This has become a major challenge in the cinnamon industry. Lack of knowledge and high cost in acquiring new methodologies and lack of confidence on the investments made for new technologies have become major reasons for using conventional methodologies.

8. Expansion of Alternative Products

Further, alternative products for cinnamon are becoming popular across the globe. Although the quality of cassia cinnamon is low, it is commonly used today due to high price differences; becoming the greatest challenge to the Sri Lankan cinnamon industry.

How to Overcome the Barriers to Cinnamon Cultivation

1. Use of New Technology

Exiting from conventional attitudes and adopting the most effective technology to produce cinnamon might help to reduce the cost of cinnamon production. Government can intervene to offer the fertilizer subsidy, to encourage the cultivators. It is also necessary to provide proper training for the cinnamon peelers and improve their reputation.

2. Development of Infrastructure Facilities

Low interest loan facilities are required for the micro level cultivators engaged in the cinnamon industry to facilitate the development of infrastructure to produce high quality cinnamon products, excluding impurities (dirt/soil/pieces of rock). Knowledge on the necessity of developing

the infrastructure to enhance production should be provided to the producers.

3. Value Added Cinnamon Products and Market Promotion

By making cinnamon producers aware of value-added products of cinnamon, and infusing technology and introducing new methodologies, the range of value-added products could be expanded. Provisions should be made by government to promote the market for the value-added products.

4. Quality Assurance

To protect the quality of cinnamon products, entering of low-quality cinnamon products into the market should be discouraged and laws and regulations should be implemented to maintain minimum standards acceptable for cinnamon products. Also, adequate knowledge should be provided on international standards and costs related to cinnamon for the cultivators and intermediates. Proper attention should be given to the high cost of obtaining quality certificates.

5. High Attention to Finished Cinnamon Goods

Cinnamon is mainly exported as a raw material in Sri Lanka, although it could generate higher incomes if the process is transformed into exporting finished cinnamon products. Therefore, proper plans should be made to export finished cinnamon products, while continuing exporting it as a raw material.

6. Active Planting Techniques

A direct contribution should be made by the relevant institutions responsible for the cinnamon cultivation on the methodology of cultivating plants.

7. Finding New Export Markets

All responsible parties should directly contribute to explore new markets available for cinnamon. The possibilities of increasing the capacity of exports to the current markets should be analyzed.

8. Good Coordination

Strong and proper coordination should be made to promote effective discussions on the issues and trends related to cinnamon cultivation with the planters and collectors, including exploring new markets, and having an understanding on the level of government intervention on cinnamon cultivation.

9. Increased Cinnamon Production

Steps should be taken to minimize the cost of production of true Sri Lankan cinnamon in order to have fair competition with low priced inferior cinnamon products such as low-quality cassia. Research should be continuously undertaken to increase yields per hectare for true Sri Lankan cinnamon.

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The Role of the Custodian: Euroclear Bank perspective

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Introduction

The fundamental role of the custodian bank is providing safekeeping of securities and other assets such as equities and commodities in physical form or electronic form. At present, the role of the custodian banks has become one of importance as there is a progressively increasing demand for the numerous financial services demands by many financial institutions. Due to the increasing uncertainties in the financial market industry and huge complexity of business models used by the financial institutions, there has been a growing risk of managing and safekeeping financial assets for the financial institutions. As a result, there has been an unprecedented demand for financial services provided by the custody banks throughout the world.

There are many leading custodian banks around the world including JPMorgan Chase, Citigroup, BNP Paribas, Barclays, Bank of New York Mellon and Euroclear Bank (EC). All custodian banks are not the global custodian because in order to be a global custodian, the particular custodian bank

should provide safeguarding of financial assets in the various jurisdictions around the world.

Role of the Custodian

Due to the rapid technological developments associated with the financial services and business activities, there has been increasing demand for the custodial services. As a result, the role of the custodian banks has expanded from the safekeeping for assets and securities to provide a wide range of services as given below.

- ◆ **Safeguarding the clients' assets and securities** – custodian banks are maintaining security of assets and securities of the financial institutions. Further, these banks provide valuation, reconciliation and accounting services as required for the assets held with them.
- ◆ **Transaction settlements and fund transfers** – on behalf of the buyer and seller of the securities, custodian banks initiate the

transaction settlement process. Accordingly, custodians transfer funds from buyer's cash account to seller's cash account and the securities are transferred from seller's collateral account to buyer's collateral account to ensure the settlement of transaction. Also, they provide market liquidity facilities to ensure the smooth settlements in timely manner.

- ◆ **Asset servicing including withholding tax exemptions and corporate actions** – At present, many custodian banks are providing administrative services such as processing tax exemptions, tax relief and tax claims for their clients.
- ◆ **Risk management** - By keeping valuable assets and securities, custodian banks are managing various risks associated with these assets/securities including safekeeping risk, administrative risk etc.
- ◆ **Reporting and data management** – Custodian banks are providing reporting and data management services from time to time according to the specific requirements of the clients. These reports help clients to confirm the settlement status of transactions, and outstanding balances of accounts which are maintained with the custodian banks.
- ◆ **Foreign Exchange Services** – Clients may need to settle transactions in different currencies such as AUD, EUR, GBP, JPY NZD etc. According to the clients' requirements, custodian banks provide foreign exchange to settle transactions.

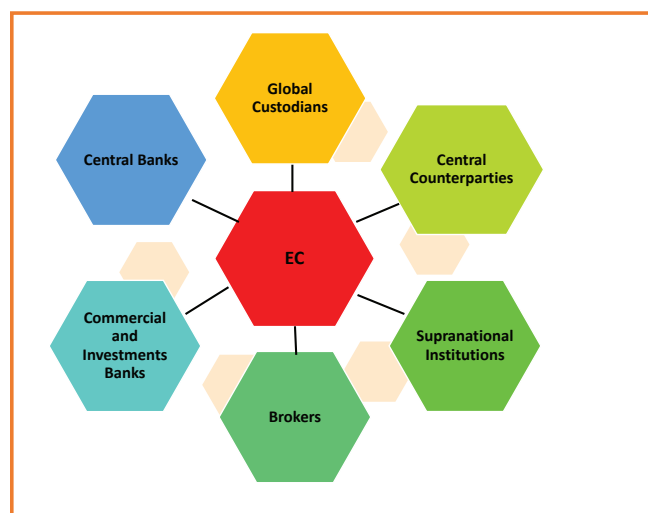
Similar to other financial institutions, Central Bank of Sri Lanka (CBSL) also obtains services from the custodian banks in order to manage financial

services more efficiently. In this regard, CBSL keeps Euroclear as a safekeeping custodian bank for non-government securities.

Euroclear Bank as a custodian

Being an International Central Securities Depository (ICSD), Euroclear Bank (EC) provides a wide range of clearing and settlements facilities for securities for international participants as well as domestic participants through the global network of over 2,000 participants from 80 countries which comprising global custodians, central counterparties, central banks, brokers, commercial and investments banks and supra national institutions as depicted in figure 1 below.

Figure 1: Participants of EC



Rapid developments in the international markets and broadening of the customers' needs prompted the EC to move away from its traditional business model which had a limited scope of services, to restructure its business model to expand the services focused around risk management, data analysis, digitalization of tax related services etc. With the adoption of new technologies that enable the EC to provide its services in line with the international standards and current developments in the international market. These new changes

have led the bank to provides its services at a low cost and greater efficiency.

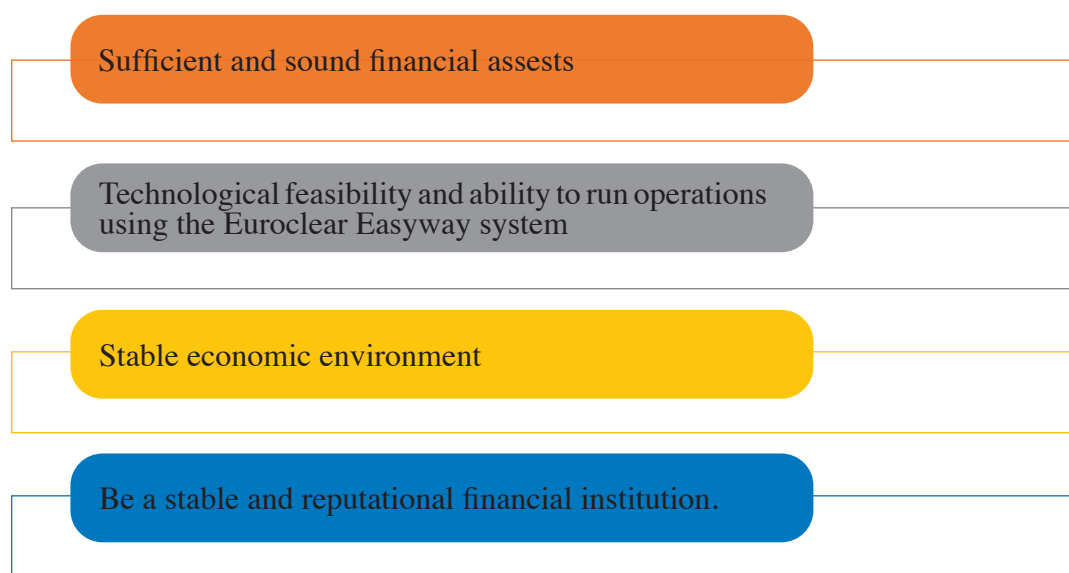
Major requirements to be fulfilled by the Participants of EC

In order to maintain the custodian relationship and obtain the wide range of services provided by the EC, participants are required to fulfill the following major requirements as shown in the figure 2.

way, all non-government fixed income securities are safeguarded by the EC, being a custodian for non-government securities of the CBSL.

CBSL has been maintaining two major accounts with the EC in the from of cash account and pledge account to keep the non-government securities. The pledge account was opened in 1994 to provide the high-quality collateral to the extended credit line facility. In order to obtain services from the EC,

Figure 2: Major requirements for the participants of the EC



Nature of the Custodian relationship with CBSL and Euroclear

Since the CBSL met all the above-mentioned criteria, the first custodian relationship between the EC and the CBSL started in 1992 with the opening of first main account at the EC. As a part of the International Reserves Management, CBSL is holding government fixed income securities, non-government fixed income securities, and trade securities in the international market. Also, all government securities are kept with the custody accounts at major central banks including Federal Reserve Bank (USD), Reserve Bank of Australia (AUD), Bank of England (GBP) etc. In the same

CBSL adopted Euroclear system link with the CBSL which was called EUCLID for the settlements of non-government securities transactions and obtain other services such as reporting, tax processing and corporate actions.

In 2006, CBSL entered Securities Lending and Borrowing Programe (SLB) at EC with an aim of earning additional return through the lending of non-government securities. Furthermore, in 2019, CBSL migrated to the web-based system which is called Easyway system, from the early system of EUCLID to improve the efficiency of settlement activities through the EC.

Role of the of the custodian bank

As a custodian for non-government securities, EC play a crucial role by providing many services to the CBSL. These services are mainly;

1. Settlement Services related to the Non-government Securities
2. Collateral Management
3. Security Lending and Borrowing programme
4. Multi-market withholding Tax services
5. Free inhouse training programmes
6. Enhanced Credit Line Facility

1. Settlement of Non-government securities transactions

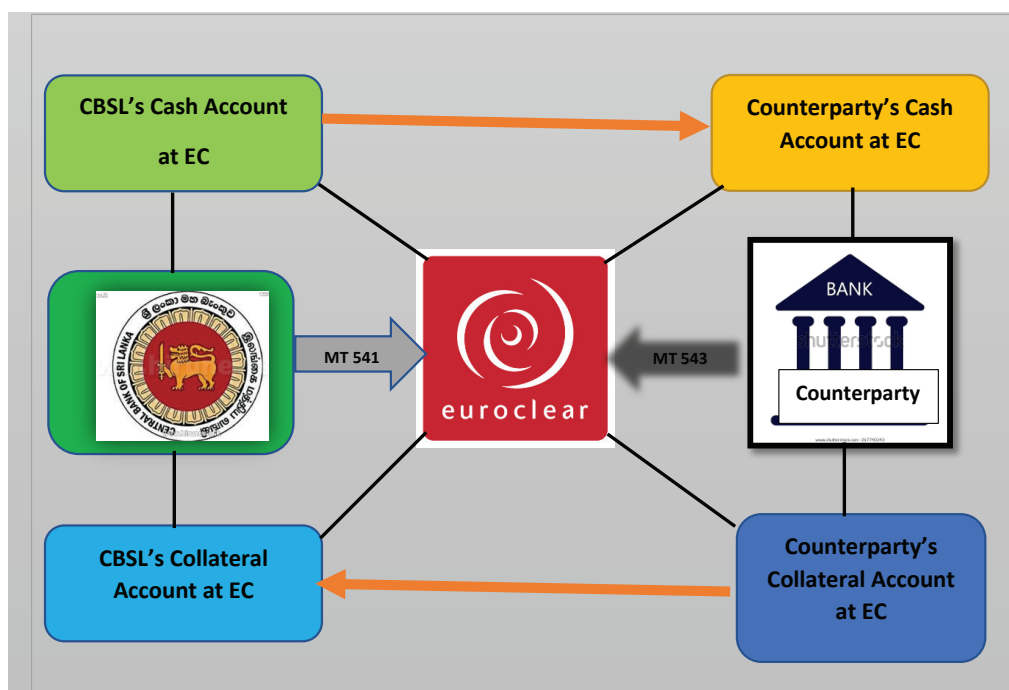
Settlement service is one of the key services provided by the EC for its clients. According to the settlement process of the custodian bank, majority of the transactions are processed on an overnight basis, and there are three types of settlements.

- ◆ Internal Settlements
- ◆ Bridge Settlements
- ◆ External Settlements

Internal Settlements

All the transactions are processed among the EC participants, and the settlement of these transactions are done in accordance with a Delivery Verses Payment (DVP). Majority of CBSL's non-government securities are settled through the internal settlement process.

If CBSL buys securities, as a buyer CBSL is required to send payment instructions through SWIFT messages or Easyway web-based system of the Euroclear. As a practice, CBSL always sends settlement instructions through SWIFT messages. As a buyer, CBSL is required to send SWIFT MT 541 to confirm the security receipts against the payment to EC on the value date basis. At the same time seller of the security (Counterparty) requires sending SWIFT MT 543 to confirm the security



delivery against the payment. After receiving instructions from both parties, transaction will be settled. Accordingly, as depicted in figure 3 below, on the settlement date sales proceed is transferred to seller's account from buyer's cash account at EC and security is delivered to buyer's collateral account from the seller's collateral account at EC.

Bridge Settlements

Bridge settlements take place between two custodian banks with one custodian bank (eg. EC) selling securities while another custodian bank (eg. Clearstream Bank) buying the securities from the seller. The settlement period of these transactions includes both real-time processing and overnight basis.

External Settlements

External settlements occur between a custodian bank's client and another counterparty whose account is held at domestic market settlements system. External Settlements are effected in four different links with the domestic market including direct link, indirect link, direct link managed by a domestic market agent and indirect link managed by domestic market agent.

2. Collateral Management

Another important service provided by the custodian bank is collateral management on behalf of their clients. At present, CBSL is holding collateral in two separate accounts for EC. That is main cash account and the other is pledge account where the CBSL is required to keep collaterals for any event of default whereas the Euroclear has a legal right to take ownership of the assets.

When CBSL trades non-government securities with the counterparties, EC performs an intermediary

function by transferring collateral from seller's collateral account to buyer's collateral account.

3. Security Lending and Borrowing programme

EC's Securities Lending and Borrowing Programme (SLB) is an automated programme which enable participants access to the large pool of high-quality globally lendable assets. This programme has integrated with the overnight settlement process of the EC. It is considered as a risk-free programme because in the event of default by the borrowers of security, EC provides guarantee to the lender for all returns generated through the securities being lent. In addition to that, bank provides a guarantee for coupon income and redemption related to the lent securities.

Through the SLB, CBSL can lend the eligible securities which are accepted by the EC and these securities are aggregated in a lending pool. Then, these lent securities are distributed among the borrowers and loans are allocated to each lender. The important thing is that the EC maintains all information of borrowers and lenders confidentially. Therefore, borrowers do not know about the details of the lenders and as lenders do not know about the details of the borrowers .

This investment strategy is immensely important for CBSL as it generates an additional income and, CBSL is not required to pay any fees for the safekeeping.

4. Multi-market withholding Tax services

Tax rules and regulations with regard to the cross-border investment activities has become a more challenging task for many financial institutions. Due to the complexity of the cross-border tax regulations, and the provisions of Foreign Account

Tax Compliance Act (FATCA), CBSL obtains services from EC to deal with the issues related to the tax exemptions, tax payments, tax relief and tax claims. Accordingly, on behalf of the client, EC facilitates service to obtain the tax exemptions or tax reductions.

5. Free inhouse training programmes

EC provides continuous in-house training programmes every year for the clients with the aim of supporting to enhance the knowledge about the Euroclear system, Settlement Services and other services. The majority of these trainings are targeted for the newcomers to the settlement environment of the Euroclear who have no idea about the settlements activities.

Many officers who are involved in the area of settlement activities, have the opportunity to participate for these training in offered by the EC. This is a core learning programme which assists participants in refine the operational aspects of Euroclear settlements.

6. Enhanced Credit Line Facility

A Credit Line Facility is a credit facility extended by the EC to cover the obligations in relations to the securities settlements, securities borrowings and custodian services. Once the facility is granted, client can be obtained the borrowings on intra-day basis. Generally, EC provides the facility in settle transactions in USD. However, clients are able to settle transactions of other currencies such as AUD, GBP, EUR, JPY etc. The facility can be obtained by pledging the collateral in terms of cash or securities. The required collaterals are determined by the EC based on the internal valuation method. However, to obtain enhanced credit line facility, clients must pledge high-quality collateral.

Conclusion

The role of the custodians has become a crucial service for many financial institutions in terms of financial services offered by them. Many financial institutions are benefiting through the opportunity to access to the cross-border financial markets and investment opportunities, efficient settlement of transactions and fund transfers, including asset servicing with the enhanced technological developments associated with the financial services. Today, many custodians have been providing enormous services through the enhanced operational efficiency by automating the many processes. Therefore, adopting this technological advancement enables banks to move away from the manual processes thereby increasing transparency, generating greater efficiencies and minimizing cost.

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“US DOLLAR”: WHY IT IS THESE PIECES OF PAPER?

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Bank Supervision Department

1. Introduction

The US Dollar or the famously known *Green Back* is the national currency of the United States of America (USA) and, in many respects, is, in the recent history, one of the most important currencies in the world. Many countries use the dollar as the anchor currency in their exchange rate regimes. The exchange rate is the rate at which one currency of a nation is exchanged with another currency. It is a relative value, stated as a comparison of the currencies of two nations. It plays a central role in international trade and finance as both a store of value and a medium of exchange. The dollar holdings represent at least two third (2/3) of the world's foreign currency official reserves and the dollar is widely used for invoicing and settling import and export transactions around the world.

In the final decades of the 20th century, the dollar replaced gold as the world's principal reserve asset and as the preferred medium of international trade, after taking over Sterling Pound and other major currencies in a short period of time. In fact, the dollar's ascendance to the rank of world's most important currency mirrors the decline of Sterling Pound and Britain's historic economic dominance. The dollar standard brought about a revolution in the way the global economy functions by creating an international monetary framework that facilitated the rapid expansion of international trade

and capital flows. In relation to the dollar, this short essay looks at the origin, evolution, various roles played by the dollar and its future as the major international currency.

2. Evolution of Dollar

2.1 Colonial origin

Path for the rise of the dollar reflects the fiscal mismanagement of colonial superpowers Britain and Spain. Despite a new world of tremendous wealth, Spain borrowed far more than the next ship was always carrying. For this reason, Spain became a serial defaulter beginning in 1557 followed by 1570, 1575, 1596, 1607, and 1647. The Spanish economic model was one of conquest rather than constructing a viable economic establishment. Britain on the other hand, extracted precious metals from the American colonies and only paid in copper. These two fiscal mismanagements on the part of Britain and Spain set the tone for the American Revolution due to the shortage of money in the colonies. By the 1700s, the Spanish 8¹ reales were commonly called “dollars” in America and cutting them up became a “piece of eight.”

1 The Spanish 8 reales was the world money standard from the time the Mexico Mint 1753 Peru 8 Reales - Pillar Type started striking coins in the late 1530's until the 1850's. (<http://www.coinsite.com/content/faq/8RealesMilledPillar.asp>)

Thus, the dollar was actually based upon the Spanish silver 8 reales coins commonly called dollars which had become the mainstay of the colonial monetary system. These were first minted by the Spanish in America during 1530. The Act of April 2, 1792, which established the U.S. Mint, authorized the production of the United States Silver Dollar, 8924 fine silver with a weight of 416 grains or 26.9563 g. However, the US “dollar” acquired its name from the German monetary unit “thaler” that had become synonymous with the silver coin of about 28 g.

Since the establishment of the Federal Reserve Bank (Fed) of the USA in 1914, the dollar had seen enhancing its prominence in the international financial transactions. This position was fortified after the World War I, when the USA surpassed Britain as the world’s largest economic power. The Fed used its power to maneuver and nurture a market in the USA similar to that of Britain. This accelerated the migration of international financial activity from London to New York and from Sterling to the Dollar.

2.2 Gold Standard: Bretton Woods

During most of the 19th century, gold was the principal form of money because of its intrinsic value as a commodity and because its weight and malleability made it a convenient store of wealth. Fiat money, i.e., money created by the fiat of a government, such as paper money not fully backed by gold; generally was not trusted by the public because of the regularity with which it had lost much or all of its value during prior centuries. The classical gold standard broke down during the World War I as one European country after another “went off” the gold standard in order to finance the acquisition of war material through the creation of

paper money. The decades between the two world wars were characterized by monetary instability, trade wars, and economic crisis, culminating in the Great Depression. Monetary stability was not restored until the end of World War II with the establishment of the Bretton Woods Monetary System. Under this, the ability of governments to create money was once again constrained by a fixed exchange rate system in which each country pegged the value of its currency to the US dollar at a fixed exchange rate, and the US dollar was pegged to gold at the rate of \$35 per ounce. The USA undertook to convert the dollars held by foreign governments into gold upon demand. Accordingly, the US dollar was chosen as the international reserve currency. This system provided a stable monetary framework that contributed to an era of exceptional economic expansion from the end of World War II up until the late 1960s. By then, however, overseas investments by American corporations, combined with US aid programmes and growing US trade deficits, had resulted in the accumulation of large US dollar holdings by a number of European nations. The system collapsed in 1971 when the USA, led by President Richard Nixon, refused to abide by its commitment to convert those foreign held dollars into gold for fear of depleting the USA’s gold reserves, ending the era of the gold standard.

2.3 Impact of dollar standard in the post Bretton Woods era

The dollar standard functions very differently from the gold standard. An inherent adjustment mechanism existed within the gold standard that made the generation of large, multi-year trade imbalances impossible. For example, in the 19th century, if Germany had a persistent trade deficit with France, some of Germany’s gold would have been shipped to France to pay for that deficit. The

expanded monetary base in France would have allowed an expansion of credit there since the availability of credit was a function of the amount of gold in the country. Credit expansion would have resulted in rapid economic growth and, eventually, inflation. Once Bretton Woods broke down, however, the self-adjustment mechanisms (market clearing assumption of classical economics) inherent in the gold standard ceased to function. International trade no longer had to balance; deficits merely had to be financed. It was the resulting expansion of international trade and cross-border capital flows that ushered in the age of Globalization. When the US government was no longer constrained by any commitment to convert dollars into gold, the USA found itself in the enviable position of being able to buy more from the rest of the world than it sold and to pay for the difference by creating dollars or by selling US dollar-denominated debt instruments such as US treasury bonds to its trading partners. Very quickly, the USA began running very large trade deficits and budget deficits¹. This has been the primary culprit of the financial crisis 2008.

3. Role of US Dollar

Today, the US dollar continues to play a central role in international trade and finance as both, a store of value and a medium of exchange.

- Many countries maintain an exchange rate regime that anchors the value of their home currency to that of the dollar.
- Dollar holdings make up a large share of official foreign exchange reserves; comprising the foreign currency deposits and bonds maintained by central banks and monetary authorities.

¹ The Central government debt to GDP has increased 32% to 76% from 2001 to 2011 and cash deficit of the government to GDP has increased from 2.2% in 2007 to 10% in 2011 (Source: World Bank data).

- In international trade, the dollar is widely used for invoicing and settling import and export transactions around the world.

These three roles of the dollar are presented schematically in Table 1 below based on the simplified identification of the six roles played by an international currency as per Cohen (1971) and Krugman (1984)², where the currency's private behavior is distinguished against its involvement in decisions of central banks, i.e., dollar's official involvement.

Table 1: Roles of dollar as an international currency

	Private behaviour	Official involvement
Medium of exchange	Vehicle	Intervention
Store of value	Banking	Reserve
Unit of account	Invoicing	Peg

3.1 Anchor currency for pegged exchange rates

Many countries peg their currency to the dollar. This means they use a fixed exchange rate to keep the value of their currency at a certain level relative to the dollar. When a country pegs its currency to the dollar, i.e., it intends to control the value of its currency without appreciating or depreciating against the dollar. To do this, they have to use a fixed exchange rate. Usually, a country will peg its currency to a certain dollar range. Most export-oriented countries try to keep the value of their currency lower than the dollar. This gives them a comparative advantage by making their exports to other countries cheaper as invoiced value denominated in US dollar. An example of this is China, which pegs its currency (the yuan/renminbi) to the dollar to maintain competitive pricing,

² p. 263.

although increasingly China has been relaxing its exchange rate controls partly responding to international criticism.

Other countries, like the oil-exporting nations in the Gulf Cooperation Council, must peg their currency to the dollar because their primary export, oil, is sold in dollars. As the dollar has declined, they have become large owners of dollars in their sovereign wealth funds. These petrodollars are often invested in the US to earn a greater return. In fact, Abu Dhabi invested petrodollars in Citigroup to prevent its bankruptcy in 2008. Countries that engage in trade with large economies such as China or oil-exporting countries will also peg their currency to the dollar to remain competitive with their customer(s).

Many large economies, such as Hong Kong, Malaysia and Singapore, peg their currency to the dollar. The Table 2 below shows that majority of the exchange rate regimes¹ use the dollar as the anchor currency.

Table 2: Exchange Rate Anchors (2011 – 2019)²

Year	US dollar	Euro	Composite ³	Another currency ⁴
2011	25.3	14.2	7.4	4.2
2012	22.6	14.2	6.8	4.2
2013	23.0	14.1	6.8	4.2
2014	22.5	13.6	6.3	4.2
2015	22.0	13.1	6.3	4.2
2016	20.3	13.0	4.7	4.7
2017	20.3	13.0	4.7	4.7
2018	19.8	13.0	4.7	4.7
2019	19.8	13.0	4.2	4.7

Source: Annual Report on Exchange Arrangements and Exchange Restrictions 2019, IMF

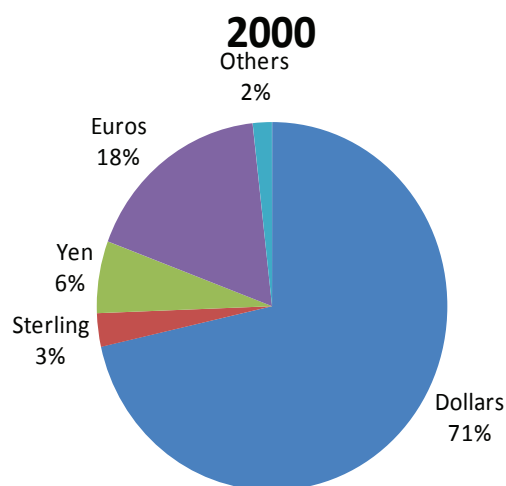
- 1 In the forms of: (a) dollarized or formed currency board, or (b) pegged exchange rate regime against dollar, or (c) managed floats with dollar as reference currency.
- 2 Percent of 189 IMF member countries and three territories: Aruba, Curaçao and Sint Maarten, and Hong Kong SAR.
- 3 A basket of currencies comprising of several currencies. For example, Morocco tracks a euro and US dollar basket.
- 4 Any other currency other than the local currency.

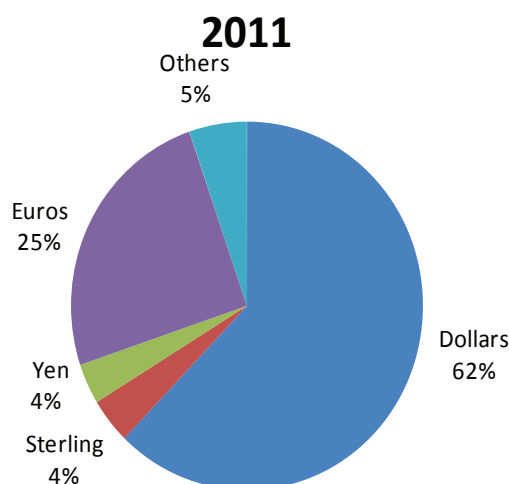
3.2 Dollar in reserve management

Dollar holdings figure prominently in official foreign exchange reserves; the foreign currency deposits and bonds maintained by monetary authorities and governments, most probably due to the fact that the dollar is an intervention currency. The significant role of the dollar in the international markets and the tendency of users to favor the currency of countries that have large economies, with relatively strong output and employment growth as well as low and stable inflation may make binding for users to use the dollar.

According to Currency Composition of Official Foreign Exchange Reserves (COFER) database of the International Monetary Fund (IMF), at the beginning of the 21st century, the dollar commanded 71% share of the total reserves of the world. However, during the last decade, the dollar dominance as the major reserve currency has gradually shrunk to below 60% by end 2021 (Chart 1).

Chart 1 - Dollar dominance as the major reserve currency



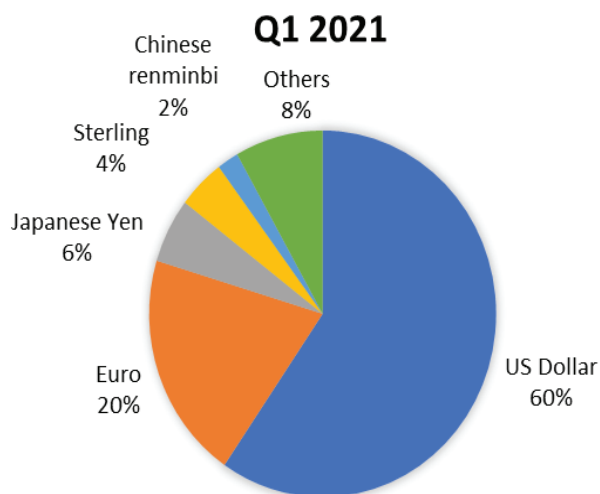


Rise of the Euro Zone and the reserve diversification motive of trade surplus countries have been cited as the major reasons for the shift. One could expect the dollar to regain its share with the decline or potential dissolution of the Euro zone. Moreover, it is noted that Chinese renminbi is emerging as a reserve currency.

3.3 Dollar as international cash and invoicing currency

The dollar is a leading transaction currency in the foreign exchange markets and a key invoicing currency in international trade. According to the Bank for International Settlement's Triennial Central Bank Survey Foreign exchange turnover in April 2019, the dollar continues to dominate international transactions with an 88% share of forex transaction volume in April 2019⁵. Turnover volumes in the foreign exchange markets have more than doubled in the past decade, implying large numbers of transactions measured in reference to, or involving, the dollar. In the forex markets, higher transaction volumes contribute to lower bid-ask spreads and reduced implicit transaction costs for using dollars; advantages that in turn reinforce the use of the dollar in these transactions. To assess the prevalence of the dollar

⁵ pp. 4 – 5.



Source: COFER, IMF

as an invoicing currency, the percentage of each country's exports invoiced in dollars is compared with the percentage of the country's total exports destined for the USA. This reveals the extent to which foreign producers choose the dollar as a 'vehicle currency' for their trade with nations other than the USA. Figure 1 indicates that a larger share of bilateral trade between countries other than the United States is invoiced in US dollars and, most of the developed and emerging markets prefer the US dollar as the invoicing currency, irrespective of their export share to the USA.

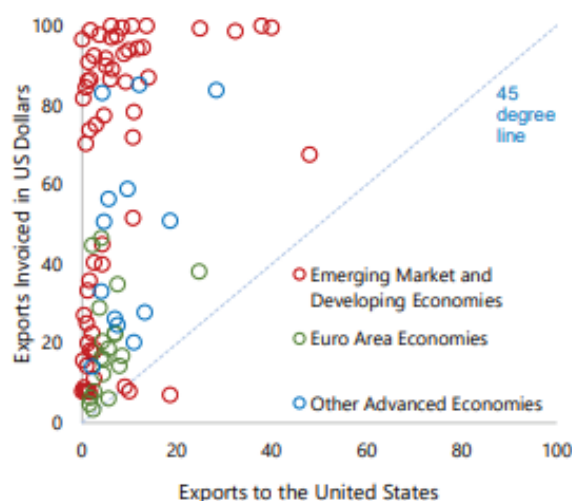
The role of the dollar as the vehicle currency is therefore attributed to the economies of scale in foreign exchange transactions and markets. Thus, the US dollar has become the key mechanism of exchange in the global interbank market. According to Kubarych (1978, p. 18) "... Virtually all interbank transactions, by market participants here and abroad, involve a purchase or sale of dollars for a foreign currency. This is true even if a bank's aim is to buy German marks for sterling".

3.3.1 Petrodollar hypothesis

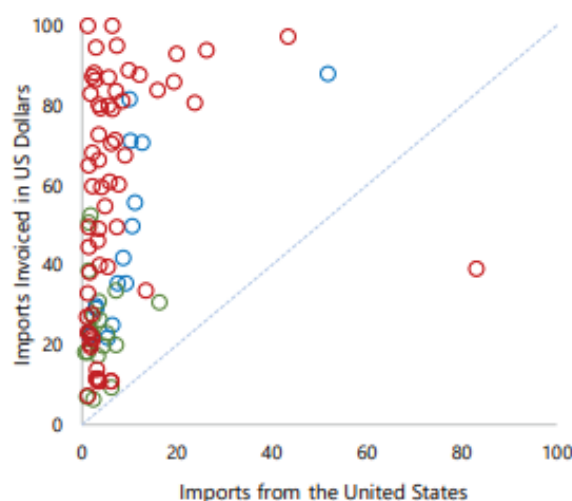
A closely related concept pertaining to commodity pricing in dollar is 'petrodollar'. Petrodollars are

Figure 1: Trade with the United States and US dollar invoicing

1. Exports to the US and Invoiced in US Dollars (percent, 2009-19 average)



2. Imports from the US and Invoiced in US Dollars (percent, 2009-19 average)



Source: IMF Staff Discussion Note, Dominant Currencies and External Adjustment, p. 9.

the US dollars earned by a country through the sale of its petroleum to another country. The notion of petrodollar has given rise to petrodollar warfare hypothesis; according to which most countries that rely on oil imports, are forced to maintain large stockpiles of dollars to finance oil imports. This creates a consistent demand for US dollars, which exert upward pressure on the US dollar's value, regardless of the economic conditions in the USA; enabling the US government to gain revenues through seignorage and by issuing bonds at lower interest rates than they would otherwise be able to. As a result, the US government can run higher budget deficits at a more sustainable level than can most other countries. A stronger US dollar also means that goods imported into the USA are relatively cheap.

4. Future of the dollar

"... The future of the United States monetary system is largely a political question; the future

international role of the dollar is largely an economic one."

Krugman (1984), p. 261

Recently, the US dollar's pre-eminence as an international currency has been questioned. Data in Chart 1 on reserve holdings indicates that there is a gradual moving away from traditional dollar holding has started. Carney (2019) argues that when the global economy is expanding, the high degree of synchronisation associated with US dollar is less important.

The emergence of the other currencies such as euro, renminbi and yen, changes in the dollar's value, and the global financial market crisis in 2008-09 have posed significant challenges to the currency's long-standing position in world markets. The status of other currencies may remain moribund similar to US dollar, if gold and cryptocurrencies emerge in the next decades, and they become more widely usable and trusted in trade and financial markets. Aftermaths of the global financial crisis proposed

that for certain transactions the dollar be replaced with a type of “world” currency based on the IMF’s special drawing rights¹.

However, in the wake of the Euro Zone crisis (Brexit, the threat of Italexit, lack of central fiscal authority, etc.) across critical areas of international trade and finance, the dollar has retained its standing in key roles. While changes in the global status of the dollar are possible, factors such as inertia in currency use, the large size and relative stability of the US economy, and the dollar pricing of oil and other commodities, will help perpetuate the dollar’s role as the dominant medium for international transactions.

5. Conclusion

The role of the dollar in the global economy has important implications to central banks and investors. The US dollar as an international currency remained stable in many respects amidst the changes in the global economy. Whilst the dollar surpassed the Sterling Pound as the leading reserve currency in 1970’s, evidence suggests that there is a gradual shift in the status of dollar amidst the growth of Asian economies that is important to recognise the potential and consequences of the dollar’s changing role in international trade and financial markets for policy formulation as well as for business.

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¹ Goldberg, L. S. (2010), p. 1.

Coverage in Deposit Insurance

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1) Why the coverage in deposit insurance is so important?

Coverage in deposit insurance can be defined as the extent to which the insured depositors of a financial institution are reimbursed through a deposit insurance system (DIS), in the event of a failure of a financial institution.

Designing a coverage level for a DIS involves catering to two main objectives. One is providing protection for depositors with incentives for depositors to exercise market discipline to limit bank risk taking and moral hazard and the other objective is to promote financial system stability. Usually, the coverage is set at a maximum value, per depositor per institution basis.

The DIS of Sri Lanka is named as Sri Lanka Deposit Insurance and Liquidity Support Scheme (SLDILSS). SLDILSS was established in 2010 with a maximum coverage limit of Rs.200,000/= or its equivalent in the case of foreign currency deposits, per depositor per institution basis. Coverage was increased to Rs.300,000/= in 2014 with 50 percent hike and doubled again in 2018 to Rs.600,000/= considering certain macro-economic factors such as GDP per capita income. Thereafter, the coverage was increased to Rs.1,100,000/= with effect from 01.04.2021, to enhance the benefit to depositors in the event of a failure of a financial

institution having considered the human aspects of the affected depositors.

The scope of deposit insurance includes the type of deposits eligible for the deposit insurance coverage. In Sri Lanka, the deposit types eligible for insurance coverage are demand, time, savings deposits and the value of the shares of the shareholders who were initially deposit holders and whose deposits were converted into equity under the directions of the Monetary Board in 2010 and 2011 as part of business restructuring plans implemented prior to 01.01.2012. However, the following deposits are considered as excluded deposit and do not eligible to obtain coverage from SLDILSS. i.e., deposit liabilities of Member Institutions of SLDILSS, deposit liabilities of Director, key management personnel and other related party excluding shareholders, deposit liabilities by former Directors or Key Management Personnel of the respective Member Institution where Monetary Board has issued Directions to remove such Director/s or Key Management Personnel, as the case may be, from the Board of Directors and/or Key Management Personnel from the position or positions held by such personnel in the respective Member Institution, Where the Director of Bank Supervision/Director of the Department of Supervision of Non-bank Financial Institutions, have determined that such Director or Directors and/ or any one or more Key

Management Personnel is and/or are not fit and proper to hold office in the Member Institution, in as much as they being subject to an investigation or inquiry for or concerning an act involving fraud, cheating, misappropriation, deceit, dishonesty or any other similar criminal activity, conducted by the police, any regulatory or supervisory authority, professional association, commission of inquiry, tribunal or other body established by law, in Sri Lanka or in any other jurisdiction OR have been found guilty for any act, where the Monetary Board determines *ex mero motu*, upon being satisfied upon material available, that any Director or Directors, or any Key Management Personnel of any Member Institution, is or are disentitled to receive any benefit under the Scheme and deposit falling within the meaning of abandoned property in terms of the Banking Act and dormant deposits in terms of Finance Business Act, funds of which have been transferred to the Central Bank of Sri Lanka.

2) Principles of setting a coverage level

International Association of Deposit Insurers (IADI) and Basel Committee on Banking Supervision (BCBS) have issued Core Principles for Effective Deposit Insurance Systems which acts as benchmarks for any effective DIS. Principle No.8 of the revised Core principles (issued in November 2014) explains on coverage. In terms of the Principle 8, scope and the coverage of the DIS should be clearly defined by the policy makers of DIS. Further, the coverage level should be able to cover the large majority of depositors but substantial amount of deposit are kept exposed to the market disciplines. Further, the coverage level should be in line with the public policy objectives and related design features of DIS. In terms of the revised Core Principle No.8, it has given number

of essential criteria on deposit insurance coverage as follows;

1. Insured deposits should be clearly and publicly defined in the law or regulation itself. Further, ineligible/excluded deposits should be clearly defined and scope and the coverage should be defined.
2. The level and scope of coverage are limited and are designed to be credible, so as to minimize the risk of bank runs and should not undermine market discipline. Further, when setting the coverage level large majority of depositors across deposit taking financial institutions are fully protected while leaving substantial portion of the value of deposits unprotected. Further, in the event substantial portion of the value of the deposits is protected, it will lead to moral hazard and moral hazard is mitigated by other measures such as strong regulation, supervision and design features of deposit insurance.
3. Level and scope of deposit insurance coverage should equally apply to all member institutions.
4. DIS should not incorporate co-insurance. Co-insurance is a “loss-sharing” arrangement whereby depositors are covered for a pre-specified portion of Deposits that is less than 100% of their Insured Deposits and hence depositors are exposed to a small loss.
5. Level and scope of coverage should be periodically reviewed to ensure it meets the policy objectives of DIS.
6. In the event the members of same DIS merged or amalgamated, as defined in the law, for a stated period, depositors of each amalgamated institutions enjoy separate coverage level, and point of expiry of such separate coverage level should be clearly notified.

7. Residency state or nationality of the depositor has no effect on coverage.
8. In the situation of multiple deposit insurance in the same jurisdictions, differences in coverage across banks/financial institutions do not adversely affect overall DIS effectiveness and system stability.
9. Foreign currency deposits are insured if they are widely used in the jurisdiction.
10. In case where there is blanket Guarantee in place, there is a credible plan to transition from blanket guarantee to limited coverage DIS. This includes,
 - (a) an assessment of the economic environment as it affects the financial system
 - (b) whether transition is consistent with the state of the financial industry, prudential regulation and supervision, the legal and judicial framework, and accounting and disclosure regimes
 - (c) policymakers have effective communication strategies to mitigate adverse public reaction to the transition, and etc.

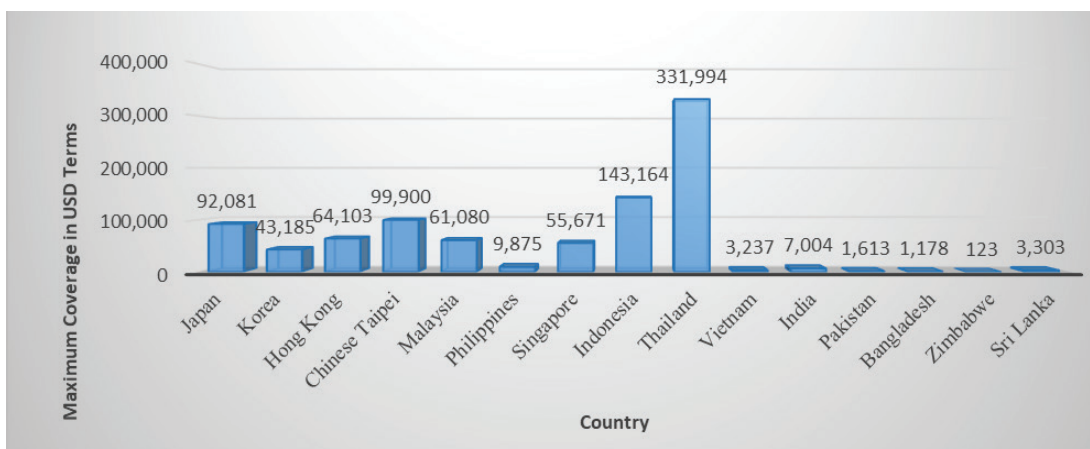
3) Deposit Insurance Coverage in Different Jurisdictions

As stated in the core principles, scope and the coverage of deposit insurance should be clearly defined and publicized by DIS in the law or regulation itself. Deposit insurance scope requires determining the types of insured deposits. Insured deposits are the deposits which are eligible for insurance coverage. Insured deposits products to be arrived by excluding the ineligible/excluded deposit products out of total deposit products of the deposit taking financial institution /Member Institutions(MI).

The coverage explains the maximum amount that will be reimbursed by DIS in case of failure of deposit taking financial institution/MI out of the insured deposits. Usually, the coverage is defined as a maximum value per depositor per institution basis.

Based on the results of Annual Survey 2020 of IADI, insured deposit products of DISs of Asian countries can be summarized as per the Table I below;

Chart 1: Maximum coverage per depositor per institution basis in USD term



Source: Author compiled using data - Annual Survey 2020 of International Association for Deposit Insurers (IADI) (as of year-end 2019).

Table 1: Types of deposit products eligible for coverage by the deposit insurance authority

Country															
Type of Account	Japan	Korea	Hong Kong	Chinese Taipei	Malaysia	Philippines	Singapore	Indonesia	Thailand	Vietnam	India	Pakistan	Bangladesh	Zimbabwe	Sri Lanka
Savings Account	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Checking Account	*	*	*	*	*	*	*	*	*		*	*	*	*	*
Annuity Contracts		*													
Certificates of Deposit				*	*	*		*	*	*	*	*	*		*
Guaranteed Investment Certificate															
Travelers Checks		*			*										
Money Orders					*										
Certified Drafts of Checks		*			*										
Foreign Currency Deposits		*	*	*	*	*		*			*	*	*		*
Inter-bank Deposits						*		*							
Government Deposits	*				*	*		*	*						
Other	1	2	3	4	5		6	7	8	9		10			11

Notes;

* - Eligible deposit product

¹ - Other eligible deposit products include: Money trusts under the guarantee of principal Bank debentures (limited to custody products) Deposits related to the investment of fixed contribution pension reserves.

² - Deposits in defined contribution (DC) retirement pension accounts or individual retirement accounts (IRAS) that are invested in Korean Deposit Insurance Corporation (KDIC)-insured products, financial products eligible for deposit insurance that are incorporated into individual savings accounts (ISAs), principal-guaranteed money trusts, etc.

³ - Time deposits with maturity not exceeding 5 years and secured deposits.

⁴ - Employee Pension Account.

⁵ - Eligible Islamic deposit accounts are protected separately from conventional deposit accounts. Also, the coverage for travellers checks, money orders and certified drafts of checks are if drawn or made against an insurable deposit account.

⁶ - Time deposits and prescribed deposits e.g. Islamic deposits

⁷ - Sharia Finance Deposits on banks based on sharia principles, include: a. demand deposit based on Wadiah Principle; b. demand deposit based on the Mudharabah Principle; c. savings based on the Wadiah Principle; d.savings based on the Mudharabah muthlaqah Principles or Mudharabah muqayyadah Principles whose risks are borne by the Bank; e. deposits based on the Mudharabah Muthlaqah Principle or Mudharabah Muqayyadah Principle whose risks are borne by the Bank;

and/or f. Deposits based on other Sharia Principles stipulated by Indonesian Deposit Insurance Corporation (IDIC) after being considered by the Financial Services Authority (FSA).

⁸- Term Deposits

⁹ - Eligible deposit products covered in Vietnam are comprised of Vietnamese dong-nominated deposits of individuals at insured institutions in forms of term deposits, demand deposits, savings accounts, certificates of deposit, bills, notes and other types of deposit as stipulated by law.

¹⁰ - Term Deposits, Call Deposit Receipts, Security Deposit Receipts

¹¹ - Time Deposits and value of the shares of shareholders who were initially deposit holders, whose deposits were converted into equity under the directions of the Monetary Board in 2010 and 2011 as part of the Business restructuring plans implemented prior to 01.01.2012.

Source: Annual Survey 2020 of International Association for Deposit Insurers (IADI) (as of year-end 2019).

The above table indicates that Savings deposits, Checking/Demand deposits, Certificate of Deposits and Time deposits are considered as eligible deposits within the DISs operated in most Asian countries.

The above graph depicts the coverage provided by DISs of Asian countries as at end of 2019. However, it should be noted that coverage is determined in local currencies and the above graph indicates each country's coverage set by the law in local currencies, converted into US Dollar (USD) terms using the exchange rate prevailed as at end of 2019 to have a comparable base. Therefore, in the case of Sri Lanka, the coverage is Rs.600,000/= and USD equivalent amount as at end of 2019 was USD 3,303. However, with effect from 01.04.2021 the coverage was increased to Rs.1,100,000/= and hence USD equivalent amount as at 01.12.2021 was USD 5,444.

4) Adequacy of coverage level

Coverage should be determined by striking a balance between the main objectives of protecting depositors and contributing to financial system stability and market discipline. The coverage should be limited, credible and easily determined.

Number of approaches have been used in the early 2000s to determine the adequacy of coverage level. Among them, examining statistical distribution of coverage across a number of countries and two times of per capita GDP were applied by some DISs. 80:20 rule was introduced later as a more robust policy approach in deciding adequacy of coverage level. Under this approach 80 percent of the total number of depositors should be fully covered but the value of such covered deposit is 20 to 30 percent of total deposit value. The main emphasis for such approach was to balance depositor protection and market discipline.

A very different view on deposit insurance coverage was emerged from the global financial crisis. Accordingly, full depositor protection for vast majority of depositors' i.e. 90 to 95 percent or more of all depositors, is to be considered when deciding the adequacy of coverage level. Further, 20 to 30 percent of the value of deposits were to be covered based on the viewpoint emerged subsequent to the global financial crisis.

Determining appropriate coverage involves placing limits on coverage level and determining type of instruments eligible for coverage. When applying coverage level certain policy rules are set

by deposit insurers. One of such commonly used rule is applying deposit insurance coverage on per-depositor, per-institution basis.

In the case where necessary information is accessible, an iterative process can be used to determine coverage level. Accordingly, deposit insurance authority should first determine the coverage level that fully protect vast majority, i.e., 90 to 95 percent of depositors. The appropriate coverage level, which fully cover vast majority, i.e. 90-95 percent of depositors of all the member institutions of DIS, can be determined by analyzing the depositor details of the all the insured entities using simple methods or statistical modeling.

Once the appropriate coverage level is determined, deposit insurance authorities should then assess the adequacy of deposit insurance funding level. In order to assess the funding levels, it is required to estimate the value of deposits at risk and the likelihood of failure of insured entities. Appropriate size of the fund that should be built up during required time horizon is called target fund size and strategies to achieve the target fund size lead to certain policy decisions such as changing premium systems and alternative funding sources etc. Further, determining the target fund size is a policy decision and judgment issue. If it is determined that adequate funding level is not met or excessive for the country, scope and coverage will need to be reconsidered.

Therefore, coverage level would need to be reviewed and adjusted when necessary, because of macro-economic factors such as, inflation and GDP real growth and other factors such as development of new financial instruments and the way in which these factors influence the composition and size of deposits.

5) Moral Hazard

Moral Hazard can be considered as a drawback of deposit insurance concept. When most of the depositors are fully covered, the insured entities might be willing to take on excessive risk, which is called moral hazard. Such concerns need to be factored in, to have optimal trade-off between protecting depositors and limiting moral hazard. This may lead covering all the small-scale depositors but leaving sufficient value of deposits at risk. Further, the emphasis on protecting large majority of depositors does not surpass the importance of mitigating moral hazard.

Kausairi, Sanusi and Ismail (2015) have studied the impact of deposit insurance towards the stability of banking industry in ASEAN countries, using panel data of 127 commercial banks in the countries of Indonesia, Malaysia, Singapore, Philippine, Thailand and Vietnam. The findings revealed that the deposit insurance policy will increase the chances of bank managers taking higher risk by compensating to the additional cost of the implementation of deposit insurance in ASEAN countries and increase their return rather than the deposit insurance policy that increases the confidence level of depositors and finally will increase the total deposit. Therefore, they concluded, the deposit insurance policy will increase the possibility of moral hazard in banking industry, indirectly.

Some moral hazard may be mitigated by creating appropriate incentives for large scale depositors to monitor risk. The principle source of market discipline for mitigating moral hazard lies with small number of large scale depositors, uninsured creditors, managers, board members and shareholders. To have effective market discipline

and to mitigate moral hazard, uninsured creditors' and shareholders should suffer losses and managers and board members should lose their positions and subject to monetary penalties.

6) Whether the current coverage is adequate for Sri Lanka

In the case of Sri Lanka, it is evident that the coverage has been remarkably increased at present than the establishment in 2010 and the current coverage is sufficient to cover the majority of small depositors. However, statistical analysis must be carried out to determine whether 90 to 95 percent of depositors are fully covered while 20 to 30 percent of the value of total deposits are covered. Further, it is required to revisit the scope covered by SLDILSS to determine whether deposit products widely used in the financial system of the country are considered as products eligible for deposit insurance. Further, upon deciding on target fund size, appropriate policy decision should be taken to revise the coverage level if necessary or to implement other policy decisions as required such as changing the premium charging mechanisms, etc.

During a crisis period, low coverage level may result in high deposit withdrawals and lead to a depositor run. Because, if portion of the deposit is subject to loss, most of the depositors will run.

Therefore, usually policy makers increase coverage limit or introduce blanket guarantee. However, once it is recovered from the crisis, reassessment of adequacy of coverage is required. Further, as stated above higher coverage leads to moral hazard. Therefore, deciding on optimal coverage level should balance all these issues.

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