



Financial Literacy with Mr. 401(k)  
Spring Term 2026  
May 4, 2026

# Exploring Bitcoin

## Class 21: Introduction to Bitcoin Digital Money



# Monday Money Matter\$

Morgan Stanley recently launched a Bitcoin investment product (Ticker: MSBT). More than \$100 million was invested in the first week. Amy Oldenburg, Morgan Stanley's head of digital assets, said the biggest challenge is not building Bitcoin products, but helping people understand what Bitcoin is and how it is different from the wider world of cryptocurrencies. She said many investors still connect Bitcoin with its early reputation. Morgan Stanley is training advisors to explain Bitcoin clearly and responsibly. Even though Morgan Stanley now suggests a 2% to 4% crypto allocation for some clients, Oldenburg believes Bitcoin investing is still in the very early stages.

Source: BitcoinMagazine.com; "Morgan Stanley Executive on Bitcoin: 'We Are Still So Early on This Journey';"  
<https://bitcoinmagazine.com/news/morgan-stanley-executive-on-bitcoin>; Reference Date: April 29, 2026.



# Class Discussion

What is one U.S.  
Dollar worth?





[Launch Video](#)



# What is Bitcoin?



## Digital Money

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Bitcoin is digital money. It has no physical form. It has no issuer.



## Money Like

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Bitcoin functions like other money: Store of Value; Medium of Exchange; and Unit of Account



## Spend & Save

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Bitcoin can be used to buy goods, services, and information, or saved to use later.



## Gov't Free

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Bitcoin is not issued by any government or bank, nor is it backed by any government or bank.

# Practical Application



Who do you think is **the issuer** of the following:

**1) The U.S. Dollar**

# Practical Application



Who do you think is **the issuer** of the following:

- 1) The U.S. Dollar
- 2) **Microsoft Company Stock**

# Practical Application



Who do you think is **the issuer** of the following:

- 1) The U.S. Dollar
- 2) Microsoft Company Stock
- 3) **Japan 10 Year Government Bond**

# Practical Application



Who do you think is **the issuer** of the following:

- 1) The U.S. Dollar
- 2) Microsoft Company Stock
- 3) Japan 10 Year Government Bond
- 4) **City of Seattle General Obligation Bond**

# Practical Application

Who do you think is **the issuer** of the following:

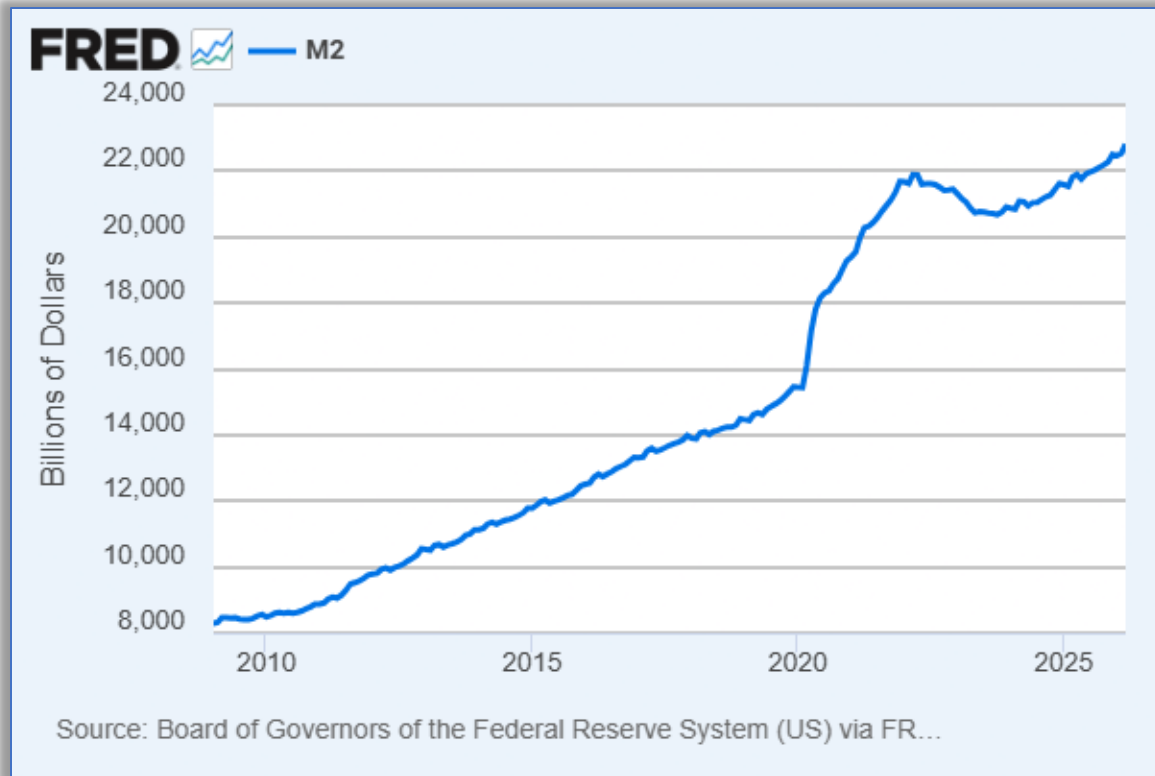
- 1) The U.S. Dollar
- 2) Microsoft Company Stock
- 3) Japan 10 Year Government Bond
- 4) City of Seattle General Obligation Bond
- 5) **Gold Ore**



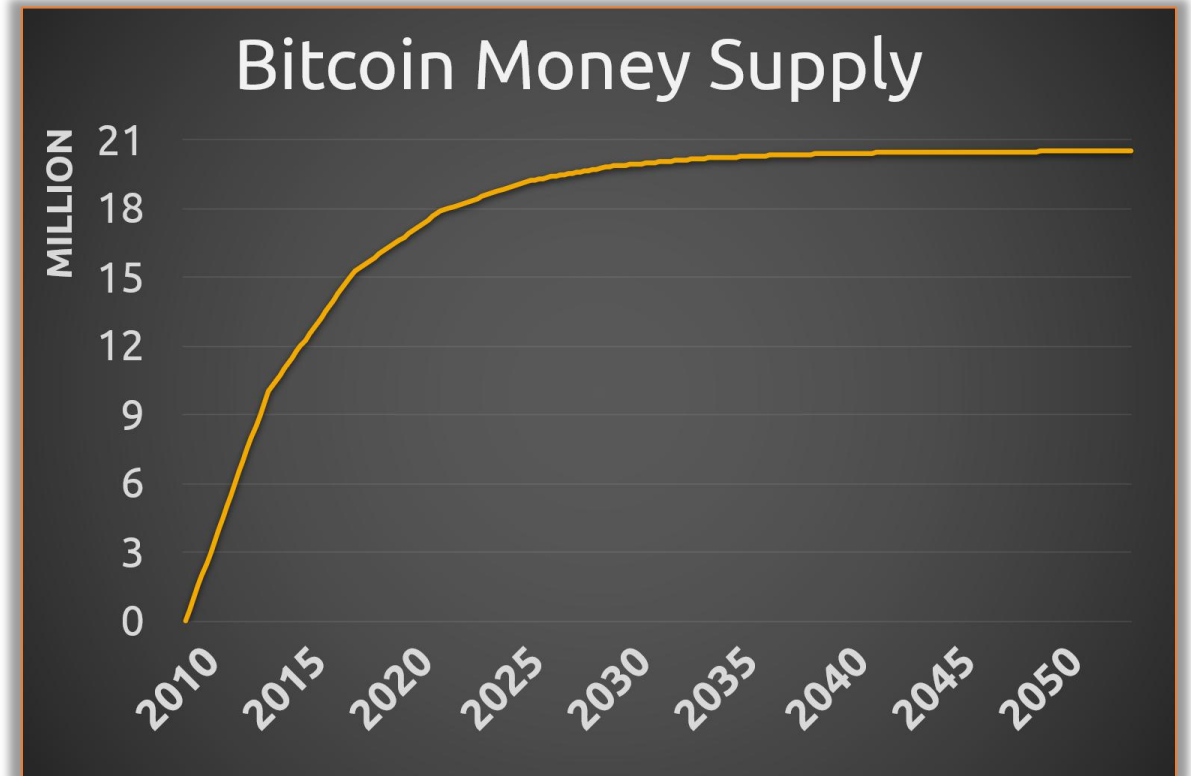
## *Class Discussion*

*So, what does it mean to say that Bitcoin has no issuer?*

# Money Supply: U.S. Dollars vs. Bitcoin



The supply of U.S. Dollars is **elastic**.  
New U.S. Dollars are 'created' through  
bank lending.



The supply of Bitcoin is deterministic or **inelastic**. By current design, there can never be more than 21 million Bitcoin.



## *Class Discussion*

*What do you think  
might happen  
when more and  
more people want  
something, but the  
amount available  
can never increase?*

# Technology Behind Bitcoin



Like a Rubik's Cube, the puzzle is hard to solve, but easy to verify.



## Broadcast to the Network

When you spend Bitcoin, your transaction goes out to thousands of computers around the world. No banks are needed.



## The Race to Solve the Puzzle

Specialized computers compete to solve a math puzzle. The winner confirms your transaction and gets paid in Bitcoin for the work.



## The Bitcoin Blockchain

Your transaction gets locked into a chain of transaction blocks that anyone can see, but no one can change. It's known as the Bitcoin Blockchain.

# How Bitcoin Transactions Work

*A step-by-step look at sending Bitcoin*



## Own It.

You hold Bitcoin with a secret digital password called a private key.



## Sign It.

Your key signs the Bitcoin transaction, like a stamp proving it's from you.



## Send It.

Your transaction goes to thousands of computers worldwide.



## Confirm It.

Every ~10 minutes, "miners" confirm and group transactions into a block of transactions.



## Lock It.

Thousands of computers verify and lock in a permanent copy of the blocks, making it nearly impossible to cheat.

# Bitcoin vs. U.S. Dollar Divisibility



## Bitcoin

Divisible to 8 decimal points.

**1 Bitcoin (₿) = 100,000,000 Satoshis (♠)**

1 Satoshi (♠) = 0.00000001 Bitcoin (₿)



## U.S. Dollar

Divisible to 2 decimal points.

**1 U.S. Dollar (\$) = 100 U.S. Cents (¢)**

1 U.S. Cent (¢) = 0.01 U.S. Dollar (\$)

# Exchange Rate of Bitcoin to U.S. Dollars

*Reference: May 3, 2026, 12:00 PM Pacific via Coinbase.com*

Bitcoin (₿)		Satoshis (₿)		U.S. Dollars (\$)
1.00000000	=	100,000,000	=	\$78,732.28
0.10000000	=	10,000,000	=	\$7,873.23
0.01000000	=	1,000,000	=	\$787.32
0.00100000	=	100,000	=	\$78.73
0.00010000	=	10,000	=	\$7.87
0.00001000	=	1,000	=	\$0.79
0.00000100	=	100	=	7.9¢
0.00000010	=	10	=	0.79¢
0.00000001	=	1	=	0.079¢

# Story Time: The Billion Dollar Pizzas

Source: *The Bitcoin Historian @pete\_rizzo*



**The Bitcoin Historian**    
@pete\_rizzo\_ · Follow

In 2008, Satoshi Nakamoto started a monetary revolution with #Bitcoin.

But by May 22, 2010, hardly anyone was using it.

The Amazing Story of the pizza purchase that changed history, and the man who spent \$2.8 billion to transform money forever 🔥 [Show more](#)



NEW AT 5:30  
**THE FIRST BITCOIN PURCHASE**  
DIGITAL CURRENCY WAS USED FIRST IN JACKSONVILLE

4:36 AM · May 22, 2024

2.3K Reply Copy link

[Read 138 replies](#)



**Why this story matters:** In 2010, very few people used Bitcoin. In fact, May 22, 2010, was the first time anyone bought something real with Bitcoin -- 2 large pizzas! Since then, every May 22 is celebrated as Bitcoin Pizza Day. 🍕

# Nodes Verify the Rules

*Anyone can run Bitcoin software and verify the network rules*



## What is a node?

**A node is any computer running Bitcoin software that verifies Bitcoin's rules.**

There is no single Bitcoin server. There are thousands of bitcoin nodes, run by different people, all around the world.

## What do nodes verify?

**Every transaction. Every block. Every rule. Including the 21 supply million limit.**

If a miner ever tried to create extra Bitcoin, every node would notice. The nodes would reject that block of transactions.

## Who can run a node?

**You. Anyone with a computer and an internet connection.**

The software is free. The rules are public. No permission is required. That's what makes Bitcoin's supply schedule verifiable.

**Today:** Approximately **24,126** publicly reachable nodes are running around the world. (source: bitnodes.io)

# How to Get Bitcoin or Satoshis



## Buy

From a broker, crypto exchange, payment service, or a person



## Mine

Using specialized computers



## Receive Gifts

From family or friends








## Trade

Goods, services, or information for Bitcoin

# Bitcoin Features & Cautions








## Features

-  Censorship Resistant
-  Decentralized
-  Fixed Money Supply
-  Network Effect
-  Permissionless



## Cautions

-  Cryptocurrency Scams
-  No Support Lines
-  Payments Can't Be Undone
-  Taxation Implications
-  Volatility



# *Class Discussion*

*Bitcoin doesn't  
require anyone's  
permission to use it.  
Why do you think  
that could be  
important for people  
in different parts of  
the world?*



# Three Key Takeaways

1. Bitcoin is digital money with no central issuer, a fixed supply of 21 million, and can be sent anywhere.
2. Bitcoin transactions are confirmed by specialized computers (miners) and verified by thousands of computers (nodes) across the network, which anyone can operate.
3. Understanding Bitcoin helps you think critically about what 'money' means and how it might evolve.



## Where to Learn More

- [Bitcoin Education](#) by Petros Koumantaros
- [Bitcoin Money: A Tale of Bitville Discovering Good Money](#) by Michael Caras (Author), Marina Yakubivska (Illustrator)
- [The Bullish Case for Bitcoin](#) by Vijay Boyapati

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Teaching young people how  
money really works

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