African J. of Economic and Sustainable Development

ISSN online: 2046-4789 - ISSN print: 2046-4770
https://www.inderscience.com/ajesd

The significance of refinanced letter of credit in cross-border financing in Nigeria

Mercy Femi-Olagundoye, Rufus Ishola Akintoye

DOI: 10.1504/AJESD.2023.10055254

Article History:

Received:	02 August 2022
Last revised:	06 January 2023
Accepted:	18 January 2023
Published online:	15 January 2024

The significance of refinanced letter of credit in cross-border financing in Nigeria

Mercy Femi-Olagundoye*

Babcock University,
121103, Ilisan, Remo, Ogun State, Nigeria
Email: omoaluhe@gmail.com
*Corresponding author

Rufus Ishola Akintoye

Babcock Business School,
Babcock University,
121103, Ilisan, Remo, Ogun State, Nigeria
Email: irakintoye@yahoo.com
Email: ir.akintoye@gmail.com
Email: akintoyer@babcock.edu.ng

Abstract: The volume of import, letter of credit (LC), foreign portfolio investment (FPI), and foreign direct investment (FDI) were analysed to ascertain the impact of each of the three variables on import trade. This is to appraise the significance of cross-border financing on trade in Nigeria. The study used descriptive statistics, a pair-sampled t-test and ordinary least square regression. The study showed that FDI does not have a significant impact, but FPI has a negative significant impact on import trade while trade lines using LC have impact on import trade in Nigeria. The trends revealed peaks and troughs in the volume of LC, FPI, and FDI and it was also established that over 60% of LC paid by first-tier commercial banks and merchant banks in Nigeria were settled using credit lines. The credit line from the result facilitates trade and ensures trade flow.

Keywords: credit line; letter of credit; import trade; foreign direct investment; FDI; foreign portfolio investment; FPI; foreign exchange; Nigeria.

Reference to this paper should be made as follows: Femi-Olagundoye, M. and Akintoye, R.I. (2024) ‘The significance of refinanced letter of credit in cross-border financing in Nigeria’, *African J. Economic and Sustainable Development*, Vol. 9, No. 3, pp.201–218.

Biographical notes: Mercy Femi-Olagundoye is a PhD student in the Department of Finance at Babcock University. She is a graduate of Economics with a BSc. She is a first class honours from the Obafemi Awolowo University, Nigeria. She has completed her MSc in Finance with merit from the University of Leicester, UK and MBA in Business Administration from University of South Wales, UK. She is a certified documentary credit specialist with over two decades of experience in trade finance and international trade operations. She also has an ACI Certificate in Treasury Operations and she is a well-versed in trade finance, uniform documentary credit, international standard banking practice, uniform custom practice, international standby practice, uniform rules for bank-to-bank reimbursement and international commercial terms. She is currently the Group Head in Domestic and Foreign Operations at the Wema Bank Plc., Nigeria.

Rufus Ishola Akintoye is a Professor of Accounting and Strategic Financial Management, Fellow of: CITN, ICAN, NAS, NIM, life member of NES and certified forensic examiner. He holds a PhD in Financial Management and Accounting. He has over 100 publications, and he has supervised and graduated 47 PhD, 36 MSc and 32 MBA candidates to date and currently supervising and co-supervising about five PhD and eight MSc.

1 Introduction

Nigeria as a country is not able to produce all its needs by itself hence the dependence on others to meet its needs. The country is often described as a mono-export product (Dode, 2012) and an import-dependent country (Alex and Ekiye, 2020), given these striking descriptions, it is a known fact that Nigeria will often deal with foreign counterparties in its supply chain. Comparative advantage is an essential factor for economic globalisation (McMillan and Rodrik, 2011), and has made many nations open their borders to trade with other economies. Supply chain globalisation is a cogent component of economic globalisation, it is a global connection resulting from the cross-border procurement of goods, services and capital (Hertzel et al., 2022). Supply chain globalisation enables firms to purchase goods and services that may not be available locally (Jain et al., 2013) and firms can leverage the accessibility to get cheaper products and save more (Li, 2013; Shao et al., 2020; Lai et al., 2021). In addition, with supply chain globalisation, firms in a particular location can have access to cutting-edge technologies and solutions (Gray and Darren, 2004; Berry and Aseem, 2015). This accessibility has strengthened trade without boundaries across the world. The success of the trade largely depends on the availability of finance, where finance is not available, trade can be stifled. There are many channels of financing trade, however, a critical one of the channels is cross-border financing, in which a foreign lender avails loans to corporates or banks for onward lending to their needy customers. Trade finance is the branch of finance that deals with the settlement of cross-border trade, it is the financing of both import and export transactions for a short period or medium-term (Malaket, 2020). It is the service offered by a bank to aid cross-border transactions (Liu et al., 2019). This shows the importance of trade finance in facilitating trade across the globe, it is the lubricant for international trade which leads to many opportunities that aid growth and development (AfDB, 2017; WTO, 2016). One channel through which trade finance is utilised is via letter of credit (LC), this is a payment instrument issued by the importer’s bank that payment will be made to the beneficiary upon full compliance with the LC terms (Crozet et al., 2021), many exporting companies, do utilise this mode of payment due to the undertaking by the banks. According to Monetary Fund-Bankers Association on Finance and Trade/International Financial Services Authority, LC is the main instrument for trade finance compared with other payment instruments like open account, bills for collection and cash-in-advance (Malaket, 2020). After the global recession of 2008, there was a rise in the cost of trade finance and a drop in the volume of trade finance (Dorsey, 2009), however, the outlook improved thereafter, nevertheless, there are some constraints in accessing trade finance by African firms (Mabuza et al., 2022), some of the limitations are low US dollar liquidity, high regulatory compliance requirements, sluggish economic growth, and poor assessment of the borrower. In solving this problem, some development financial institutions, do provide trade finance to support many developing economies, especially African countries.

Nigeria is involved in supply chain globalisation as a result of its demand for foreign goods and production capacity, however, getting actively involved in the global chain may be constrained due to the paucity of foreign exchange to settle the obligations. In order to overcome these constraints, firms do explore alternative channels to settle their counterparties. In Nigeria, majority of cross-border financing is in form of loans from overseas lenders (Ukpanah et al., 2017) and these can come in form of external loans and suppliers' credit (CBN, 2018). Trade finance is one channel Nigerian banks use to leverage cross-border financing in supporting trade in the region. Trade finance is an important instrument in global trade, especially in developing economies. Many firms particularly small and medium enterprises (SMEs) do experience a financing gap, consequently, external finance is required otherwise their expansion may be limited. According to World Trade Organization, over 80% of world trade relies on trade finance as it mitigates the challenges of cashless transactions and acts as a trade lubricant. Banks are involved in financing trade in many parts of the world and the use of letters of credit is an attractive mechanism. In Nigeria, trade finance is well embraced among the importers as a tool for facilitating payment of letters of credit since the CBN (2016) makes available foreign exchange for the settlement of such letters of credit upon maturity subject to certain conditions as stipulated by the apex bank. Given this accessibility to foreign exchange, Nigerian banks do source credit lines from their correspondent banks to refinance their trade transactions especially those with letters of credit as a mode of payment.

International trade financing can also be supported by foreign direct investment (FDI) and at times individuals or corporate do invest offshore in form of portfolio investment. Major lenders in this instance are international financial institutions, export-credit agencies, development finance banks and private equity investors (Ukpanah et al., 2017) although a balanced equity and debt financing will aid the performance of the firms (Akintoye, 2008). Earlier, FDI was seen to reduce export, but recent research showed that the two are complementary (Akadiri et al., 2020). There are different methods to access a market, one of the methods is the export of goods and FDI, the investors test the foreign market by exports, thereafter, invest in local firms to build local capacity and be able to understand the local market dynamic (Voica et al., 2021). This arrangement further helps local subsidiaries to have easy access to markets of the developed economies (Noja et al., 2021).

2 Literature review

2.1 Conceptual review

There are four methods of structuring financing terms for international trade, each, however, has a different level of risk either to the importer or to the exporter, and at times to both the importer and the exporter. The methods are open account, cash-in-advance, documentary collection and documentary credit.

- *Open account:* This is a mode of payment whereby goods are shipped to the buyer before payment is due, typically 30, 60, 90, or 120 days after delivery (Crozet et al., 2021). There is a shift from the traditional trade financing mechanism like LC to open account by corporate on the premises of complexity, long processing time, and high cost of LC (Malaket, 2020).
- *Cash-in-advance:* This is a method of payment in which the buyer pays ahead of receipt of goods (Reddy and Reddy, 2021). There is no payment risk for the exporter under this method, the importer bears all the risks. Compared with other modes of payment, cash-in-advance offers the most security to the exporter (Crozet et al., 2021).
- *Documentary collection:* This is a trade finance instrument whereby at least two banks are involved in handling the documents presented by the exporter to the importer for payment. In this model, the exporter ships the goods and sends a draft drawn on the importer plus other shipping documents to his bank for onward delivery to the importer's bank for presentation to the importer. The presenting bank releases the documents to the importer upon acceptance of the draft (Niepmann and Schmidt-Eisenlohr, 2017).
- *Documentary credit:* This is another method of structuring financing in international trade, it is often considered the safest method. A documentary LC is defined as a written undertaking given by an issuing bank (applicant's bank) to the beneficiary (seller) on behalf of the applicant to pay at sight or at a determined future date up to the stated amount upon presentation of complying documents as per the LC terms (Meynell, 2019; Dorsey, 2009). A LC is one of the most secure payment instruments in international trade, and its usage enhances trust among the parties involved (Clark, 2014). It eliminates the underlying risk associated with trade for both the buyers and the seller (Crozet et al., 2021). Many importers and exporters prefer this instrument, especially where there is an absence of trust due to the age of the relationship or previous bad experiences. Where trading partners are not related, most often LC is the preferred option, compared with other payment instruments.
- *Confirmed LC:* This LC has a definite undertaking of the confirming bank plus that of the issuing bank to honour or pay on a set of documents presented by the beneficiary or his bank provided all terms and conditions are met (uniform customs and practice 600) as quoted by Meynell (2019). For a confirmed LC, the confirming bank becomes the primary paying bank, and it is reimbursed by the issuing bank. The confirmation of LC involves a confirming bank giving a separate payment undertaking to the exporter, once the exporter presents complying documents, he gets paid (Malaket, 2021). This form of payment instrument protects the exporter from all forms of risk associated with the importer and the importer's country.
- *Unconfirmed LC:* This LC has only the confirmation of the issuing bank, without any other confirmation from any bank. The undertaking to pay is only from the issuing bank (Agriexchange.apeda, 2022), the exporter is exposed to associated risks with the importer and the importer's country like exchange rate instability, technical incompetency, political instability and other risks.

Many beneficiaries prefer confirmed LC due to the risk associated with unconfirmed LC. Confirmation, by correspondent banks, frees exporters from any form of risk once he complies with terms and condition, however, over a decade there has been a decline in trade finance confirmation extended by top African banks' correspondent banks like Citibank, Commerzbank, Standard Chartered Bank and Deutsche Bank (Mabuza et al., 2022). This decline was due to increased compliance costs to the confirming bank, the low-risk appetite of the confirming banks, and the high cost incurred in fulfilling regulatory customer due diligence checks (World Bank Group, 2019) while on the side of the issuing banks, the regulatory restriction is a major contributory factor (African Development Bank Group, 2020).

The COVID-19 pandemic contributed to a decline in trade finance in Africa, the global financing conditions were more stringent, and this led to a major outflow of over US $5 billion from Africa in 2020 quarter 1 (African Export-Import Bank, 2020). This led to a shrink in the US liquidity which hampered African trade finance activities (Bempong and Drammeh, 2020). A consortium of major development financial institutions showed that some correspondent banks rejected letters of credit from the region, for instance, there was an increase of rejected letters of credit by the confirming bank as recorded by 38% of local banks and 30% of foreign-owned banks located in the region. Likewise in Nigeria, some of the letters of credit issued with the expectation of confirmation from the correspondent banks were declined. This aggravated the challenges of trade in Nigeria because the scarcity of foreign exchange forestalled the banks from opening cash-backed letters of credit for their clients.

2.2 Types of letters of credit

2.2.1 Red-clause/green-clause credits

A type of LC where an advanced payment is paid to the beneficiary upon presentation of advance payment guarantee. For green-clause LC, there must be evidence that goods have been ware-housed in addition to the advanced payment guarantee (IFS School of Finance, 2013).

2.2.2 Back-to-back credits

An LC is first issued in favour of a middleman by a bank at the request of an applicant. The middleman uses the LC to request a bank to issue a separate LC on its behalf in favour of the supplier. This type of LC is often used by middlemen that stand between the supplier and the ultimate buyer.

2.2.3 Revolving credits

A revolving documentary credit the issuing bank irrevocably undertakes to reinstate the credit after each drawing or time period either cumulative or non-cumulative, automatically and without any further amendment (IFS School of Finance, 2013).

2.2.4 Transferable credits

A transferable credit is a credit that is transferable by the beneficiary (first beneficiary) to his sub-supplier(s) (second beneficiary/ies). Amount, unit price, date of shipment, date of presentation, and validity date of transferred credit can be different (IFS School of Finance, 2013).

2.2.5 Standby credits

A standby credit is a documentary credit or similar arrangement however named or described which represents an obligation to the beneficiary on the part of the issuing bank to repay money borrowed by the applicant, or advanced to or for the account of the applicant.

LC can be available by sight, by deferred payment, or by acceptance.

2.2.6 Sight LC

These are LCs that payment is due upon receipt of documents as per the LC terms and conditions.

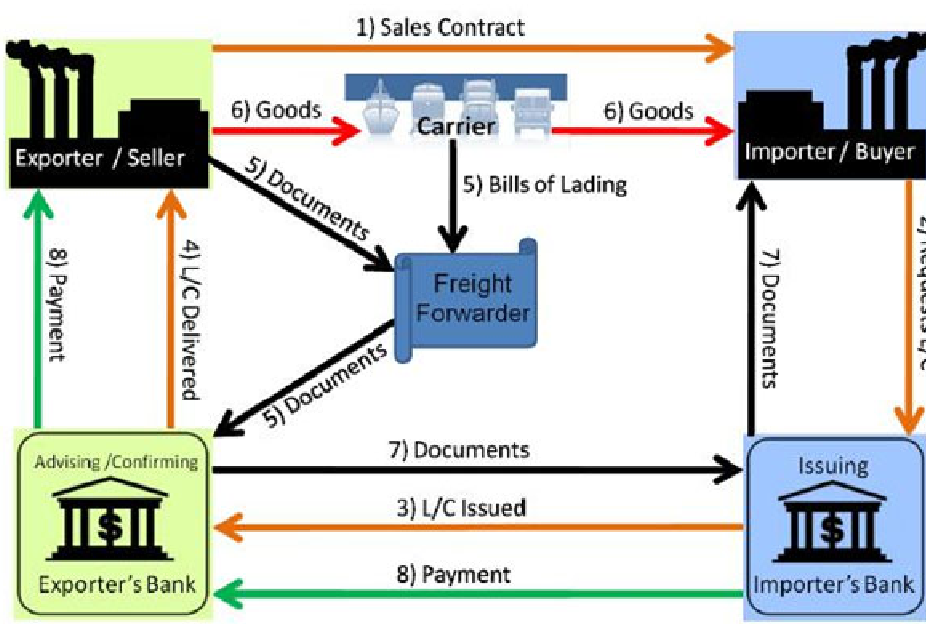
2.2.7 Deferred payment LC

Payment is made at a future date upon presentation of complying documents. This type of LC avails the applicant's beneficiary's credit.

2.2.8 LC by acceptance

This type of LC entails the presentation of a draft or bill of exchange that will be accepted by the drawee and payment made on the due date.

Figure 1 LC flowchart



Source: Agriexchange.apeda (2022)

Figure 1 depicts the flow of a LC; the applicant (importer) instructs his bank, the issuing bank, to issue an LC on his behalf to the beneficiary, the exporter, and pay upon presentation of complying documents. The confirming bank pays the beneficiary or agrees to accept the draft drawn on it or authorises the advising bank or the nominated bank to pay (Agriexchange.apeda, 2022).

2.3 Empirical review

In the study of Crozet et al. (2021) on international trade and LC: a double-edged sword in time of crises, using US exports during the time of COVID-19 pandemic and global financial crisis. The study revealed that product reliance on LC directly impacts resilience on trade flow during period of uncertainty, while in times of financial crisis, the supply of LC is adversely affected leading to a drop in volume of LC. Ahn and Sarmiento (2019) conducted a study on estimating the direct impact of bank liquidity shocks on the real economy: evidence from LC import transactions in Colombia. The study showed that banks that relied on wholesale funding or borrowings from foreign banks reduced their LC issuance more in both intensive and extensive margin. The study further showed a reduction in imports by importer-exporter pair that relied more on LC. While studying reduced cross-border lending and financing costs of SMEs by Bremus and Neugebauer (2018), the scholars using aggregate information on total and cross-border credit with firm-level survey data for a period of 2010 to 2014, found that reduction in cross-border lending led to a deterioration in borrowing conditions of small firms. In a joint study by Baskaya et al. (2017), on capital flows and the international credit channel by examining the role of international credit channel in Turkey from 2005 to 2013, found that an increase in capital inflow leads to an increase in credit supply by more capitalised banks with non-core liabilities. Niepmann and Schmidt-Eisenlohr (2017) studied international trade, risk, and the role of banks, using unique data with global coverage, and found that LC is used more by exporter exporting to countries with intermediate contract enforcement and risky countries. In the study of Engemann et al. (2011) on 'Trade credits and bank credits in international trade: substitutes or complements?', using panel data on large German manufacturing firms it was found trade credits and bank credits are substitutes. In the study of Antràs and Foley (2015), 'Poultry in motion: a study of international trade finance practices', the scholars analysed the financing terms that support international trade practices. Using transactional-level data from a US-based firm exporting frozen and refrigerated food products, particularly poultry, found that cash-in-advance and open account are more in use than LC and documentary collection but cash-in-advance and LC are prevalent where the importer is in a country where contractual enforcement is not firm. Other studies are 'Legal relationship between the supervisor of a letter of credit and the beneficiary of a letter of credit' (Ölmez, 2022), 'Block-chain implementation of letter of credit based trading system in supply chain domain' (Rajashekaragouda and Dakshayini, 2020), and 'Testing the trade credit and trade link: evidence from data on export credit insurance' (Auboin and Engemann, 2014).

2.4 Theoretical consideration

2.4.1 Heckscher-Ohlin theory

This is a comparative advantage theory that states that a country with plentiful capital, but relatively scarce labour will export capital-intensive products and import labour-intensive products while a country with plentiful labour, but relatively scarce capital will export labour intensive products and import capital-intensive products. The theory emphasised that differences in prices are the basis for trade not cost as propounded by the classical theory.

Given the several literatures on cross-border financing of trade transactions, there are not yet enough studies on the significance of LC on cross-border financing hence this study. The aim of this research is to assess the refinanced LC in cross-border financing in Nigeria. Refinanced letters of credit are those letters of credit to which the correspondent banks added confirmation and are being financed through a trade finance facility extended to the issuing bank. The trade finance provided by the offshore correspondent banks serves as bridge finance for the importer due to the large paucity of foreign exchange in the country and the need for continuous trade flows. How well this financing option supports trade is expected to be revealed after this study. The study intends to test if there is a significant impact of refinanced letters of credit by leveraging trade finance provided by offshore correspondent banks in terms of credit-line cross-border financing in Nigeria.

3 Methodology

To test the hypothesis, the study used an ex-post facto research design based on data from the CBN annual report, the Nigerian Bureau of Statistics, Nigerian Commercial Banks, and Nigerian Merchant Banks. The study covered a period of six years, from 2016 to 2021. The period was selected based on CBN's introduction of a new exchange rate system in June 2016. This was one of the ways the apex bank explored to deal with the scarcity of foreign exchange in the foreign exchange market. The new system was to encourage investors into the country and allows exporters to sell their export proceeds at a competitive price. The new system aimed at making the exchange rate realistic as it was meant to be determined by market forces, unlike the then fixed exchange rate system. The variables adopted for the study are volume of import, FDI, foreign portfolio investment (FPI), and LC, proxied for trade finance.

3.1 Data presentation and analysis

The empirical presentation adopted for the study is in line with the model of Liu et al. (2019) for a determinant of currency choice and slightly modified for the empirical specification of Crozet et al. (2021) testing whether exports of products typically traded using LCs were more resilient than the export of other products during COVID-19 pandemic.

3.1.1 *Empirical specification*

$$y = f(x)$$

$$imp = f(FDI, FPI, LC)$$

$$imp = \beta_0 + \beta_1 FDI + \beta_2 FPI + \beta_3 LC + \mu_i$$

$$imp = 420.15 - 16.09FDO - 1.94FPI + 26.80LC + \mu_i$$

where imp is the volume of import, FDI denotes foreign direct investment, FPI represents foreign portfolio investment and LC denotes trade finance, and β_0 is the regression intercept which is constant.

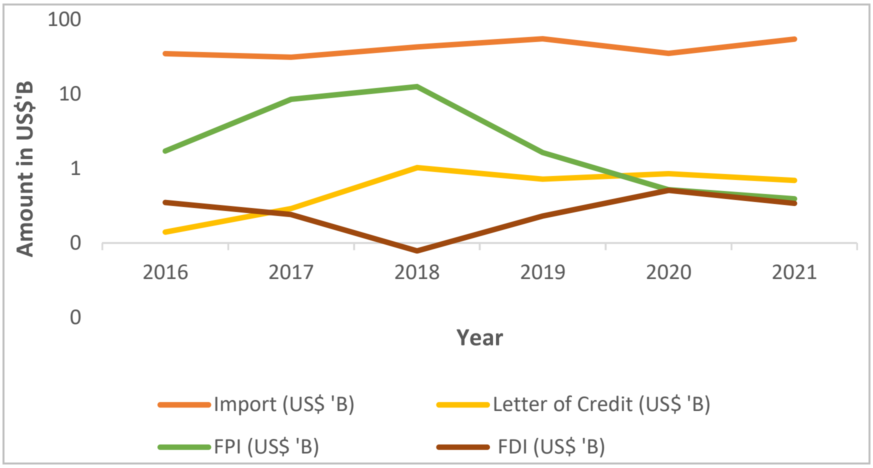
μ is the error term of the model. The volume of import (imp) is taken as the total import on a yearly basis which can be paid either by LC or documentary collection, and even cash-in-advance. The variables 'FPI' and 'FDI' are adopted as part of the explanatory variable because they are both sources of foreign exchange in the country. As per the CBN guidelines, such a fund is expected to be sold in the Nigerian investor and exporter (I&E) window for Nigerian local currency, naira and a certificate of capital importation issued to the beneficiary of the fund. The buyer of the fund, which is the authorised dealer banks, is expected to sell the fund to their customers for eligible trade. Both 'FPI' and 'FDI' are added to the pull of funds available for sale in the foreign exchange market, they help boost the liquidity in the market to finance trade. Where there is scarcity, the importer explores the option of trade finance to sustain their trade and ensure no gap. So, where cash is not available or not adequate for settlement of trade, banks leverage their relationship with their correspondent banks to use their trade credit line to finance such trade, this credit line is the trade finance that is utilised via LC.

4 Findings

From Figure 2, the volume of import trade fell in 2016, from US $34.78 billion to US $31.27 billion in 2017, however, the volume was at its peak of US $55.26 billion in 2019 but dropped to US $35.40 billion in 2020. FPI rose in 2017 from US $8.51 billion to US $12.55 billion in 2018, however, there was a huge slide in 2021, from US $12.55 billion in 2018 to US $386 million in 2021. The FDI also fluctuated, it rose to US $514 million in 2020 but dropped to US $339 million in 2021. The LC issued rose from US $137 million in 2016 to US $1.03 billion in 2018 though dropped to US $715 million the subsequent year. Table 1 showed US $31.27 billion, US $137 million, US $386 million, and US $78 million as the minimum value of imports, LC, FPI, and FDI respectively during the period while the highest volume of imports was US $55.46 billion, US $1.03 billion was highest recorded by LC and the highest volume for FPI and FDI were US $12.55 billion and US $514 million, respectively.

The linear regression revealed that R^2 is 98%. The coefficients for the variables are 26.80, –1.94, and –16.09 for LC, FPI and FDI, respectively, and LC and FPI are statically significant at p = (0.01), (0.02), however, FDI did not show any significant relationship at p = (0.30).

Figure 2 Volume of Imp, LC, FPI and FDI (see online version for colours)



Source: Author's computation

Table 1 Descriptive statistics

Imp {US$'B}		*LC {US$'B}*		*FPI {US$'B}*		*FDI {US$'B}*	
Mean	42.41	Mean	0.62	Mean	4.22	Mean	0.29
Median	39.20	Median	0.70	Median	1.67	Median	0.29
Range	23.99	Range	0.90	Range	12.16	Range	0.44
Minimum	31.27	Minimum	0.14*	Minimum	0.39*	Minimum	0.08*
Maximum	55.26	Maximum	1.03	Maximum	12.55	Maximum	0.51

Note: *Approximated.

Source: Author's computation

From the t-test: paired with two samples for the means the result showed that they are all significant at p = (0.00015), (0.00088), and (0.00016) for LC, FPI and FDI, respectively.

Table 2 t-test: paired two sample for means

	Imp	*LC*	*Imp*	*FPI*	*Imp*	*FDI*
Mean	42.41	0.62	42.41	4.22	42.41	0.29
Observations	6	6	6	6	6	6
Pearson correlation	0.68		–0.55		0.34	
df	5		5		5	
t stat	10.29		7.07		10.19	
P(T ≤ t) two-tail	0.00015		0.00088		0.00016	
t critical two-tail	2.57058		2.57058		2.57058	

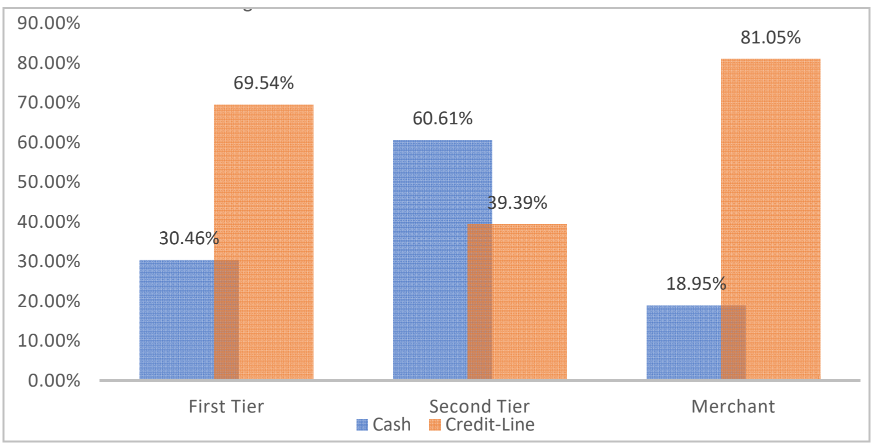
Source: Author's computation

Table 3 Regression statistics

Multiple R	0.99148466			
R square	0.98304183			
Adjusted R square	0.95760457			
	Coefficients	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	420.145006	0.01418789	202.4971814	637.7928311
Letter of credit (US$B)	26.8007053	0.012627621	13.71831971	39.88309083
FPI (US$B)	–1.9363735	0.028756358	–3.380546866	–0.492200135
FDI (US$B)	–16.087182	0.301341149	–66.20803035	34.03366616

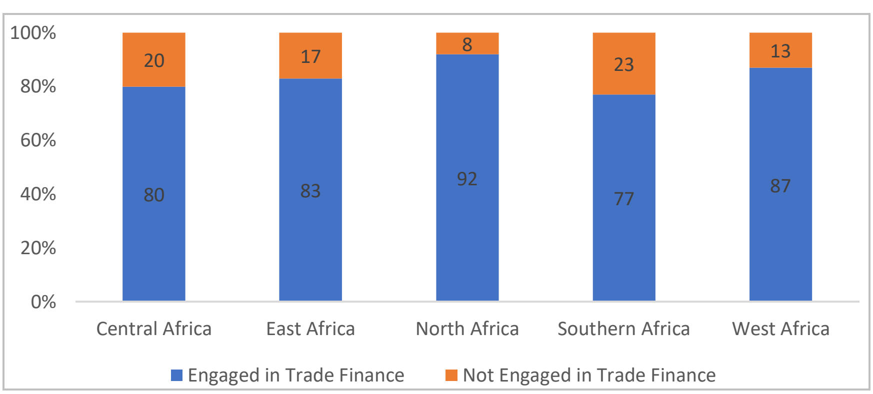
Source: Author's computation

Figure 3 Sources of finance for LC (see online version for colours)



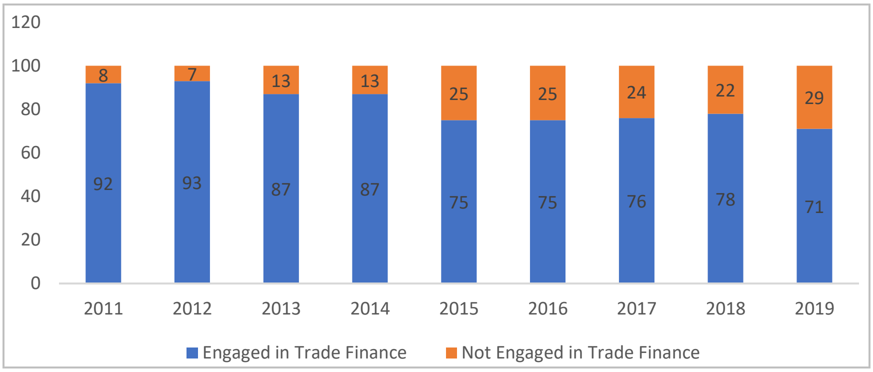
Source: Deposit money banks and merchant banks

Figure 4 Share of banks in Africa engaged in trade finance by sub-region (see online version for colours)



Source: AfDB (2020) report

Figure 5 Share of banks in Africa engaged in trade finance by year (see online version for colours)



Source: AfDB (2020) report

Table 4 Average annual Brent crude oil price – 2016–2021 (US$)

Year	*Average price*
2016	43.67
2017	41.96
2018	64.30
2019	71.00
2020	34.00
2021	54.25

Source: https://www.statista.com/statistics

From Figure 3, for the first-tier commercial banks, 69.54% of LC opened during the review period were refinanced by banks' correspondent banks. On the other hand, out of the total LC opened by the second-tier banks from 2016 to 2021, 39.39% were refinanced by their correspondent banks. In the case of the merchant bank, 81.05% were refinanced LCs for the period. The ratio of cash-backed to credit-line LC for the first-tier bank is 3:7, while for second-tier banks is 6:4 and for merchant banks is 2:8. This aligned with AfDB (2020) report as shown in Figure 4 and Figure 5.

5 Implication

Based on the result, the volume of imports fluctuated all through the period but always rose with marginal drops in 2017 and 2020. Nigeria being an import-dependent country consistently imports more to meet its demand and support local production. This is like Bangladesh's experience, in Bangladesh, import is substantial although recently more emphasis is on the increase of export to ease the balance of payment deficit.

The result shows trade credit has a significant impact on the volume of imports in Nigeria, as more trade credit is made available, the volume of imports rises. A unit change in trade credit leads to a 26.80 rise in import volume, this shows that this financing model is extended by offshore correspondent banks by either adding confirmation to the LC or refinancing the LCs aid trade flows in Nigeria. This position aligned with the facts from World Trade Organization, African Development Bank and African Export-Import Bank. Availability and accessibility of these credit lines are trade enablers in Nigeria and even in other parts of Africa. AfDB has some trade finance programmes to support trade in Africa, like its Trade Finance Line of Credit (TFLOC), offered to African financial institutions with more attention to SME and trade finance, and the US $450 million Trade Finance Programme for the African Export-Import Bank in 2017. Furthermore, the bank has approved an aggregate sum of US $1.4 billion in trade finance lines to support trade in the region. In like manner, the Afreximbank Trade Facilitation Program (AFTRAF) by African Export-Import Bank availed more than 120 lines totalling US $2.2 billion across 32 countries (AfDB, 2020).

Many imports would not have been possible given the unavailability of foreign exchange and the payment mode acceptable to the supplier except for the confirmation line extended to the local banks for utilisation by their importing clients. The top confirming banks for Africa are Citibank, Commerzbank, Standard Chartered Bank and Deutsche Bank (AfDB, 2020), these confirming banks support trade facilitation in Nigeria. Many suppliers will not want to do documentary collection or open account due to the high uncertainty associated with payment nevertheless, the paucity of foreign exchange will hinder the importer to accept cash in advance despite the associated risk of performance. Given these constraints, refinanced, or confirmed LCs are a window to explore to satisfy both the importer and the exporter. From Figure 3, the result shows that the confirming banks support trade in Nigeria through the instrument of LC refinancing. Within the period reviewed, the volume of LCs refinanced by correspondent banks was 69.54% and 81.05% for first-tier banks and merchant banks respectively while 39.39% of LC issued were refinanced by offshore correspondent banks. In line with AfDB's (2020) position, the capital base of the first-tier bank could explain why they attracted more refinancing facilities from the correspondent banks than the second-tier banks. Likewise, the merchant banks, the size of transactions could also explain the volume of refinancing they obtained from the correspondent banks. The approved US $300 million trade finance loan to First Bank of Nigeria and US $50 million to FSDH Merchant Bank Nigeria both in 2016, clearly supported this position.

The CBN introduced managed floating exchange rate system in June 2016 due to various challenges associated with the existing system. Prior to the introduction of the new model, the demand for foreign exchange was very high however, the supply was short due to low accretion to a reserve which was majorly due to a reduction in oil proceeds. For the success of the new model, the CBN before its implementation cleared the backlog of foreign exchange demand of US $4.02 billion (CBN, 2016). The rise in the value of letters of credit from 2016 to 2018 was due to confidence in the foreign exchange market as CBN began to intervene in the market fortnightly. However, as the demand for foreign exchange consistently grew as a result of incessant increase in the import trade, the available foreign exchange could not meet the demand, hence the fair of default and delayed payment returned, and the overseas banks began to exercise some caution hence the drop in the volume of LC paid from 2019 to 2021.

The settlement of LC depends majorly on the availability of foreign exchange, especially from CBN. The availability of foreign exchange depends on crude oil proceeds, which account for close to 90% of the foreign exchange earnings of Nigeria (Ebimobowei, 2022). However, the volume of proceeds is driven by the oil price, the higher the price the better the foreign exchange earnings, as quantity is restricted by the quota system. Considering the average oil prices in Table 4, the average crude oil (Brent) price fluctuated throughout the period, the highest being in 2019 and the lowest being in 2021. While the availability of foreign exchange is critical to LC payment, the type of good being financed by LC is an important factor in estimating foreign exchange needs, oil imports and other bulk cargoes are heavy consumers of foreign exchange. Nigeria imports its refined oil, consequently, the value of import trade will be high when oil import is high. In 2019, the value of LC dropped from US \$1.034 trillion in 2018 to US \$715 billion, even though the average crude oil price was higher than that of 2018, yet other oil imports dropped by 34.3% although aggregate imports increased by 28% in the same year. This shows that other modes of payment like documentary collection and cash-in-advance could have been used. Furthermore, the drop in other oil imports could have affected the volume of LC paid in that year. Given the constraint of getting foreign exchange to settle offshore beneficiaries, the easier alternative to keep trade running during this period was the use of offshore credit lines. These credit lines were mostly available to refinance LC. The beneficiary of refinanced LCs is comfortable shipping the consignment given the fact that the payment will be made by the confirming bank. The volume of trade lines in 2017 was a clear indication of the reaction of the market to the new system introduced in June 2016. The beneficiary and the offshore banks were willing to avail loans to local borrowers through their banks with the belief that the exchange rate was determined by forces of demand and supply. Contrarily, the supply was in trickles from the apex bank, hence the return of low confidence in the market and the drop in the available credit lines. The inability of the local banks to settle their due obligation was very worrisome and this increased the country’s risk. The supply of trade finance was affected as the correspondent banks were uncomfortable with the high default rate from Nigerian banks due to the paucity of foreign exchange.

The FPI from the result also has a significant inverse impact on trade import, a unit increase in FPI leads to 1.94 reductions in trade volume. This shows that funds brought into the country for investment in money market instruments do not increase import trade rather it reduces it. When the stock market is vibrant and receives a lot of foreign investors’ participation, importers can diversify investment by investing part of the fund for trade import in money market instruments. This is often believed that these instruments are very liquid and are easily convertible to currency within a short period, unlike import trade which takes a long time and is subject to exchange rate volatility that can affect the profitability and even capital invested. The drop in FPI from 2019 to 2021, has been majorly associated with the instability of the naira, the exchange rate has not been stable for a while. Considering the paucity of foreign exchange in the market, many investors are not sure of easy repatriation of their investment upon maturity, hence the reduction in the FPI coming into the country. The reduction in FPI contributes to the illiquid foreign exchange market and it also affects foreign participation in Nigeria’s stock market. The result of the study further shows that changes in FDI do not significantly affect import trade although when tested without considering other variables, the result shows a significant impact. FDI is for developmental purposes and many times the fund stays in the economy for a longer period, unlike FPI which is classified as hot monies. From the result, a unit change in FDI leads to a drop of 16.89 in import trade. The fluctuations in the volume of FDI for the period can be associated with the volatility in the exchange rate in the country and the scarcity of foreign exchange. The COVID-19 pandemic also affected the global FDI and as projected by UNCTAD (United Nations Conference, 2021), a slide of 5%–10% was expected in global FDI in 2021, however, the slide in the volume of FDI in Nigeria in 2021 was over 34%. The impact of the pandemic in 2020 was mixed, while some economies like Nigeria, Sweden, and Spain recorded a rise in their FDI, other economies, recorded a dip in FDI in 2020; North America experienced a drop of 46%, US recorded a decline of 49% and 37% in Latin Americans and the Caribbeans (United Nations Conference, 2021). Both FPI and FDI may not positively impact import trade but the two are sources of foreign exchange in the country.

6 Conclusions

LC refinancing is one of the cross-border financing services and strategies to support trade in various regions. Nigeria, like other emerging economies, does access cross-border financings in form of supplier credit and trade finance. The use of foreign credit lines is due majorly among other reasons to the paucity of foreign exchange and late delivery of funds purchased from CBN. Many suppliers are unwilling to trade with Nigerians due to fair non-payment or delayed payment hence the need for alternative financing. Furthermore, the financing gaps often experienced by SMEs also constrained their expansion and indirectly affect the volume of trade in the country. In resolving this, the local banks do engage their correspondent banks for credit lines to facilitate trade. These credit lines are made available via refinancing LCs by which the offshore banks add confirmation to the LCs and pay the beneficiary upon presentation of shipping document in compliant with the terms and conditions of the LCs, thereafter, book a loan for the local bank to be repaid at a future date. While refinanced LCs do not free the importer from the obligation, yet trade is not stalled due to the paucity of foreign exchange.

While the offshore banks provide credit lines, the offshore investors also inflow funds into the country as funds for portfolio investment and longer tenor funds as external loans or supplier's credit. These funds are sold in the I&E window as an alternative source of foreign exchange to CBN. Most of these funds when sold are used to settle trade obligations. Irrespective of the purpose of the fund, funds are converted to local currency and foreign exchange sold for payment of an eligible transaction. The credit line is a business enabler in Nigeria, it ensures the free flow of trade and bridges the financing gap often experienced by the SMEs.

6.1 Recommendations

Cross-border financing enhances trade and investments. It reduces financing constraints and enhances firms' output. Given these benefits, it is imperative to leverage this for trade and investment expansion in Nigeria. There is a need for expansion in the foreign exchange market, CBN being the main supplier of foreign exchange is not sustainable, and other channels like export proceeds should be explored. Cross-border financing will be readily available if foreign lenders have the assurance of timely repayment of the loan. Furthermore, the availability of foreign exchange will reduce the trade cycles and reduce the financing cost of trade. Many times, when there is a paucity of foreign exchange, the loans are extended at higher refinancing rates, thereby reducing, or wiping off the gains of the facilities. The timely settlement will also attract investors, however, where funds are tied down for a prolonged period, investors would be discouraged. Many SMEs need trade finance, if this is made available, the majority of them will utilise such financing channels and expand to aid the growth and development of the economy. The policymakers can achieve this by partnering with the DFIs and the correspondent banks while they ensure the availability of foreign exchange to settle the obligation upon maturity.

References

African Development Bank Group (AfDB) (2017) *Trade Finance in Africa Overcoming Challenges*, AfDB, Côte d'Ivoire.

African Development Bank Group (AfDB) (2020) *Trade Finance in Africa: Trends Over the Past Decade and Opportunities Ahead*, AfDB, Abidjan.

African Export-Import Bank (2020) *Survey of Impact of COVID-19 on African Trade Finance*, African Export-Import Bank, Cairo.

Agriexchange.apeda (2022) *Issuing of Letter of Credit* [online] https://agriexchange.apeda.gov.in (accessed 11 May 2022).

Ahn, J. and Sarmiento, M. (2019) 'Estimating the direct impact of bank liquidity shocks on the real economy: evidence from letter-of-credit import transactions in Colombia', *Review of International Economics*, Vol. 27, No. 5, pp.1510–1536.

Akadiri, A., Gungor, H., Akadiri, S. and Bamidele-Sadiq, M. (2020) 'Is the causal relation between foreign direct investment, trade, and economic growth complement or substitute? The case of African countries', *Journal of Public Affairs*, https://doi.org/10.1002/pa.2023.

Akintoye, I.R. (2008) 'Effect of capital structure on firms' performance: the Nigeria experience', *European Journal of Economics, Finance and Administrative Sciences*, Vol. 10, pp.233–243.

Alex, K. and Ekiye, E. (2020) 'Determinants of Imports and the Nigerian economy: 1981–2018', *Confluence Journal of Economics and Allied Sciences*, Vol. 3, No. 2, pp.187–206.

Antràs, P. and Foley, C. (2015) 'Poultry in motion: a study of international trade finance practices', *Journal of Political Economy*, Vol. 123, No. 4, pp.809–852.

Auboin, M. and Engemann, M. (2014) 'Testing the trade credit and trade link: evidence from data on export credit insurance', *Review of World Economics*, Vol. 150, No. 4, pp.715–743.

Baskaya, Y., Giovanni, J., Kalemli-Özcan, S., Peydró, J. and Ulu, M. (2017) 'Capital flows and the international credit channel', *Journal of International Economics*, Vol. 108, No. S, pp.15–22.

Bempong, E. and Drammeh, M.L. (2020) 'COVID-19 pandemic – potential risks for trade and trade finance in Africa', in *SSRN Electronic Journal*, Vol. 11, No. 6, pp.1–7, https://doi.org/10.2139/ssrn.3647320.

Berry, H. and Aseem, K. (2015) 'Global sourcing and foreign knowledge seeking', *Management Science*, Vol. 61, No. 5, pp.1052–1071.

Bremus, F. and Neugebauer, K. (2018) 'Reduced cross-border lending and financing costs of SMEs', *Journal of International Money and Finance*, Vol. 80, No. C, pp.35–58, Elsevier.

CBN (2016) *Revised Guidelines for the Operation of the Nigerian Inter-bank Foreign Exchange Market*, CBN, Abuja.

CBN (2018) *Foreign Exchange Manual*, CBN, Abuja.

Clark, J. (2014) *Trade Finance: Developments*, Committee on the Global Financial System, Switzerland.

Crozet, M., Demir, B. and Javorcik, B. (2021) 'International trade and letters of credit: a double-edged sword in times of crises', *IMF Economic Review* [online] https://link.springer.com/article (accessed 29 May 2022).

Dode, R. (2012) 'Nigeria, mono-product economy & the global economic recession: problems & prospects', *Global Journal of Human Social Science Sociology, Economics & Political Science*, Vol. 12, No. 11, pp.41–48.

Dorsey, T. (2009) *Trade Finance Stumbles*, 11 March, IMF, Washington, DC.

Ebimobowei, A. (2022) 'Oil revenue and economic growth of Nigeria: 1990–2019', *African Journal of Economics and Sustainable Development*, Vol. 5, No. 1, pp.17–46.

Engemann, M., Eck, K. and Schnitzer, M. (2011) *Trade Credits and Bank Credits in International Trade: Substitutes or Complements?*, Working Papers [online] https://ideas.repec.org/p/bav/wpaper/108_engemanneckschnitzer.html.

Gray, P. and Darren, B. (2004) 'Knowledge sourcing effectiveness', *Management Science*, Vol. 50, No. 6, pp.821–834.

Hertzel, M., Peng, J., Wu, J. and Zhang, Y. (2022) *Global Supply Chains and Cross-Border Financing*, pp.1–26, SSRN.

IFS School of Finance (2013) *Guide to Documentary Credits*, Polestar Wheatons Ltd., Exeter.

Jain, K., Karan, G. and Serguei, N. (2013) 'Managing global sourcing: inventory performance', *Management Science*, Vol. 60, No. 5, pp.1202–1222.

Lai, G., Yixuan, L. and Wenqiang, X. (2021) 'International taxation and production outsourcing', *Production and Operations Management*, Vol. 30, No. 2, pp.402–418.

Li, C. (2013) 'Sourcing for supplier effort and competition: design of the supply base and pricing mechanism', *Management Science*, Vol. 59, No. 6, pp.1389–1406.

Liu, T., Lu, D. and Woo, W. (2019) 'Trade, finance and international currency', *Journal of Economic Behavior & Organization*, Vol. 164, pp.374–413.

Mabuza, P., Bempong, E.N. and Amoussou, O.C. (2022) *Confirming Banks and Trade Finance in Africa*, AfDB, Abidjan.

Malaket, A. (2020) 'How trade finance works', in Malaket, A. (Ed.): *The Handbook of Global Trade Policy*, pp.468–493, John Wiley & Sons Ltd., New Jersey.

McMillan, M. and Rodrik, D. (2011) *Globalization, Structural Change and Productivity Growth*, WTO, Switzerland.

Meynell, D. (2019) *Additional Material Relating to the Paper – The Use of Drafts Under Documentary Credits*, International Chamber of Commerce, Paris.

Niepmann, F. and Schmidt-Eisenlohr, T. (2017) 'International trade, risk and the role of banks', *Journal of International Economics*, Vol. 107, No. C, pp.111–126.

Noja, G., Cristea, M. and Yüksel, A. (2021) 'Brexit spillovers through international trade and foreign investment: empirical evidence from EU-27 and the UK', *Panoeconomicus*, Vol. 68, No. 5, pp.653–680.

Ölmez, F. (2022) 'Legal relationship between the supervisor of a letter of credit and the beneficiary of a letter of credit', *The Journal of International Scientific Researches*, Vol. 7, No. 1, pp.9–18.

Rajashekaragouda, G. and Dakshayini, M. (2020) 'Block-chain implementation of letter of credit based trading system in supply chain domain', *2020 International Conference on Mainstreaming Block Chain Implementation (ICOMBI)*, pp.1–5.

Reddy, U. and Reddy, C.R. (2021) 'Global trade and finance: some issues global trade and finance: some issues', *International Journal of Research in Business*, Vol. 9, No. 2, pp.29–34.

Shao, L., Xiaole, W. and Fuqiang, Z. (2020) 'Sourcing competition under cost uncertainty and information asymmetry', *Production and Operations Management*, Vol. 29, No. 2, pp.447–461.

Ukpanah, A., Okafor, O., Udoma, U. and Osagie, B. (2017) *Cross-Border Financing Report 2017: Nigeria*, 21 September [online] https://www.iflr.com/article/2a63z6r85wa15txsn8tts/cross-borderfinancing- report-2017-nigeria.

United Nations Conference (2021) *Global Foreign Direct Investment Fell by 42% in 2020, Outlook Remains Weak*, UNCTAD, Geneva (accessed 31 May 2022).

Voica, M., Panait, M., Hysa, E., Cela, A. and Manta, O. (2021) 'Foreign direct investment and trade – between complementarity and substitution. Evidence from European Union countries', *Journal of Risk and Financial Management*, Vol. 14, No. 11, pp.1–16.

World Bank Group (2019) 'Trade finance and the compliance challenge' [online] https://documents1.worldbank.org/curated/en/736471567750290277/pdf/Trade-Finance-and-the- Compliance-Challenge-A-Showcase-of-International-Cooperation.pdf.

World Trade Organization (WTO) (2016) *Trade Finance and SMEs Bridging the Gaps in Provision*, WTO, Geneva.