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The Identity Challenge in Finance: From Analogue Identity to Digitized Identification to Digital KYC Utilities

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needs to be reached to ensure that the objectives of financial inclusion and market integrity are not achieved to the detriment of financial stability.



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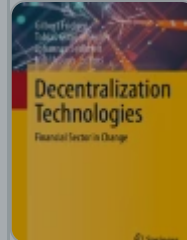
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Decentralized Finance and Decentralized Digital Identities: Opportunities and Challenges of Identity...

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Notes

1. See Zetzsche et al. ([2018](#)).
2. For example, the Google email identity may be used to certify a personality for the online accommodation service Airbnb.

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Singapore's various notices and guidelines on AML/CFT, available at <http://bit.ly/2p5BgJX>; and for Australia, see Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth).

6. For the European Union, see Art. 25 of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No. 648/2012 [2014] OJ L173/84/349–496.
7. Asian Development Bank ([2016](#)).
8. International Finance Corporation ([2017](#)), p 13.

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16. International Bar Association Legal Practice Division Working Group ([2015](#)), p 11.
17. Zetzsche et al. ([2018](#)).
18. Arner et al. ([2016](#)).
19. See, Zetzsche et al. ([2018](#)) and Arner et al. ([2016](#)).
20. Noto ([2017](#)).
21. Donnelly ([2018](#)).

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29. Pesin ([2017](#)).

30. See, Hardjono et al. ([2016](#)).

31. Reuters ([2018](#)).

32. For details, see Weigend ([2017](#)).

33. See, Lanier ([2013](#)).

34. Ibid.

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42. Unique Identification Authority of India, About Aadhaar, <https://uidai.gov.in/your-aadhaar.html> (accessed 11 December 2018) and Unique Identification Authority of India, Aadhaar data update, <https://uidai.gov.in/enrolment-update/aadhaar-enrolment/aadhaar-data-update.html> (accessed 11 December 2018).
43. Abraham et al. (2017).
44. 'Indian business prepares to tap into Aadhaar, a state-owned fingerprint identification system', *The Economist*, 24 December 2016.

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signatures [2000] OJ L13/12.

51. For the European Commission, see Kirova ([2016](#)).

52. Ibid.

53. See, Art. 11 of the eIDASR.

54. European Commission ([2017b](#)).

55. European Commission ([2017a](#)).

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62. Stanley and Buckley ([2016](#)).

63. LexisNexis ([2016](#)).

64. ThomsonReuters, The South African KYC Service,
<https://africa.thomsonreuters.com/en/products-services/risk-management-solutions/kyc-as-a-service.html> (accessed 11 December 2018).

65. IIFL ([2014](#)).

66. For example, see RBL Bank's Abacus Digital Savings Account (temporarily disabled because of the recent Supreme Court Judgement); and HDFC

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71. See, Association of the Luxembourg Fund Industry ([2018](#)).

72. See, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L119/1.

73. Zetzsche et al. ([2017](#)).

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