Collateralized Purchasing Power Investment

a financial instrument that stabilize and secure growth in consumer markets & business supply chains, by assuring the right to draw upon on demand, credit via the CPPI, at times when a payment transaction is about to fail due to insufficient funds in the buyers card payment account

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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 Collateral (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

proccessed 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.

- Investment
- Payment
- Repayment

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 debit transfer request in a fiat currency (pre-approved by its financial authority to make use of a CPPI functionality (local conditions might restrict or expand the CPPI usability)). The currency is always the denominated currency in use with the account linked to the specific payment card presented as payment method. If the currency is listed as approved in the CPPI gateway application the financial operator then adds a percentage fee (service fee) in the same fiat currency that serves as the denominated currency in account for the specific payment card in use. An amount equal to that of the amount of the outstanding balance needed to cover the full balance due on the card payment transaction reserved for payment in the user's card payment account. Then the Second step initiates, and the debt is transferred in a 1:1 exchange rate transaction that initiates and issues a flash credit note on the corresponding amount credited to the CPPI application internal "XXX-FLA Credit Exchange 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 13:52:27:000	07/30/2020 13:52:27:000			OUTPUT DATA TIMESTAMP		07/30/2020 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		

	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)						

	CPPI Non-Interest Income Account						FLA Credit Assets Reconsiliation Account				
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 amount (all fees included) required to cover the outstanding balance (now including all fees), in the payment transaction. 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 FLA) equals to that of the amount needed to cover the outstanding balance in the payment transaction (all incurring fees included). 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 initiation of process III impossible until the principal account balance is zero.

10 Tønder
Enhedsbeløb

1:10
Gearing

0,04
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 Tors. 02:00
Næste handelsperiode	18-06-2020 03:00 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.

Third, a gearing exchange transaction then takes place (HYB –> USD by a factor of two, that assures enough funds are also available for the repayment process (III) to complete. Using a hybrid currency also minimizes the risk of generating inflation on the fiat currency as a result of the CPPI. The geared exchange investment must then settle in the user account linked to the payment card in the payment transaction. Users must pre-registration their payment card(s) in the PPCI application and link their payment card prior to using the services in the PPCI app, or if the payment card is used through on a payment card terminal administered by a merchant other third party who providers that has a CPPI build in functionality enabled in their card payment process.

II - reconciliation settlement process

An internal exchange transfer with the CPPI accounts on half of the available balance in the Investment Credit & Exchange Account (fx HYB <-- USD) at an exchange rate of one (without gearing) is then initiated and sent to the internal CPPI reconciliation settlement account (denominated in the HYB) within the CPPI application that fully repays the principal and brings the balance in this account back to zero.

III - surplus credit disbursement process

An external transfer on the last half of the available balance is then prepared (the investment surplus as the result of process I) and sent from the Credit & Investment Exchange Account to the Card Payment Account of the payee in a direct credit transfer. When the credit transfer is complete the payee now has enough funds available in account to initiate a second card payment attempt completing the payment transaction successfully.

The instrument is linked and initiated via any payment application or through a card payment terminal with a merchant, with the required built- in function either built into the actual terminal or through a datalink to the CPPI, 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 part of the software in the payment terminal.

Future potential customer base

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 pymnts.com in December of 2023.Regardsless of the proportion of consumers the 70% who then must have access to credit products, the number speaks for itself. The 30% are according to the articles labeled "subprime customers", meaning customers who 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 themself have no control or direct influence upon.

Number of potential businesses worldwide: 100% of operating businesses worldwide. 500,000 of which are estimated to be in immediate need of liquidity to operate efficiently.

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."

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 Transaction 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 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) & buisness (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 aplælication.

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.
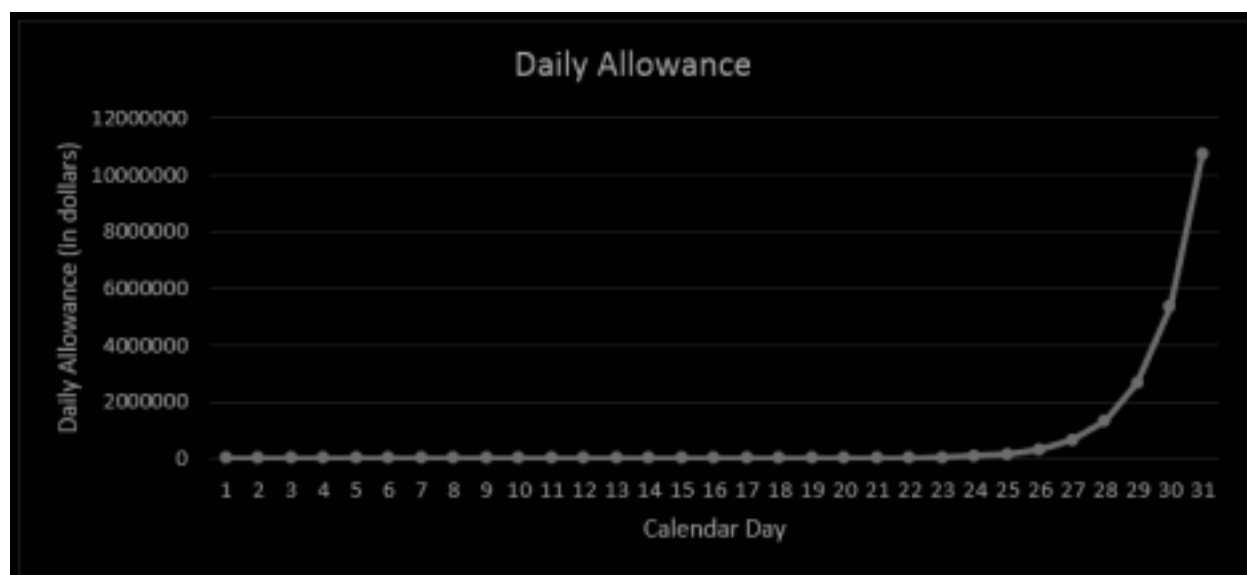
Communicate with the Customer

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.