

# Financial Economics ECON2103

Lecture 10:

*Decentralised Finance*

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# Introduction

Digitalisation has brought forth a new era of financial innovation, challenging traditional notions of money and banking. It is essential to approach it with a clear understanding of its risks and potential benefits, as it continues to impact the future of the global economy.

# Agenda

Introduction

Topic one: Decentralized Finance

Summary







# Learning Objectives

- Learn advantages and disadvantages of decentralized finance

# Topic one

## Decentralized Finance

# Decentralized Finance (DeFi)

- DeFi refers to a new generation of financial applications built on **blockchain technology** that allows for **peer-to-peer transactions** without the need for intermediaries such as banks.
- DeFi is built on blockchain technology and **smart contracts** that automate financial transactions, allowing for increased efficiency, transparency, and accessibility.

# Smart Contract

- A smart contract is a self-executing contract with **the terms of the agreement** directly written into code.
- It operates on a blockchain platform and automatically executes, enforces, or verifies **the terms of the contract** when certain predefined conditions are met.
- Smart contracts eliminate the need for intermediaries.

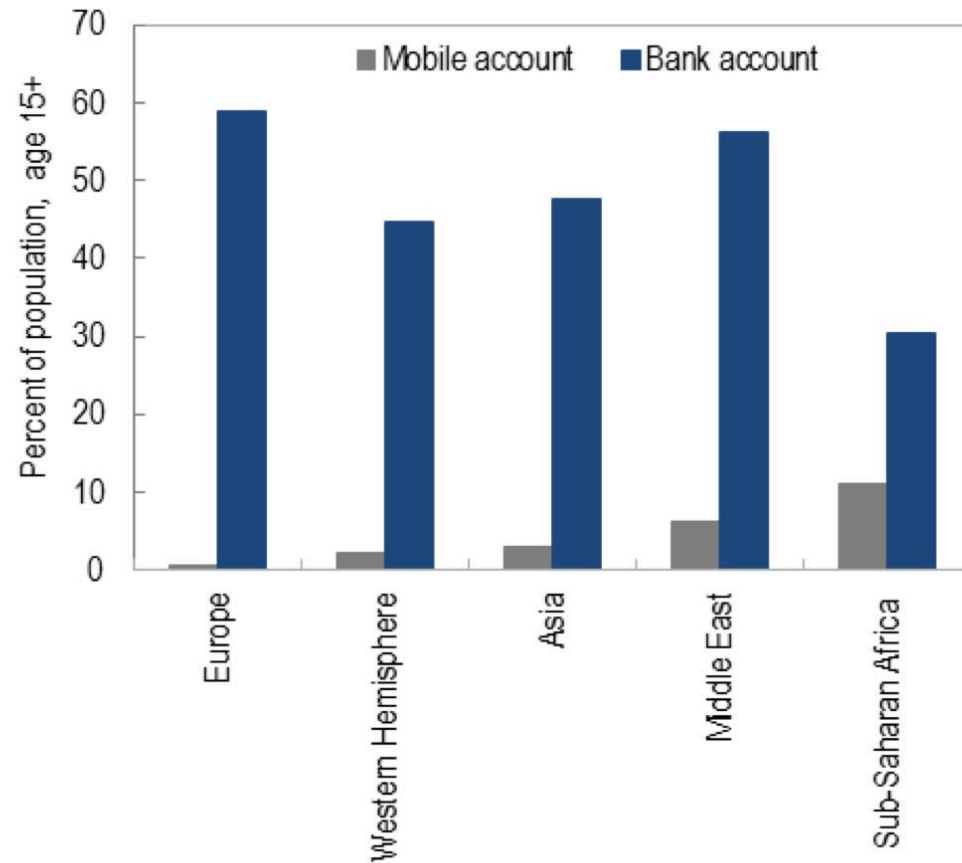


# Benefits: DeFi

- DeFi can potentially increase **financial inclusion** by providing access to financial services for people who are unbanked or underbanked.
- It can **reduce transaction costs** by eliminating intermediaries such as banks, which typically charge fees for their services.



## 1999-2014 Financial Inclusion

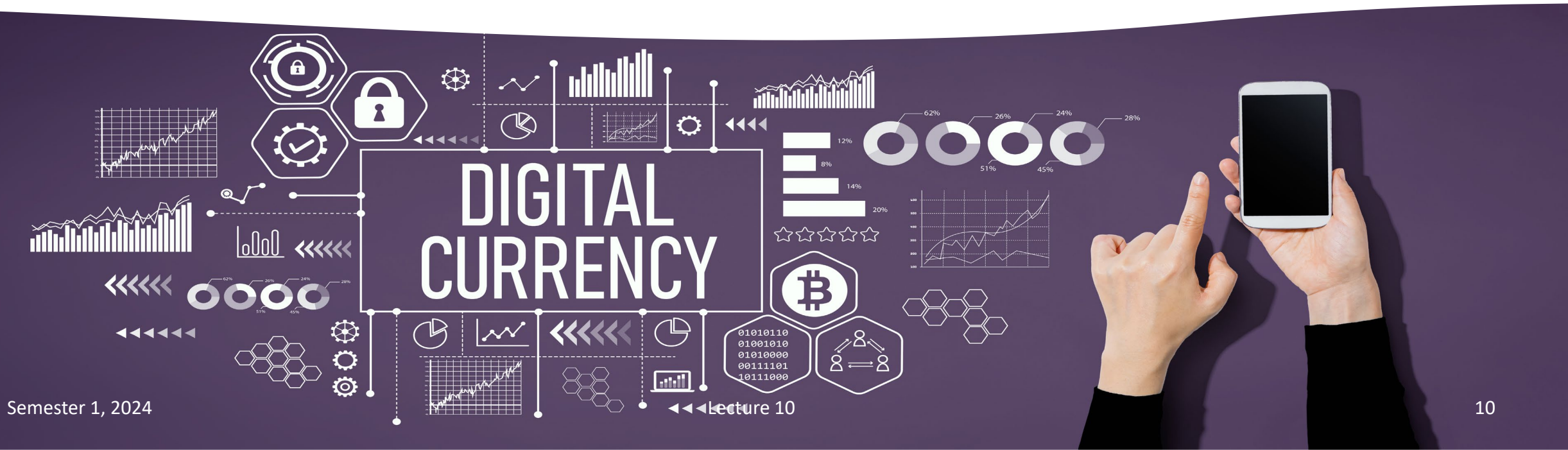


*In 2014, the share of the population holding mobile bank accounts reached 11% in SSA, the highest in the world. (European Investment Bank 2016)*

*In Kenya, according to the 2019 FinAccess Household Survey, 82.9% of Kenya's adult population has access to at least one financial product. (Central Bank of Kenya, 2019)*

# Risks: DeFi


- One of the most significant risks is **regulatory uncertainty**, as DeFi operates in a largely unregulated space.
- Another risk associated with DeFi is **smart contract vulnerabilities**.
- Another risk is **untraceability**.
- DeFi faces the **risk of market manipulation**, as users can exploit the decentralized nature of these applications to manipulate prices and engage in fraudulent activities.



# The 2021 Global DeFi Adoption Index Top 20

(Ozili PK. 2022)

<b>Country</b>	<b>Overall index ranking</b>	<b>Index score</b>
United States	1	1.00
Vietnam	2	0.82
Thailand	3	0.68
China	4	0.62
United Kingdom	5	0.60
India	6	0.59
Netherlands	7	0.55
Canada	8	0.52
Ukraine	9	0.49
Poland	10	0.46
France	11	0.46
Australia	12	0.41
Turkey	13	0.40
Switzerland	14	0.38



## Q. What are your thoughts on the digitization of financial markets?

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- I believe it enhances accessibility and efficiency, benefiting both investors and institutions.
- It has no impact on the financial industry and its traditional practices.
- I think it only appeals to a niche group and won't have a significant influence.
- It causes more problems than solutions and should be avoided.



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# Summary

Blockchain is a revolutionary technology and DeFi is a new financial innovation. However, challenges like regulatory uncertainties exist. We have studied potential benefits and risks of digital currency and DeFi in this lecture.

# Feedback for Topic 10

- <https://padletuq.padlet.org/Shino/econ2103-shared-thoughts-topic-10-sh0prye5t5i1unb2>



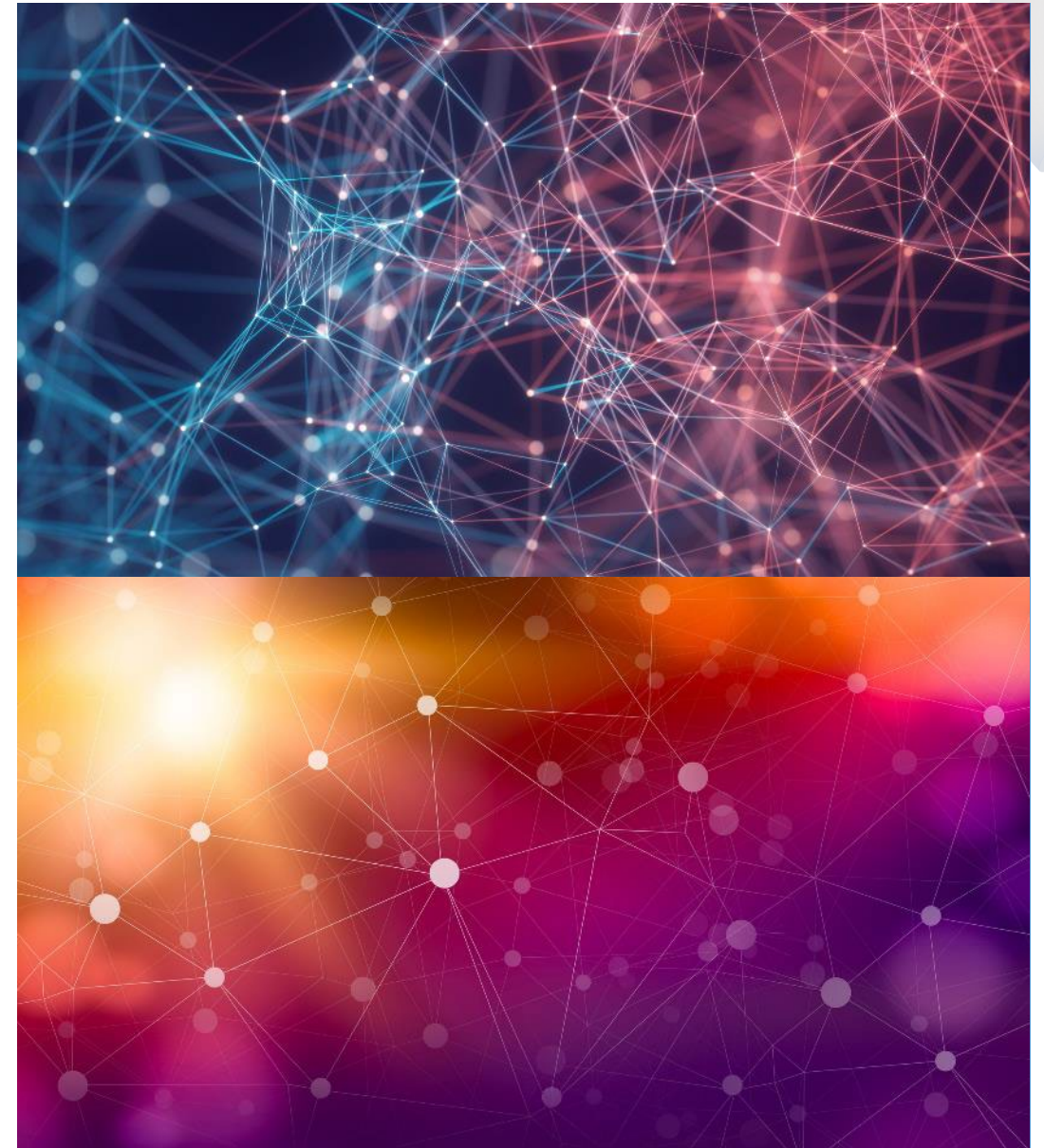
# Thank You

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# Source

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- “Adventures in DeFi-land”  
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