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**Scope:** White papers, reports, and speeches related to the intersection of central banking activity and blockchain technology. Does not include news articles or op-eds. Papers denoted with \*\*\* indicate key recommendations.

## Central Banks

### *Joint research or pilot work*

- Bank of Canada, Bank of England, Monetary Authority of Singapore
  - “Cross-border interbank payments and settlements: Emerging opportunities for digital transformation” (2018)  
<http://www.mas.gov.sg/~media/ProjectUbin/Cross%20Border%20Interbank%20Payments%20and%20Settlements.pdf>
- European Central Bank, Bank of Japan
  - Project Stella reports (2016-2018)
    - “Securities settlement systems: delivery-versus-payment in a distributed ledger environment” (2018)  
[http://www.boj.or.jp/en/announcements/release\\_2018/data/rel180327a1.pdf](http://www.boj.or.jp/en/announcements/release_2018/data/rel180327a1.pdf)
    - “Payment systems: liquidity saving mechanisms in a distributed ledger environment” (2017)  
[https://www.ecb.europa.eu/pub/pdf/other/ecb.stella\\_project\\_report\\_september\\_2017.pdf](https://www.ecb.europa.eu/pub/pdf/other/ecb.stella_project_report_september_2017.pdf)

### *Central banks*

- Bank of Canada
  - Project Jasper collection (2017-2018)  
<https://www.bankofcanada.ca/research/digital-currencies-and-fintech/fintech-experiments-and-projects/>
  - Staff discussion & working papers:
    - “Should the central bank issue e-money?” (2018)  
<https://www.bankofcanada.ca/wp-content/uploads/2018/12/swp2018-58.pdf>
    - “A policy framework for e-money” (2018)  
<https://www.bankofcanada.ca/2018/04/staff-discussion-paper-2018-5/>

- “Central bank digital currency and monetary policy” (2018)  
<https://www.bankofcanada.ca/wp-content/uploads/2018/07/swp2018-36.pdf>
    - “Central bank digital currency: Motivations and implications” (2017)  
<https://www.bankofcanada.ca/wp-content/uploads/2017/11/sdp2017-16.pdf>
    - “Central bank digital currencies: A framework for assessing why and how” (2016)  
<https://www.bankofcanada.ca/2016/11/staff-discussion-paper-2016-22/>
- Bank of England
  - Staff working papers and reports
    - “Central bank digital currencies: design principles and balance sheet implications” (2018)  
<https://www.bankofengland.co.uk/working-paper/2018/central-bank-digital-currencies---design-principles-and-balance-sheet-implications>
    - “Broadening narrow money: monetary policy with a central bank digital currency” (2018)  
<https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2018/broadening-narrow-money-monetary-policy-with-a-central-bank-digital-currency.pdf>
    - “The macroeconomics of central bank issued digital currencies” (2016)  
<https://www.bankofengland.co.uk/working-paper/2016/the-macroeconomics-of-central-bank-issued-digital-currencies>
    - “The economics of digital currencies” (2014)  
<https://www.bankofengland.co.uk/-/media/boe/files/digital-currencies/the-economics-of-digital-currencies>
    - “Innovations in payment technologies and the emergence of digital currencies” (2014)  
<https://www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2014/innovations-in-payment-technologies-and-the-emergence-of-digital-currencies.pdf>
  - Digital currencies research home page:  
<https://www.bankofengland.co.uk/research/digital-currencies>
- Bank of Finland
  - “The great illusion of digital currencies” (2018)  
[https://helda.helsinki.fi/bof/bitstream/handle/123456789/15564/BoFER\\_1\\_2018.pdf?sequence=1&isAllowed=y](https://helda.helsinki.fi/bof/bitstream/handle/123456789/15564/BoFER_1_2018.pdf?sequence=1&isAllowed=y)
  - “Central bank digital currency” (2017)  
[https://helda.helsinki.fi/bof/bitstream/handle/123456789/14952/BoFER\\_5\\_2017.pdf?sequence=1&isAllowed=y](https://helda.helsinki.fi/bof/bitstream/handle/123456789/14952/BoFER_5_2017.pdf?sequence=1&isAllowed=y)

- Bank of France
  - Production implementation: Blockchain for Banking Services Pilot (2016+) SEPA Creditor Identifiers (SCI) repository sharing between banks (powerpoint presentation available)
  - Working paper #642, “Monetary policy and digital currencies: Much ado about nothing?” (2017)  
<https://www.banque-france.fr/sites/default/files/medias/documents/dt-642.pdf>
  
- Bank of Israel
  - \*\*\* “Report of the team to examine the issue of central bank digital currencies” (2018)  
<https://www.boi.org.il/en/NewsAndPublications/PressReleases/Documents/Digital%20currency.pdf>
  
- Bank of Korea
  - “Central bank digital currency and financial stability” (2019)  
<http://www.bok.or.kr/viewer/skin/doc.html?fn=201901310941017800.pdf&rs=/webview/result/E0002902/201901>
  
- Bank of Lithuania
  - Digital Collector Coin (DCC) retail CBDC test (related public documents available upon request to Bank of Lithuania or WEF)
  - LBChain Platform-Service - blockchain technology sandbox
    - Website: <https://www.lb.lt/en/pre-commercial-procurement>
    - RFP web page:  
[https://www.lb.lt/uploads/documents/files/apie-mus/atskaitomybe-ir-skaidrumas/ikiprekybinis-pirkimas/Pre-Commercial\\_Procurement\\_conditions.pdf](https://www.lb.lt/uploads/documents/files/apie-mus/atskaitomybe-ir-skaidrumas/ikiprekybinis-pirkimas/Pre-Commercial_Procurement_conditions.pdf)
  
- Bank of Thailand
  - Project Inthanon phase 1 report (2019)  
[https://www.bot.or.th/English/FinancialMarkets/ProjectInthanon/Documents/Inthanon\\_Phase1\\_Report.pdf](https://www.bot.or.th/English/FinancialMarkets/ProjectInthanon/Documents/Inthanon_Phase1_Report.pdf)
  
- Central Bank of Brazil
  - “Distributed ledger technical research in Central Bank of Brazil” (2017)  
[https://www.bcb.gov.br/htms/public/microcredito/Distributed\\_ledger\\_technical\\_research\\_in\\_Central\\_Bank\\_of\\_Brazil.pdf](https://www.bcb.gov.br/htms/public/microcredito/Distributed_ledger_technical_research_in_Central_Bank_of_Brazil.pdf)
  - Project Pier data and information exchange project:  
<https://www.bcb.gov.br/en/#!/c/news/1853>

- Danmarks Nationalbank
  - “Central bank digital currency in Denmark?” (2017):  
<https://www.nationalbanken.dk/en/publications/Documents/2017/12/Analysis%20-%20Central%20bank%20digital%20currency%20in%20Denmark.pdf>
- Deutsche Bundesbank
  - BLOCKBASTER DLT prototype with Deutsche Borse (2016-2018)  
<https://www.bundesbank.de/resource/blob/766672/29feab3f9079540441e3abda1ed2d2c1/mL/2018-10-25-blockbaster-final-report-data.pdf>
- Hong Kong Monetary Authority
  - “Whitepaper 2.0 on distributed ledger technology” (2017)  
<https://www.hkma.gov.hk/media/eng/doc/key-functions/financial-infrastructure/infrastructure/20171025e1.pdf>
    - Annex:  
<https://www.hkma.gov.hk/media/eng/doc/key-functions/financial-infrastructure/infrastructure/20171025e1a1.pdf>
  - “Whitepaper on distributed ledger technology” 1.0 (2016)  
[https://www.hkma.gov.hk/media/eng/doc/key-functions/financial-infrastructure/Whitepaper\\_On\\_Distributed\\_Ledger\\_Technology.pdf](https://www.hkma.gov.hk/media/eng/doc/key-functions/financial-infrastructure/Whitepaper_On_Distributed_Ledger_Technology.pdf)
- Monetary Authority of Singapore
  - Project Ubin collection (2017-2018)  
<http://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre/Project-Ubin.aspx>
- Norges Bank
  - “Central bank digital currencies” (2018)  
<https://static.norges-bank.no/contentassets/166efadb3d73419c8c50f9471be26402/nbpapers-1-2018-centralbankdigitalcurrencies.pdf>
- Reserve Bank of New Zealand
  - “In search of gold: exploring central bank digital currency” (2018)  
<https://www.rbnz.govt.nz/research-and-publications/speeches/2018/speech2018-06-25>
- South African Reserve Bank
  - Crypto Assets Regulatory Working Group: “Consultation paper on policy proposals for crypto assets” (2019)  
[https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9037/CAR%20WG%20Consultation%20paper%20on%20crypto%20assets\\_final.pdf](https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9037/CAR%20WG%20Consultation%20paper%20on%20crypto%20assets_final.pdf)
  - “Project Khokha” (2018)

- [https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8491/SARB\\_ProjectKhokha%2020180605.pdf](https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8491/SARB_ProjectKhokha%2020180605.pdf)
    - <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8491/Project%20Khokha%20Press%20Statement%2005%20June%202018.pdf>
- Sveriges Riksbank (Sweden)
  - e-krona reports collection (2017-2018)
    - <https://www.riksbank.se/en-gb/payments--cash/e-krona/>
  - e-krona project: Action plan for 2018 (2017)
    - [https://www.riksbank.se/globalassets/media/rapporter/e-krona/2017/handlingsplan\\_ekrona\\_171221\\_eng.pdf](https://www.riksbank.se/globalassets/media/rapporter/e-krona/2017/handlingsplan_ekrona_171221_eng.pdf)
- Swiss National Bank
  - Speech by Thomas Jordan: “Financial market infrastructures: Walking the line between stability and innovation” (2016)
    - [https://www.snb.ch/en/mmr/speeches/id/ref\\_20160926\\_tjn](https://www.snb.ch/en/mmr/speeches/id/ref_20160926_tjn)
  - Speech by Andrea Maechler: “The financial markets in changing times – Changes today and tomorrow: the digital future” (2018)
    - [https://www.snb.ch/en/mmr/speeches/id/ref\\_20180405\\_amr](https://www.snb.ch/en/mmr/speeches/id/ref_20180405_amr)
- US Federal Reserve
  - St. Louis Federal Reserve staff and working papers
    - David Andolfatto, “Assessing the impact of central bank digital currency on private banks” (2018)
      - <https://s3.amazonaws.com/real.stlouisfed.org/wp/2018/2018-026.pdf>
    - Aleksander Berensten and Fabian Schar, “The case for central bank electronic money and the non-case for central bank cryptocurrencies” (2018)
      - <https://research.stlouisfed.org/publications/review/2018/02/13/the-case-for-central-bank-electronic-money-and-the-non-case-for-central-bank-cryptocurrencies>
  - Atlanta Federal Reserve “Notes from the Vault”
    - Larry D. Wall, “Some Blockchain Challenges” (2018)
      - <https://www.frbatlanta.org/cenfis/publications/notesfromthevault/06-some-blockchain-challenges-2018-06-27>
  - Board of Governors speeches
    - Lael Brainard, “Cryptocurrencies, digital currencies, and distributed ledger technologies: What are we learning?” (2018)
      - <https://www.federalreserve.gov/newsevents/speech/brainard20180515a.htm>
    - Lael Brainard, “Distributed ledger technology: implications for payments, clearing, and settlement” (2016)

<https://www.federalreserve.gov/newsevents/speech/brainard20161007a.htm>

- Joint staff working papers
  - \*\*\* “Distributed ledger technology in payments, clearing, and settlement” (2016)  
<https://www.federalreserve.gov/econresdata/feds/2016/files/2016095pap.pdf>

## Academia

- MIT Digital Currency Initiative
  - Robleh Ali: “Cellular structure for a digital fiat currency” (2018)  
<https://static1.squarespace.com/static/59aae5e9a803bb10bedeb03e/t/5b5780276d2a737b3c172bfc/1532461095681/Cellular+structure+for+a+digital+fiat+currency+July+2018.pdf>
- NBER Working Papers
  - Barry Eichengreen, “From commodity to fiat and now to crypto” (2019)  
<https://www.nber.org/papers/w25426.pdf>
  - Eric Budish: “The economic limits of bitcoin and the blockchain” (2018)  
<https://www.nber.org/papers/w24717>
  - Christian Catalini and Joshua Gans (2018) “Some simple economics on the blockchain” (2018) <https://www.nber.org/papers/w22952>
  - Michael Bordo and Andrew Levin: “Central bank digital currency and the future of monetary policy” (2017)  
[https://www.hoover.org/sites/default/files/research/docs/17104-bordo-levin\\_updated.pdf](https://www.hoover.org/sites/default/files/research/docs/17104-bordo-levin_updated.pdf)
  - Max Raskin and David Yermack: “Digital currencies, decentralized ledgers, and the future of central banking” (2016) <https://www.nber.org/papers/w22238.pdf>
- Stephen Cecchetti and Kermit Schoenholtz, “Fintech, central banking, and digital currency” <https://www.moneyandbanking.com/the-authors/>
- Lawrence White, “The world’s first electronic money has come - and gone: Ecuador, 2014-2018”  
<https://www.cato.org/blog/worlds-first-central-bank-electronic-money-has-come-gone-ecuador-2014-2018>

- Yale Department of Computer Science
  - “Fedcoin: A blockchain-based central bank cryptocurrency” (2017)  
[https://law.yale.edu/system/files/area/center/global/document/411\\_final\\_paper\\_-\\_fedcoin.pdf](https://law.yale.edu/system/files/area/center/global/document/411_final_paper_-_fedcoin.pdf)

## International Organizations & Market Infrastructure

- BIS Committee on Payments and Market Infrastructure (CPMI), Markets Committee, and others
  - “The future of money and payments” (2019)  
<https://www.bis.org/speeches/sp190322.pdf>
  - \*\*\* “Proceeding with caution - a survey on central bank digital currency” (2019)  
<https://www.bis.org/publ/bppdf/bispap101.htm>
  - \*\*\* “Central bank digital currencies” (2018)  
<https://www.bis.org/cpmi/publ/d174.htm>
  - “Cryptocurrencies: Looking beyond the hype” (2018)  
<https://www.bis.org/publ/arpdf/ar2018e5.htm>
  - “Regulating cryptocurrencies: assessing market reactions” (2018)  
[https://www.bis.org/publ/qtrpdf/r\\_qt1809f.htm](https://www.bis.org/publ/qtrpdf/r_qt1809f.htm)
  - “Money in the digital age: what is the role for central banks”? (2018)  
<https://www.bis.org/speeches/sp180206.htm>
  - “DLT in payment, clearing and settlement: An analytical framework” (2017)  
<https://www.bis.org/cpmi/publ/d157.htm>
  - \*\*\* “Central bank cryptocurrencies” (2017)  
[https://www.bis.org/publ/qtrpdf/r\\_qt1709f.htm](https://www.bis.org/publ/qtrpdf/r_qt1709f.htm)
  - “Digital currencies” (2015) <https://www.bis.org/cpmi/publ/d137.htm>
- Inter-American Development Bank
  - “Digital central bank money and the unbundling of the banking function” (2016)  
<https://publications.iadb.org/en/publication/12439/digital-central-bank-money-and-unbundling-banking-function>
- IMF
  - \*\*\* “Casting Light on Central Bank Digital Currencies” (2018)  
<https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2018/11/13/Casting-Light-on-Central-Bank-Digital-Currencies-46233>
  - Speech by Christine Lagarde: “Winds of Change: The Case for New Digital Currency”:  
<https://www.imf.org/en/News/Articles/2018/11/13/sp111418-winds-of-change-the-case-for-new-digital-currency>

- SWIFT
  - “GPI real-time Nostro Proof of Concept” (2018)  
<https://www.swift.com/news-events/press-releases/swift-completes-landmark-dlt-poc>
  - “SWIFT on Distributed Ledger Technologies” (2016)  
<https://www.swift.com/insights/press-releases/swift-and-accenture-outline-path-to-distributed-ledger-technology-adoption-within-financial-services>
- ISSA (International Securities Services Association)
  - “DLT: Principles for industry-wide acceptance” (2018)  
[https://www.issanet.org/e/pdf/2018-06\\_ISSA\\_DLT\\_report\\_version\\_1.0.pdf](https://www.issanet.org/e/pdf/2018-06_ISSA_DLT_report_version_1.0.pdf)
  - “Infrastructure for crypto-assets: A review by infrastructure providers” (2018)  
[https://www.issanet.org/e/pdf/2018-10\\_ISSA\\_report\\_Infrastructure\\_for\\_Crypto-Assets.pdf](https://www.issanet.org/e/pdf/2018-10_ISSA_report_Infrastructure_for_Crypto-Assets.pdf)

## Technology and Consulting Firms

- Accenture
  - \*\*\* “Do central banks need to issue currency?” (speech at Hamburg Institute of International Economics by Ousmène Mandeng, Senior Advisor to Accenture’s Global Blockchain practice)  
<https://www.economicsadvisory.com/comments/18-9-5-Do-central-banks-need-to-issue-currency.html>
  - “The (R)evolution of Money: Blockchain Empowered Digital Currencies ” (2017)  
[https://www.accenture.com/t20171116T025715Z\\_w\\_us-en\\_acnmedia/PDF-63/Accenture-Evolution-Money-Blockchain-Digital-Currencies.pdf](https://www.accenture.com/t20171116T025715Z_w_us-en_acnmedia/PDF-63/Accenture-Evolution-Money-Blockchain-Digital-Currencies.pdf)
- IBM & OMFIF (joint paper)
  - \*\*\* “Central Bank Digital Currencies” (2018)  
<https://www.omfif.org/media/5415789/ibm-central-bank-digital-currencies.pdf>
- R3
  - “Fedcoin: A central bank-issued cryptocurrency” (2016)  
<https://static1.squarespace.com/static/55f73743e4b051cfcc0b02cf/t/58c7f80c2e69cf24220d335e/1489500174018/R3+Report-+Fedcoin.pdf>