

CONTENTS

1	Introduction and Overview	1
	<i>Introduction</i>	1
	<i>The Emergence of Digital Sharing Economy</i>	1
	<i>Disruption and Disintermediation in Financial Services Industry</i>	5
	<i>Decentralized Finance</i>	7
	<i>Societal Implications of FinTech</i>	8
	<i>References</i>	10
2	Fiat Money: History and Features	13
	<i>Introduction</i>	13
	<i>Barter and Commodity Money</i>	13
	<i>Precious Metals</i>	16
	<i>Transition to Paper Money</i>	17
	<i>Emergence of Banks</i>	19
	<i>International Monetary Systems</i>	23
	<i>References</i>	26
3	Financial Technology Sectors and Business Models	29
	<i>Introduction</i>	29
	<i>FinTech, Definition and Background</i>	30
	<i>Alternative Payments</i>	31
	<i>E-wallets</i>	33
	<i>P2P Payments</i>	35

	<i>Cryptocurrencies</i>	36
	<i>CBDC</i>	36
	<i>Buy Now, Pay Later (BNPL)</i>	36
	<i>Crowdfunding</i>	37
	<i>Evolution and Growth of Crowdfunding</i>	37
	<i>Types of Crowdfunding</i>	39
	<i>The Crowdfunding Process</i>	43
	<i>Challenges and Risks of Crowdfunding</i>	45
	<i>Peer-to-Peer lending</i>	48
	<i>Definition and Overview</i>	48
	<i>Historical Development of P2P Industry</i>	48
	<i>Key Sectors in the P2P Industry</i>	49
	<i>Business Models in the P2P Industry</i>	50
	<i>Risks of P2P Industry</i>	51
	<i>Robo-Advisory</i>	52
	<i>Origins of Robo-Advisory</i>	52
	<i>Robo-Advisory Business Model</i>	53
	<i>RegTech</i>	54
	<i>An Overview of RegTech Growth</i>	54
	<i>RegTech Business Models</i>	58
	<i>Insurtech</i>	60
	<i>Impact of Insurtech on the Insurance Value Chain</i>	60
	<i>Role of FinTech in Covid-19 Era</i>	62
	<i>References</i>	64
4	Cryptocurrency	69
	<i>Introduction</i>	69
	<i>Genesis of Cryptography and Cryptocurrency</i>	69
	<i>Blockchain</i>	71
	<i>Distributed Ledger</i>	72
	<i>Nodes</i>	72
	<i>Transactions</i>	73
	<i>Consensus Mechanism</i>	74
	<i>Cryptography</i>	75
	<i>Blocks</i>	76
	<i>Hashing</i>	76
	<i>Smart Contracts</i>	77
	<i>Pros and Cons of Blockchain</i>	78

<i>Applications of Blockchain</i>	80
<i>Cryptocurrency Wallets</i>	83
<i>Public Key</i>	83
<i>Private Key</i>	84
<i>Types of Cryptocurrency Wallets</i>	84
<i>Cryptocurrency Exchange</i>	88
<i>Cryptocurrency as a Payment Mode</i>	89
<i>Cryptocurrency Mining</i>	90
<i>Mining Equipment</i>	90
<i>Mining Software</i>	91
<i>Validation</i>	92
<i>Mining Difficulty</i>	92
<i>Rewards</i>	93
<i>Mining Pool</i>	94
<i>Cryptocurrency and Data Privacy</i>	96
<i>Overview of Top Cryptocurrencies</i>	97
<i>Stablecoins</i>	99
<i>Fiat-Collateralized Stablecoins</i>	99
<i>Crypto-Collateralized Stablecoins</i>	100
<i>Algorithmic Stablecoins</i>	101
<i>References</i>	102
5 Central Bank Digital Currency	107
<i>Introduction</i>	107
<i>What Is CBDC and How It Works?</i>	108
<i>Infrastructure</i>	109
<i>Issuance</i>	111
<i>Distribution and Redemption</i>	114
<i>Security</i>	116
<i>CBDC Project Objectives</i>	117
<i>Monetary Policy</i>	117
<i>Financial Stability</i>	119
<i>Bank Runs Risk</i>	120
<i>Payment System Efficiency</i>	121
<i>Financial Inclusion</i>	121
<i>Illicit Activities</i>	122
<i>CBDC Types</i>	123
<i>Retail CBDC</i>	123

<i>Wholesale CBDC</i>	124
<i>CBDC Projects Around the World</i>	124
<i>China—Digital Currency Electronic Payment (DCEP)</i>	124
<i>Sweden—E-krona</i>	125
<i>Bahamas—Sand Dollar</i>	126
<i>European Union—Digital Euro</i>	126
<i>United States—Digital Dollar</i>	127
<i>Thailand—Project Inthanon</i>	128
<i>Demand for CBDC</i>	129
<i>CBDC and Cryptocurrency</i>	130
<i>Control and Issuance</i>	130
<i>Regulatory Framework</i>	131
<i>Technology</i>	131
<i>Stability and Value</i>	131
<i>Purpose and Use Cases</i>	132
<i>Privacy and Anonymity</i>	132
<i>References</i>	132
6 Neobanks	139
<i>Introduction</i>	139
<i>What Is Neobank?</i>	140
<i>Neobanks vs. Traditional Banks</i>	140
<i>Physical Presence</i>	140
<i>Fee Structures</i>	141
<i>Financial Products</i>	142
<i>Customer Service</i>	143
<i>Size</i>	143
<i>Technology</i>	144
<i>Reputation</i>	144
<i>Digital Banking vs. Neobanks</i>	145
<i>Neobanks Products</i>	145
<i>Digital-Only Bank Accounts</i>	145
<i>Instant Money Transfers</i>	146
<i>Savings Goals and Automatic Savings</i>	146
<i>Budgeting Tools</i>	146
<i>Personalized Financial Advice</i>	147
<i>Cryptocurrency Integration</i>	147
<i>Foreign Currency Accounts</i>	147
<i>Round-Up Savings</i>	147

<i>International Money Transfers</i>	148
<i>Technological Infrastructure</i>	148
<i>Cloud Computing</i>	148
<i>Application Programming Interfaces (APIs)</i>	149
<i>Mobile Apps</i>	149
<i>Artificial Intelligence (AI) and Machine Learning (ML)</i>	150
<i>Cybersecurity</i>	151
<i>Personnel Expertise Composition</i>	151
<i>Digital Banking Expertise</i>	151
<i>Regulatory and Compliance Experts</i>	152
<i>Risk Management Experts</i>	152
<i>Financial Experts</i>	152
<i>Customer Service Experts</i>	152
<i>Data Scientists and Analysts</i>	152
<i>Product Management Experts</i>	153
<i>Human Resources Experts</i>	153
<i>Neobanks and e-KYC</i>	153
<i>What Is e-KYC?</i>	153
<i>Benefits of e-KYC for Neobanks</i>	154
<i>Challenges of e-KYC for Challenger Banks</i>	154
<i>Global Cases of Neobanks</i>	155
<i>Revolut</i>	155
<i>Chime</i>	155
<i>N26</i>	156
<i>Monzo</i>	156
<i>Ally Bank</i>	156
<i>Neobanks and SMEs</i>	157
<i>Neobanks: Disruptive or Sustaining Innovation</i>	158
<i>References</i>	160
7 Digital Currencies' Implications for the Monetary System and Financial Stability	165
<i>Introduction</i>	165
<i>Cryptocurrency and Monetary Policy</i>	166
<i>Reduced Control of Central Banks</i>	166
<i>Impact on Inflation</i>	167
<i>Difficulty in Implementing Monetary Policy</i>	169
<i>Cryptocurrency and Financial Stability</i>	170
<i>Volatility</i>	170

	<i>Cybersecurity</i>	171
	<i>Regulatory Uncertainty</i>	172
	<i>Disintermediation</i>	173
	<i>CBDC and Monetary Policy</i>	173
	<i>CBDC and Financial Stability</i>	174
	<i>Stablecoins and Monetary System</i>	175
	<i>Stablecoins</i>	175
	<i>Impact on Monetary Policy</i>	175
	<i>Impact on Financial Stability</i>	176
	<i>References</i>	177
8	FinTech and Financial Inclusion	183
	<i>Introduction</i>	183
	<i>What Is Financial Exclusion?</i>	184
	<i>Causes of Financial Exclusion</i>	185
	<i>Geographical Factors</i>	185
	<i>Socioeconomic Factors</i>	186
	<i>Cultural and Gender-Based Factors</i>	187
	<i>Technological Factors</i>	188
	<i>FinTech: Enabling Financial Inclusion</i>	189
	<i>Increased Access to Financial Services</i>	189
	<i>Cost Reduction and Efficiency Gains</i>	190
	<i>Empowerment of Underserved Communities</i>	190
	<i>Enhanced Financial Literacy and Education</i>	190
	<i>Job Creation and Economic Growth</i>	190
	<i>FinTech Segments and Financial Inclusion</i>	192
	<i>Mobile Money and Digital Wallets</i>	192
	<i>Peer-to-Peer Lending Platforms</i>	194
	<i>Crowdfunding</i>	195
	<i>Blockchain and Distributed Ledger Technology</i>	196
	<i>Robo-Advisory Services</i>	198
	<i>Big Data Analytics and Credit Scoring</i>	199
	<i>Barriers to Digital Financial Inclusion</i>	200
	<i>Infrastructure Barriers</i>	200
	<i>Financial Literacy</i>	201
	<i>Trust and Security Barriers</i>	201

	<i>Regulatory and Policy Barriers</i>	202
	<i>Regulatory Considerations for FinTech and Financial Inclusion</i>	202
	<i>References</i>	204
9	Legal Framework for Digital Currencies	211
	<i>Introduction</i>	211
	<i>Regulation of Digital Currency Exchanges</i>	212
	<i>Regulatory Approaches to Digital Currencies</i>	213
	<i>United States</i>	213
	<i>European Union</i>	214
	<i>United Kingdom</i>	216
	<i>Regulatory Challenges and Considerations</i>	217
	<i>Technological Complexity</i>	217
	<i>Cross-Border Transactions</i>	217
	<i>Market Volatility and Investor Protection</i>	217
	<i>Consumer Education and Awareness</i>	218
	<i>Money Laundering and Illicit Activities</i>	218
	<i>Regulatory Coordination and Harmonization</i>	218
	<i>Innovation and Market Development</i>	218
	<i>Scalability and Systemic Risks</i>	219
	<i>Legal Framework and Jurisdictional Challenges</i>	219
	<i>Anti-Money Laundering (AML) and Know Your Customer (KYC) Requirements</i>	219
	<i>AML Regulations for Digital Currency Businesses</i>	219
	<i>KYC Obligations and Customer Due Diligence</i>	220
	<i>Consumer Protection and Investor Safeguards</i>	221
	<i>Taxation of Digital Currencies</i>	222
	<i>Regulatory Sandboxes and Innovation</i>	225
	<i>References</i>	226
10	New Generation of Participants in Financial Industry	231
	<i>Introduction</i>	231
	<i>Generational Differences and Technology Adoption</i>	232

	<i>Understanding Generational Cohorts</i>	232
	<i>Baby Boomers and FinTech Adoption</i>	234
	<i>Generation X and FinTech Adoption</i>	235
	<i>Millennials and FinTech Adoption</i>	236
	<i>Generation Z and FinTech Adoption</i>	237
	<i>Impact on the Financial Market</i>	239
	<i>References</i>	240
11	The Road Ahead	243
	<i>Introduction</i>	243
	<i>Overview of the Evolution of Money</i>	243
	<i>The Future of Money: A Glimpse into a Digital Horizon</i>	244
	<i>Emerging Trends and Future Scenarios</i>	246
	<i>Decentralized Autonomous Organizations (DAOs)</i>	246
	<i>The Role of Artificial Intelligence (AI) and Machine Learning (ML)</i>	246
	<i>Social and Cultural Implications</i>	246
	<i>Conclusion: The Uncharted Territory Ahead</i>	247
	<i>References</i>	247
	Index	249