DFC in the common monetary area

Feedback from the Regulatory Requirements & Economic Impact Survey: Legal Frameworks

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The Common Monetary Area (CMA)

- The CMA, formerly known as the Rand Monetary Area, is an international monetary union established in 1974.
- Member states include:
  - Republic of South Africa
  - Kingdom of Lesotho
  - Kingdom of Swaziland
  - Republic of Namibia
- The core objective of the union is:
  "to provide for the sustained economic development of the CMA as a whole"
- The Multilateral Monetary Agreement (MMA) of 1992 serves as the international treaty governing the monetary rules and obligations of CMA member states.
  - Separate bilateral monetary agreements between the South African government and smaller CMA states uphold the MMA.

Legal tender under the MMA

The viability of a CMA-wide DFC depends on the MMA recognition of legal tender

Under the monetary framework of the MMA:

- All member states possess the right to issue sovereign national currencies within respective territories.
- Legal tender status within the CMA, however, requires all national currencies to be pegged at par to the South African rand.
- The pegged currency regime defines the rand as the de facto medium of exchange within the monetary area.
- No other currencies may be accepted as legal tender within the CMA unless previously agreed upon by the Government of South Africa.
  - Authorisation is contingent upon the geography of proposed circulation and the uniqueness of its appearance within the CMA.
- Pegged-at-parity currencies only serve as a means of exchange between CMA countries for frictionless **wholesale** payment transfers.
  - CMA members states are not obliged to accept all sovereign national currencies as valid legal tender for retail transactions within their respective territories.

Implications of MMA guidelines for new CMA currency

Both the right and the freedom to introduce new currency within the CMA are subject to the conditions of the MMA.

Rights of national currency	*subject to*	Conditions under pegged currency regime
Unrestricted transfer of funds between CMA member states	→	Foreign (rand) reserve requirement of at least equal to their total local currencies in circulation
Issuance of independent foreign exchange controls	→	National controls in accordance with South African provisions
National implementation of rules, regulations and guidelines that support national financial stability legislation	→	National payment regulation compliance with the CMA cross-border payment strategy through: - **coordinated** payment and settlement systems, - **harmonised** legal and payment regulatory frameworks, - **common** implementation of rules and procedures necessary for an integrated payment system infrastructure

Potential for DFC implementation at a CMA level

- The MMA does not directly prohibit the establishment of new currencies, or the form that it may take, as legal tender within the CMA.
- DFC will, however, be required to abide by the same MMA conditions currently imposed on existing currency.
- MMA-compliant DFC would therefore need to be:
  - Recognised by the South African government as legal tender
  - Pegged to the value of the rand
  - Subject to foreign reserve requirements and South African foreign exchange controls
  - Consistent with the CMA cross-border payment strategy
- Consultation may be required between the CMA Commission and any country seeking to adopt and trade in DFC in the absence of CMA DFC regulation
- DFC is likely to be more South African orientated due to the structure of the treaties and agreements within the CMA.

The regulatory viability of DFC in South Africa

DFC may be permitted in South Africa as a legal electronic bank note under current legislation.

Legal tender framework:

- Defined as a "note of the bank or of an outstanding note of another bank for which the bank has assumed liability," or an undefaced and unmutilated coin that is lawfully in circulation
- Coins are specified to comprise predetermined metal alloys.
- Bank notes do not have a clearly specified form or material.
- Instead, the issuance of any banknote, in any form or material, depends only on the approval by the Department of Finance

This allows for DFC to assume the form of a note and legal tender pending Ministerial approval.

Electronic money framework:

- Defined as monetary value or legal tender represented by a claim on the issuer
- It is:
  - stored ***electronically***
  - ***issued on receipt*** of funds,
  - generally ***accepted as a means of payment*** by persons other than the issuer, and
  - ***redeemable for physical cash*** or a deposit into a bank account on demand.

DFC permitted to act as e-money if authorised as legal tender

Right to currency issuance:

- SARB has the sole authority to create, issue and destroy "banknotes and coins", provided that it is "lawfully in circulation and legal tender in the Republic".
- As per the NPS Act of 1998, system participation is restricted to the SARB and authorised financial institutions.
- Only registered South African banks have the right to distribute cash or e-money, e.g. FnB eBucks

DFC will need to be Bank created and issued

6 | Source: SARB Act 90 of 1989, SARB position paper on Electronic money (2009), National Payment systems Act 74 of 1998

Current initiatives in South Africa to test DFC viability

2017 Project Khokha

Detail	Description		
Aim	To develop and test a PoC that is built on a private (permissioned) Ethereum blockchain (Quorum) to create the tokenisation of the South African rand		
Objective	To demonstrate the ability for DFC to be transferred between commercial banks on a blockchain		
Goals	To create a distributed ledger between participating banks for a domestic payment system, backed by central bank deposits Compare DLT capabilities with existing technology used by the SARB		
Measurable goals	***Transaction speed*** 70,000 transactions over two hours	***Block Propagation Times*** 95% propagation in < 1s. 99% propagation in < 2s.	***Confidentiality*** Fully confidential transactions
Focus	Performance Adherence to principles RTGS participation Non-technical implications		

Four iterations of transaction were conducted under Project Khokha to test DFC viability

Iteration 1

- Token transfer between two banks
- Minting function enabled by SARB

Iteration 2

- Operation similar to SAMOS
- SARB authorisation
- Network-wide visibility of transactions

Iteration 3

- Transaction values privatised by Pedersen commitments
- Encryption keys shared between nodes via P2P “whisper channels”
- KYC and AML/CFT information shared between participants

Iteration 4

- Privatised values strengthened by additional range proofs
- SARB role as payment validator replaced by node consensus
- KYC and AML/CFT information shared between participants

Tested outcomes of project Khokha suggest technical feasibility of DFC as a wholesale payment solution between participants

Project achievements based on the fourth and final iteration:

- Standard daily transaction volume (70,000) processed in < 2 hrs
- Payments processed at 12.86 transactions per second
- Successful use of ISO20022 messaging
- Two-second propagation
- Full transaction confidentiality and settlement finality
- Last iteration removed the need for the SARB to approve each transaction
- KYC compliance

Project limitations due to scope:

- Inability to test on all PFMIs
- Lack of legal or regulatory compliance considerations
- Inability to test cross-border transactions, securities and retail offerings

Applicability of SA DFC in smaller CMA countries

Compliance of LNS regulations with that of South Africa suggests opportunity for DFC application

	Legal tender definition	Form/material	Electronic money	Issuer of legal tender	Distributor of electronic money
Lesotho	Notes and coins issued by the bank at face value	Prescribed by the Finance ministry, based on Bank recommendations	Monetary value as represented by a claim on issuer that is **electronically** stored, **issued against currency**, accepted as **means of payment**	Central Bank sole responsibility	An authorised financial institution
Namibia	Notes and coins issued by the Central Bank as payment for any amount	Prescribed by the bank with prior approval from the finance ministry	A designated payment instrument of monetary value represented by a claim on its issuer that is **electronically stored**, accepted as **means of payment**, **issued against currency**	Central Bank sole responsibility	Any authorised bank or non-bank entity
Swaziland	Notes and coins issued by the bank for the payment of any amount	Prescribed by the finance ministry based on Bank recommendation	Monetary value as represented by a claim on issuer that is **electronically** stored, **issued against currency**, accepted as **means of payment**	Central Bank sole responsibility	Any authorised bank or non-bank entity
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Applicability?	**Possible formulation of DFC as bank note**	**Acceptance as legal tender possible through Ministerial authorisation**	**DFC as legal tender may operate as e-money**	**Central Bank the only entity to establish DFC**	**Issuance of DFC requires clarification between CMA members**

Recommendations and conclusions

- The legal and regulatory definitions of legal tender across CMA countries present an opportunity to establish DFC as both a currency and form of electronic money.
- The achievement of a CMA-wide DFC hinges on its approval and effectiveness in South Africa.
- Current efforts in South Africa to test the applicability of DFC to wholesale payments highlight its potential for adoption.
- A coordinated approach will be required, however, when introducing a South Africa-approved DFC into the monetary union.
- This approach will require a single, harmonised DFC system in the CMA that can limit cross-border risks and uphold union commitments to the cross-border payment strategy.
- Harmonisation processes will require clear guidance from central banks on the interpretation and formulation of DFC through either circulars, guidance notes or practice notes.
- Risk-based regulatory sandboxes initiated in one jurisdiction and then expanded to other CMA territories may enable monetary authorities to adapt existing regulation to the future needs of DFC.

Thank you

Please engage with us:

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