

# Collateralized Purchasing Power Investment

*a financial instrument to stabilize and secure growth in consumer markets & business  
supply chains*



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# Introduction

A fascinating characteristic of any instrument in play, is the infinity variety of feelings, a composer gives by using the instrument in the musical creation.

This financial project uses the basic theory of Maslow's Pyramids/Hierarchy of needs<sup>1</sup> as the baseline for its implementation. To briefly introduce the underlying theory, the levels of the pyramids are categorized in 5 layers. The level of importance to the profitability prospect of the financial project is to secure, that no one on the face of this planet longer lives in deficiency on level one or two of the pyramid.

The financial instrument introduced in this financial project does this through micro financing measures of gearing investment in the purchasing power abilities of individuals and businesses, in order for them to work their own way out of any economic hardship they may be in at any given time in their life spans. The working title for this new financial instrument is the "purchasing power investment instrument" (PPII). The theory, the process and the mathematical construct enabling this mechanism is accessible on this webpage and can be implemented fairly easily into the current payment and credit system in a matter of months, by any financial institution with authorization to administer credit under the fractional reserve banking system. The profitability prospect for the financial institution making the implementation precisely and in close collaboration with the inventor of this financial mechanism will have a 100% guarantee of being successful in its profitability opportunity. The target group of individuals and businesses that will benefit immediately from the time of implementation is 3 billion individuals and a minimum of 500.000 businesses worldwide. All corners of our society would have immediate beneficial outcomes on implementation in all countries and on all levels.

## Maslow's original hierarchy of needs (Maslow 1943)



Maslow's original hierarchy of needs (left) attests the fundamental importance of biological and physiological demands and depicts the continuation of human needs into the social and psychological realms once these primary assets have been obtained.

Maslow later expanded this model to include cognitive, aesthetic, and later transcendence needs.

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<sup>1</sup> [ResearchGate.net](https://www.researchgate.net)

# Executive Summary

## Background

The earliest forms of credit documents and trust-based payment systems can be traced back to ancient Mesopotamia and Egypt (around 3000 BC), where merchants used things like clay tablets as promissory notes to ensure payment across vast distances. The Roman Empire also had "praescriptiones" (pre-written payment orders) and "cautiones" (collateral documents) used by financial agents.

## Question

This business case came about in the pursuit of answering one question that to this day has remained unanswered in economic theory. The question below primarily concerns the consumer who has lost obtainability to conventional consumer credit.



***“How do we (the authority) in a timely manner make a secure and collateralized credit flow to consumers and/or businesses in need of credit, in order for them to meet a required payment obligation on a good and/or service needed for consumption (or to avoiding b2b supply chains interruptions), assuring they are free from fear of dropping of their current living standard, especially in times of economic hardship?”***

## Product

Product name: Collateralized Purchasing Power Investment (CPPI)

Product type: Financial

Product market: Consumer Retail (products & services) & businesses (products & services supply chains)

## Instrument Description

This financial instrument is divided into three separated processes, that run subsequently after each other. For security reasons it is highly recommended, that regardless of reason, no looping of any of the processes is possible, fx. due to a technical issue fx. attempts to interrupt the dataset when the application is running.

For security reasons, all functionalities are designed to run entirely within the framework of the application. The application is blocked from receiving any new data input before process I completes by initiating process II with the processed data from Process I. Only process I can

receive an external data input and can only send data to process II. Process II can only receive internal application data from process I and can only send internal data to process III. Process III can only receive internal data coming from process II and can only on its completion send the processed data to an external receiver one time only. If the external data is not received, then a new payment attempt must be re-initiated on the user's request from a card payment terminal or from a payment app. If the CPPI receives an identical data set, the first dataset will be classified as a discrepancy in the credit transfers from process III, These discrepancies must then be manually investigated by the financial operator.

When the application has received the required input data, process I then automatically initiates, followed by process II, and then process III completes the process (All processes securely execute within the framework of the application). All three processes in the "collateralized purchasing power investment" should, in a fully automated version of the CPPI application, be able to complete in a matter of 15-30 seconds, where at the end of process III, the surplus credit at a result of the CPPI, are credited to the account of the payee, who then can re-initiate the card payment transaction, now with enough funds in account to complete the card payment transaction.



- I. **investment**
- II. **reconciliation**
- III. **disbursement**

## I - investment process

The collateralized purchasing power investment initiates via the application or via a card payment terminal (enabled with the necessary feature to initiate a CPPI payment request) upon users requests. When requested the CPPI initiates a geared exchange investment using the commodity and/or service, as collateral (in favor of the financial operator). The financial operator has full collateralization up till the point of where the principal balance is fully repaid. This takes place in process III of the application.

The **First step** of the investment process kicks in, when the CPPI application receives a request for credit in a fiat denominated currency (pre-approved by its financial authority to make use of a CPPI functionality (local conditions might restrict or expand the CPPI usability)). The requesting currency is the card payment account currency, not the currency in use for the actual card payment transaction (if different). If the request currency is approved with the corresponding governing authority of currency, the request offsets the demand, initiating the actual instrument in the CPPI application and the financial operator then adds a percentage fee (service fee), now in the in the fiat currency that serves as the denominated currency for the card payment transaction. An amount equal to that of the amount of the outstanding balance needed (equal to the demand amount) to cover the full balance due on the card payment transaction, is then reserved via the merchant on the user's payment card to assure the payee the full balance due post completion of the CPPI. Then the **Second step** initiates, and the demand is credited to the "XXX-HYB credit exchange & Investment account!.

This initiates the issuing of a hybrid credit note on the corresponding amount equal to that just credited to the CPPI application internal “XXX-HYB credit exchange & investment account”. The two steps in process I are highlighted (FF0050) in the CPPI transaction account balance sheets illustration below:

|    | A                                | B   | C                          | D                          | E        | F | G  | H   | I                          | J      | K        |
|----|----------------------------------|-----|----------------------------|----------------------------|----------|---|--|-----|----------------------------|--------|----------|
| 1  | INPUT DATA TIMESTAMP             |     | 07/30/2020<br>13:52:27:000 | 07/30/2020<br>13:52:27:000 |          |   | OUTPUT DATA TIMESTAMP                    |     | 07/30/2020<br>13:52:27:888 |        |          |
| 2  | INPUT DATA ORIGIN                |     | PAYMENT CARD               | BANK                       |          |   | OUTPUT DATA DESTINATION                  |     | PAYMENT CARD               |        |          |
| 3  | INPUT DATA LABEL                 |     | DEBIT                      | FEE (DEBIT)                |          |   | OUTPUT DATA LABEL                        |     | CREDIT                     |        |          |
| 4  | INPUT DATA CURRENCY              |     | \$                         | \$                         |          |   | OUTPUT DATA CURRENCY                     |     | \$                         |        |          |
| 5  | INPUT DATA NUMBER                |     | 852.99                     | 17.06                      |          |   | OUTPUT DATA NUMBER                       |     | \$852.99                   |        |          |
| 6  | FLA-XXX Credit Exchange Account  |     |                            |                            |          |   | XXX-FLA Credit Exchange Account          |     |                            |        |          |
| 7  | Exchange Rate (fixed):           |     | 2.00                       |                            | \$       |   | Exchange Rate (fixed):                   |     | 1.00                       |        | ₪        |
| 8  | TIMESTAMP                        | CUR | CREDIT                     | DEBIT                      | BALANCE  |   | TIMESTAMP                                | CUR | CREDIT                     | DEBIT  | BALANCE  |
| 9  | 07/30/2020 13:52:27:444          | \$  | 1,705.98                   | 0.00                       | 1,705.98 |   | 07/30/2020 13:52:27:111                  | ₪   | 852.99                     | 0.00   | 852.99   |
| 10 | 07/30/2020 13:52:27:444          | \$  | 34.12                      | 0.00                       | 1,740.10 |   | 07/30/2020 13:52:27:111                  | ₪   | 17.06                      | 0.00   | 870.05   |
| 11 | 07/30/2020 13:52:27:555          | \$  | 0.00                       | 852.99                     | 887.11   |   | 07/30/2020 13:52:27:333                  | ₪   | 0.00                       | 852.99 | 17.06    |
| 12 | 07/30/2020 13:52:27:555          | \$  | 0.00                       | 17.06                      | 870.05   |   | 07/30/2020 13:52:27:333                  | ₪   | 0.00                       | 17.06  | (0.00)   |
| 13 | 07/30/2020 13:52:27:777          | \$  | 0.00                       | 852.99                     | 17.06    |   |  |     |                            |        |          |
| 14 | 07/30/2020 13:52:27:777          | \$  | 0.00                       | 17.06                      | (0.00)   |   |  |     |                            |        |          |
| 15 | CPPI Non-Interest Income Account |     |                            |                            |          |   | FLA Credit Assets Reconciliation Account |     |                            |        |          |
| 16 |                                  |     |                            |                            |          |   |  |     |                            |        |          |
| 17 | CPPI FEE:                        |     | 2.00%                      |                            | \$       |   |  |     |                            |        | ₪        |
| 18 | TIMESTAMP                        | CUR | CREDIT                     | DEBIT                      | BALANCE  |   | TIMESTAMP                                | CUR | CREDIT                     | DEBIT  | BALANCE  |
| 19 | 07/30/2020 13:52:27:888          | \$  | 17.06                      | 0.00                       | 17.06    |   | 07/30/2020 13:52:27:222                  | ₪   | 0.00                       | 852.99 | (852.99) |
| 20 |                                  |     |                            |                            |          |   | 07/30/2020 13:52:27:222                  | ₪   | 0.00                       | 17.06  | (870.05) |
| 21 |                                  |     |                            |                            |          |   | 07/30/2020 13:52:27:666                  | ₪   | 852.99                     | 0.00   | (17.06)  |
| 22 |                                  |     |                            |                            |          |   | 07/30/2020 13:52:27:666                  | ₪   | 17.06                      | 0.00   | 0.00     |

The amount must always be equal to that of the total amount of the principal (that is the total all fees and the outstanding balance needed for the card payment transaction to complete). Note: It is paramount that any fees that the financial operator (or any other third party service providers needs added) are added prior to issuing of the hybrid currency, so that the grand total amount issued (in HYB) equals to that of the amount needed to cover the outstanding balance in the payment transaction and incurring fees. Any fees, interest or similar instrument added post the first step, will generate a positive balance post repayment of the principal balance and the application will run incomplete when trying to balance the principal balance in the final step of process II, making the release of the demanded credit to the payor, initiating in process III, impossible until the principal account balance is zero.

|                                  |                 |                                      |
|----------------------------------|-----------------|--------------------------------------|
| 10 Tønder<br>Enhedsbeløb         | 1:10<br>Gearing | 0,04<br>Dynamisk spread              |
| Pointværdi                       |                 | 1 USD                                |
| O/N finansiering - køb           |                 | -0,0055%                             |
| O/N finansiering - salg          |                 | -0,0045%                             |
| O/N finansieringstid             |                 | 02:00                                |
| Marginindskud                    |                 | 10,00%                               |
| Vedligeholdelsesmargin           |                 | 5,00%                                |
| Futurekontrakt                   |                 | Aug 2020                             |
| Automatisk overførsel (rollover) |                 | 02:25 17-07-2020                     |
| Nuværende handelssession         |                 | Ons. 03:00<br>Tors. 02:00            |
| Næste handelsperiode             |                 | 18-06-2020 03:00<br>19-06-2020 02:00 |

The above screenshot is from a gearing example and has no relation to this business case other than exemplification of the existence of what is the closest related multiplication factor for the collateralized purchase investment instrument to have successful operations.

The **Third step** in process I then initiates in the CPPI application as a geared exchange transaction (HYB → USD at an exchange rate of two, from the “credit exchange & investment account” to the “credit exchange account”. This assures enough funds are also available for the repayment process (II) to complete. Using a hybrid currency also minimizes the risk of generating inflation on the fiat currency as a result of the CPPI.

## II - reconciliation process

An internal exchange transfer then initiates in the CPPI application from the “credit & exchange account” on half of the available balance from the Investment (in fx HYB ← USD), at an exchange rate of one (without gearing) and is sent to the internal CPPI “reconciliation settlement account” (denominated in HYB) within the application. This fully repays the principal and brings the balance in the account back to zero. Note, that the reconciliation process takes place before the credit disbursement process initiates. This is to release and enable the payor to obtain acquisition of the collateral, that initiates on the conclusion of process III.



### III - disbursement process

A bank payment voucher (BPV) is then issued denominated on the last half of the available balance (the investment surplus as a result of process I) and sent from the “credit exchange account” to the card payment terminal, where the payor will be asked to confirm, that she/he qatar to use the now available voucher to cover the remaining part of the outstanding balance needed to complete the purchase transaction. This confirmation is done directly on the card payment terminal by the user re-typing the voucher amount and pressing accept or the normally green button on the terminal and the purchase transaction completes successfully and the customer now has acquired the good(s) and/or service(s) needed, Note: The service fee for the financial operator administering the CPPI service is included in the voucher amount and transferred from the “credit exchange account” to the internal “CPPI non-interest revenue account” of the financial operator. The revenue obtained in this account is then part of the equity held on the total balance sheets of the financial operator. Please note that a CPPI enabled card payment terminal would have the actual CPPI application installed as part of the software on the terminal, meaning that no internet connection is needed to run the CPPI service in the specific framework.



The CPPI application can also be run via a payment application. Running the application in this framework will require connectivity, as the BPV is presented by the user type the or NFC scanning the voucher (as the BPV is issued as a one time disposable virtual payment card)

Note: The operational CPPI instrument is intended to have compatibility and functionality that enables the application to be linked and initiated via any payment application or through a card payment terminal at a merchant, with either built in CPPI functionality in the actual card payment terminal or through a datalink to the CPPI application, in for example retail stores. A terminal with a built-in CPPI component could be an advantage in case of connectivity disturbances as a CPPI would be part of the software installed on the card payment terminal.

### The customer base, future potential

The potential customer base of users that could be considered using this application is vast. “About 30% of consumers have low credit scores — 650 or less — that have denied them access to credit products” according to an article published on [www.pymnts.com](http://www.pymnts.com) in December of 2023<sup>2</sup>. 70% of customers are estimated to have access to conventional credit products, however a staggering 30% of customers have no access at all to any conventional credit products whatsoever. The 30% are according to the articles labeled “subprime customers”, meaning customers who

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<sup>2</sup> [Pymnts.com article on consumers accessibility to credit products \(12-01-2023\)](http://www.pymnts.com)

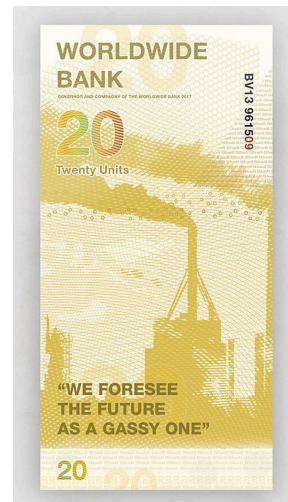
know they are not eligible to obtain credit products and therefore never make an attempt to make an application for this type of financialization.

In more broad terms the usability of the CPPI mechanism exist in both consumer markets and Business supply chains in growing economies and in the OECD, that currently are unable to obtain funds adequate to reach or maintain a standard of living as defined residing under the poverty line in the OECD, who are currently unable to, or having severe difficulties obtaining consumer credit through conventional channels, to meet required purchases to obtain or maintain a basic standard of living within the country of where that individual resides.

Number of potential customers worldwide: 100% of world population

Businesses threatened by insolvency by having insufficient access to credit to withstand temporary imbalances in other markets, that they themselves have no control or direct influence upon.

Number of potential CPPI business users: All operating businesses worldwide threatened by insolvency would benefit from using the CPPI infrastructure to produce their way out of insolvency. To give an example on how severe the situation is among operating businesses, an article concerning business health statistics published on the web site [www.begbies-traynorgroup.com](http://www.begbies-traynorgroup.com) in January 2025<sup>3</sup>, shows that in the United Kingdom alone, around half a million businesses countrywide are operating in severe economic distress.



## Future potential growth and availability of the application

To grow through market implementation of the specific financial product introduced in this case to consumer markets, by implementing the mechanism in the card payment transaction process, for when consumers and or businesses make purchases of goods and services, where liquidity is required in order for the payment transaction to be completed successfully.

# Application Description

## Mission Statement

“To serve as a trusted partner to customers using the application, by responsibly providing and safeguarding the financial services within the application, to continue enabling growth and economic progress.”

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<sup>3</sup> [Traylor Business Health Statistics Article \(01-23-2025\)](#)



## Legal Support Structure

UNECE, Article 25.1 that states:

*“Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.”*

Financial regulators, authorized to regulate financial legal structures of markets where his application is in operational use.

## Markets

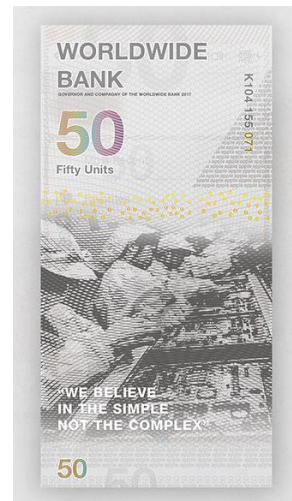
### Industry

Financial markets for card payment transactions in products & services for consumption or for products & services manufactured through B2B supply chains.

### Application Advantages

The company can offer an unique, safe, secure and efficiently simple banking service application, for consumer and small to medium size businesses for them to conduct their daily banking operations with and added security against bankruptcy and insolvency through the financial product of purchasing power investments.

- Unique financial product with global potential for contributing growth & market stability
- Clear profitability potential, through a customer base, previously thought to be non profitable
- The purchasing power mechanism is self sustainable by the customers use of the application PPI functionality in the framework provided by the financial operator
- Application can be incorporated as a third party application if required



### Regulations

Local financial regulations in the specific markets, in which the application is implemented. An exemplification of such regulation could be the European Union Payment Services Directive II or similar regulations on financial markets.

# Service Line

## Product/Service

Out of the box, easy to implement, financial products, that enables new ways for financial operators to make stable profiteering on consumer and business segments, that prior to application implementation, would have been viewed as non profitable to the financial operator.

The Purchasing Power Investment mechanism is an instant stabilizing mechanism, for the restoration or monetization of purchasing power to the private individual or business, in the temporary requirement of having to make use of this financial mechanism, to maintain sufficient standard of living or to conduct normal business operations in a given market.

- Payment Transactions in need of liquidity to successfully complete
- The markup retail price (MRP, as collateral) as equal to or partly equal to the total outstanding balance charged to the card (medium of exchange mechanism) where the payment transaction are in process (normally though a merchant service)



## Pricing Structure

The financial product introduced in this business case has a variable fee based structure.

- A percentage fee, set or partly set depending on local regulations, by the financial operator administering the specific CPPI application in use, is added to the purchasing power investment (PPI) formula, that completes successfully, once initiated by a customer (private or business) using an application in which the process of this financial product has function.

## Product Lifecycle

Lifecycle: Potentially indefinite.

## Intellectual Property Rights

The intellectual property rights are to the three private individuals, who have directly contributed with the key components of constructing financial mathematics and process, that in combination are what compound this specific financial instrument.

## Research and Development

It is recommended the financial operator making use of the full potential all functionalities in the application, to conduct research on the operational use of the application, based on the statistical material generated through the market operations of the report module of the application, that could:

- include a feedback mechanism on the website for ideas, suggestions, and improvements
- include the development of cards for use with the application, to provide a safe & secure transactional operations of the features, within the application including that of the PPI functionalities
- include reviewable PPI statistics generated in the application, to identify risk and opportunities, to make the application features run ever more safe and secure



## Marketing & Sales

### Growth Strategy

Growth potential strategy: Depends on the financial operators market operations.

### Growth Strategy Getting New Customers To Use The Application

Expanding availability of the application in accessible consumer (primarily retail segments) & business (primarily supply chains) markets, estimated worldwide as being:

- 3 billion private individuals
- 500,000 businesses (currently threatened by insolvency, 2021 numbers)

In economic terms a turnover fee generated from customer use of the application depends on the available fee set by the financial operator administering the application.

***This can be calculated using the following formula:***

*The customer generated turnover value in the application (= increased purchasing power) X (times) the applied service fee by the financial operator = total revenue, with a certain time frame.*

*To exemplify, let's set the recurring time frame to be: 24 hours, the purchasing power investment revenue in that time frame we set on an average of: \$1 billion and the fee we set at 2.5%, then the calculation would look like: \$1,000,000,000.00 x 2.5% = \$25,000,000.00*

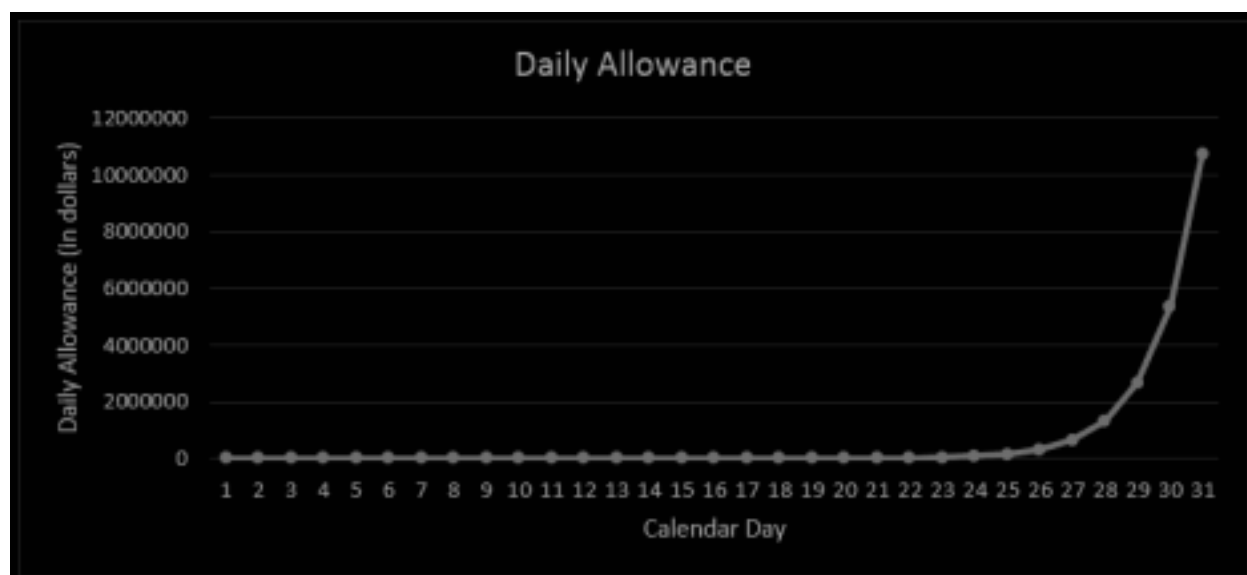
## Growth Strategy Expanding On The Customer Use Of The Application

Delayed, however stable growth strategy potential, as high as equal to that of the growth generated out of the increased purchasing enabled through the mechanism built into the process of this financial product. Given the simple fact that boosting the purchasing power through this financial mechanism, where a product or service value is immediately released, minimizes the risk of loss and profitability substantially, making inflation as a risk factor redundant over time.

- The financial growth would be at maximum potential, when equal to that of the growth expansion generated from the increased purchasing power enabled by the individuals and businesses, using the mechanism in this financial product through an applied application with this mechanism built in.

The exponential function is per default built into the construct of this financial product, as a perpetual boosting for exponential growth with almost immediate measurable effect on micro and macroeconomics, however the use frequency of the application in specific market segments (fx retail food & beverages) determines the quantification of the real measurable effect of this financial product.

The doubling time can be calculated if needed. Fx the doubling time a purchasing power funds availability of \$1 pr. day per capita to \$2 a day per capita and then compare the statistical data to a setting where this financial product would not be used.



# Communicate with the Customer

Communicating with customers can happen using the built in messaging & news module in the core application of which the financial operator of the PPI (product) administers. The module has by default the following functionality built in, for communication with customers using the application:

- Send, receive, view and reply to secure internal
- Send messages to specific users
- Search functionality through own messages
- Filter by date or subject
- Manage incoming/outgoing email settings, alerts, and notifications
- Reading news articles from CGP
- Filter by date or title

## How to Sell

It is recommended that this financial product is marketed through existing marketing channels with financial operators, incorporating the mechanism of this product, into their current financial logistical settings of financial infrastructure.