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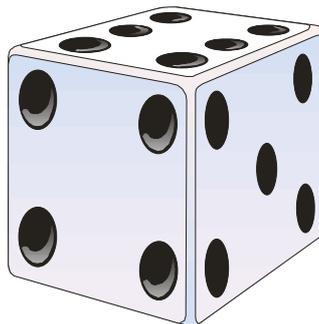
# The Bitcoin Board Game

(Finding Satoshi)



a quasi-cooperative game about Bitcoin for 2-6 players  
(playing time: 60 minutes; ages: 10+)

by Channing Jones



Version: 2.1

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# 1. Introduction

To play the Bitcoin board game you should know at least a little about Bitcoin. Bitcoin is a special type of Internet money with unique cryptographic and peer-to-peer properties. Read more about it on the website [bitcoin.org](http://bitcoin.org). Satoshi Nakamoto is the mysterious founder of Bitcoin whose identity has not been revealed yet.

In the Bitcoin board game you play the growing of the Bitcoin economy. You can decide whether to play cooperatively or for your own gain. Cooperative players will try to grow the Bitcoin economy as much as possible. Players seeking to win themselves will try to get as much money as possible.

# 2. Components

This is a "print-and-play" game. This means you will need to make and supply some parts on your own.

You will need to print out all the PDF files. Keep the rules and the event tables sheet for reference during play. Use the boards to play on. Cut out the markers and cards. You can paste parts onto cardboard for extra stability. You can put the cards into transparent plastic sleeves for durability and easier shuffling.

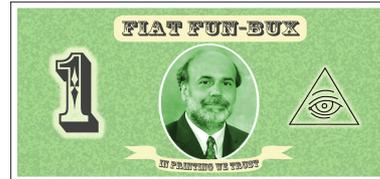
## Parts of the printout:

- the Bitcoin Advancement Board
- the Prices Board
- the Track Board (Line up the two parts, so that the "2"s make one square of 4x4 spaces, You will need to cut away some paper.)
- 46 track tiles
- 22 job cards (7 Fiat jobs, 15 Bitcoin jobs)
- 6 role cards (1 Satoshi, 5 Bitcoin Geeks)
- 6 Bitcoin News cards
- 6 Economic News cards
- 6 player turn summary cards
- 7 markers (5 price markers, 2 Bitcoin Advancement markers)
- the rules
- paper money (for the Fiat money; print-out the 1s paper twice at least, and the other

denomination pages once each at least; *alternatively you can use the money from another board game instead*

## Parts you will need to supply yourself:

- some chips or coins (for the Bitcoins; two types at least, one for 1s and one for 10s)
- 1 die
- 6 pawns of different colors (if possible: blue, green, purple, red, white and yellow)



# 3. Setup

To prepare the game do the following steps:

## 3.1. Setup the boards.

Place the 3 boards on the table.

Divide the track tiles into three stacks depending on their number on their back (1, 2 and 3) and shuffle them face down. Then place one tile on each empty space on the track board with the same number.

Place the price markers for Food and Internet on 20\$, the price marker for Bitcoin on 0\$ on the Prices Board. Also place the Job Effect marker on the price according to the number of players (see chapter 4.5 under "Price Effect of Bitcoin Jobs").

Place the two markers for the Bitcoin advancements on their respective start positions ("0.1" and "CPU") on the Bitcoin Advancements Board.

Shuffle the Bitcoins News cards and Economic News cards each face down into deck.

Each player selects a pawn and a player turn summary card of the same color (if possible) and places his pawn on the Start space of the Track Board.

## 3.2. Determine "Satoshi".

Take a number of Bitcoin Geek cards equal to the number of player minus 1 and add the Satoshi card. Shuffle these cards. Deal one card face down to each player.

Each player secretly looks at their card. One player is "Satoshi". He can only win if everybody wins. Everybody else is a "Bitcoin Geek" and the normal winning conditions apply (see chapter 6). Each player must keep their card secret until the end of the game unless somebody makes a guess at them being Satoshi.

**Two Player Game:** Do the same as above, except take 2 Bitcoin Geek cards and the Satoshi card instead. The remaining card stays face down until the end of the game.

### **3.3. Distribute jobs.**

Each player gets a Fiat job card either by selection or distributing them randomly.

### **3.4. Get starting wealth.**

Each player gets 20\$ (Fiat). The player with the "Pizza Delivery Guy/Gal" job also gets 1 Bitcoin.

### **3.5. Determine the starting player**

If a player has the Student job card, then he is the starting player. Otherwise if somebody has the Banker job card, then the player to the left of him is the starting player. If neither Student nor Banker is in play then determine the starting player randomly.

## **4. Game Concepts**

### **4.1. Money**

There are two types of money used in the game. One is called "Fiat" and the other is called "Bitcoin". Amounts in Fiat are denoted in the game with the \$-symbol. Amounts in Bitcoin are denoted by BTC.

A player must leave his Fiat and Bitcoin money open on the table but other players may not inspect his stacks.

### **4.2. Jobs**

There are two types of jobs in the game, "Fiat jobs" and "Bitcoin jobs". Fiat jobs pay an income in Fiat money and Bitcoin jobs pay an income in Bitcoins.

#### **Job Limitations**

A player can only have two jobs at most. One job is his main job and any other job is his secondary job. If he only has one job then this is automatically his

main job. To make it clear which job is his secondary one a player can turn his secondary job card to the side.

A Fiat job can only be the main job.

A player may not have two identical jobs.

A player can get no more than 2 BTC income for his secondary job (exception: Night Security Guard, see chapter 5.5).

### **4.3. "Unemployed"**

If a player has no job then he can miss his move to get a Job Opportunity (see chapter 5.2). He can do this even if he was not able to buy both Food and Internet this turn.

### **4.4. "Bank"**

The "bank" is the supply of Fiat and Bitcoin money currently not held by any players. Players make their payments to and get their income from the "bank".

#### **Transaction Fee**

Each time a player exchanges Bitcoins with the bank he must pay an additional 5\$ (exception: Bitcoin Exchange Operator, see chapter 5.6). This is paid on every occasion the player wishes to exchange regardless of the number of Bitcoins bought or sold.

### **4.5. Prices**

Three prices are marked each on the Prices Board. They are Food, Internet and Bitcoin.

The price for Food and Internet may move up due to Economic News events. The price for Internet may also move down due to job cards.

The Bitcoin price may move up or down through several effects. This includes Bitcoin Software advancements, Bitcoin Mining advancements, Bitcoin News events and Bitcoin jobs held by players. It cannot move below 0\$.

#### **Price Effect of Bitcoin Jobs**

Each new Bitcoin job a player gets increases the Bitcoin price by 6\$ if playing with 2 players, by 4\$ if playing with 3 players, by 3\$ with 4 players and by 2\$ with 5-6 players. If a player loses or quits a Bitcoin job then decrease the price in the same way accordingly.

## 5. Play

Each player takes a turn starting with the starting player and then going clockwise until the game ends.

### 5.1. Player Turn

A player does the following things during his turn in this sequence:

#### 1.) Collect income.

The player gets the amount of Fiat and Bitcoin money from his jobs as shown on his cards.

#### 2.) Pay living expenses.

If possible the player must buy one Food and one Internet by paying the current price for each as marked on the Prices Board.

If he can only buy one of these two, then he misses his move (exception: if "unemployed", see chapter 4.3).

If he can buy none of these two he misses his move as above and must also move his pawn back to Start.

Additional Food or Internet cannot be stored.

#### 3.) Make a move.

Unless he is missing his move he must then move his pawn on the track board onto another tile.

He can only move orthogonally (i.e. not diagonally) in two directions, namely up and right, as indicated by the large arrows on the board.

The number of spaces (=tiles) he can move depends on how many Bitcoins he spends:

1 space: 0 Bitcoins

2 spaces: 1 Bitcoin (for Janitor: 0 Bitcoins)

3 spaces: 4 Bitcoins (for Janitor: 3 Bitcoins)

Spending more Bitcoins than above does not give him additional spaces to move.

He does not need to move all spaces in a straight line. He can switch to the other direction after each space he enters.

If his pawn enters a space that is already occupied by another pawn then the number of spaces he can move is increased by one. He may not end his move on such a space (exception: Start space).

After the player has determined which space he will end his move on, he then applies the effect of that space (see below, chapter 5.2). In some cases this

will result in another move.

#### 4.) Quit jobs.

A player can give up any of his jobs now only (exception: Job Opportunity, see chapter 5.2). He can also switch main job and secondary job now only (exception: Job Opportunity, see chapter 5.2).

### 5.2. Track Space Effects

These are the detailed explanations of the track spaces:

"Bitcoin Mining": Advance the marker on the Mining table of the Bitcoin Advancement Board to the technology level indicated in this space. Increase the Bitcoin price and give BTC to the moving player for each level accordingly. Secondary job income limits do not apply to this. If the marker is already at this level or beyond it nothing happens.

"Bitcoin News": Draw a card from the Bitcoin News deck and change the Bitcoin price accordingly. If all cards have been drawn then shuffle the discarded cards into a new deck.

*(Note that each card has a number 1-6 so players can deduce which cards may come up next.)*

"Bitcoin Software": Advance the marker on the Software table of the Bitcoin Advancement Board to the version indicated in this space. Increase the Bitcoin price for each level accordingly. The levels 0.4 to 0.8/0.9 each require a die roll of 4 to 6 for the effect to occur. If the die roll is 1 to 3 there is no effect. If the marker is already at this level or beyond it nothing happens.

"Bitcoin Software Alternatives": Increase the Bitcoin price as indicated on the track.

"Coffee shop": A player who starts his turn here gets free Internet.

"Economic News": Draw a card from the Economic News deck apply the result on the Economic News table. If all cards have been drawn then shuffle the discarded cards into a new deck.

*(Note that each card has a number 1-6 so players can deduce which cards may come up next.)*

"Free Bitcoin": The player gets 1 Bitcoin if he never had any in this game yet.

"Job Opportunity": The player may get a new main or secondary job by taking a job card currently not in play. Job limitations must be met (see chapter 4.2). He can quit a job or make a job secondary if necessary to meet these. Some spaces have a payment

requirement printed on it. In this case the player only gets the Job Opportunity if he first pays the indicated amount.

"Jump": The player must immediately make another move (i.e. move his pawn according to Bitcoins spent).

"Personal Event": The player must roll a die and apply the result on the Personal Event table (see Track Board) to himself. If the event is marked as "lucky" then 1 is added to the die roll number. A player may not give away or sell his Bitcoins to avoid a negative result on the table.

### 5.3. Trading

A player may exchange Bitcoin and Fiat money with the "bank" anytime during his turn (only). Use the Bitcoin price given on the Price Board. If the price is 0\$ then no exchange with the "bank" is possible. For each exchange with the "bank" a player must pay a transaction fee of 5\$ (see chapter 4.4).

Players can give or trade their money with each other anytime during the game (exception: when a player can end the game, see chapter 6). No transaction fees are necessary in this case.

Jobs may not be traded or given to other players.

### 5.4. Finding Satoshi

A player may try to find the player holding the Satoshi card anytime during the game. The tries are processed in order of request. Each player has only one try per game. He selects another player and this player must reveal his card. If he has guessed correctly then both his and Satoshi's Bitcoin amounts are doubled. If he has guessed incorrectly then he loses all of his Bitcoins.

### 5.5. Fiat Jobs

"Banker": Get 60\$. If you lose or quit this job after starting the game with it the Bitcoin price goes up 5\$. This can only happen once per game. Go last at game start if there is no Student in play.

"Janitor": Get 43\$. Pay 1 Bitcoin less for moving (i.e. 0 BTC for 1 or 2 spaces, 3 BTC for 3 spaces).

"Journalist": Get 45\$. Double the effect of Bitcoin News spaces you land on.

"Night Security Guard": Get 42\$. You get the full effect for a secondary Bitcoin job as if it were your main job.

"Pizza Delivery Guy/Gal": Get 22\$. Get free Food each turn. Get 1 BTC at game start.

"Programmer": Get 46\$. Get no more than 1 BTC income for your secondary job. Double the effect of Bitcoin Software (& Alternatives) spaces you land on.

"Student": Get 20\$. Get free Internet each turn. Double the effect of Bitcoin Software (& Alternatives) spaces you land on. Go first at game start.

## 5.6. Bitcoin Jobs

"Bitcoin Exchange Operator": Get 3 BTC if you are the only player with this job, otherwise 1 BTC. You pay no transaction fees when you exchange with the "bank".

"Bitcoin Foundation": Get 1 BTC. If this is your main job then double the effect of Bitcoin Software (& Alternatives) spaces and Bitcoin News spaces you land on. *(Note that this job is very useful for the 'Satoshi' player.)*

"Miner": Get 3 BTC. Get -1 BTC for each other player with a Miner job. Double the effect of Bitcoin Mining spaces you land on.

"Mining Pool Operator": Get 2 BTC. Double the effect of Bitcoin Mining spaces you land on (unless you already have a Miner job).

"Online Merchant": Get 1 BTC per player with a Bitcoin job and no Fiat job, if there is a Bitcoin Exchange Operator in play. The effect on the Bitcoin price for getting/losing this job is increased by 1\$.

"Web Service Provider": Get 1 BTC for every 2 Bitcoin jobs in play, if this includes a Bitcoin Exchange Operator. Decrease the Internet price by 2\$ when this job comes into play.

## 6. Game End

The game ends when a player lands on the End space.

When it is clear that the moving player can end the game then no more trading between players may occur.

All players then reveal their Satoshi/Bitcoin Geek cards and add up their Fiat and Bitcoins if necessary to determine the winner.

### Winning

The winning conditions vary depending upon the

Bitcoin price at the end of the game:

- If the Bitcoin price is under 40\$ then the player with the most Fiat money wins (use Fiat job income, counting \$ only, to break ties).
- If the Bitcoin price is equal to or over 40\$ but less than 60\$ then the player with the most Bitcoins wins (use Fiat money to break ties).
- If the Bitcoin price is equal to or over 60\$ then all players win.

The player with the "Satoshi" card only wins if all players win. His Bitcoin and Fiat money totals are not used for determining the winner.

### 6.1. Increased Difficulty

Experienced players may choose to increase the difficulty of the game at start by increasing the above winning condition limits. For a **hard** game increase the above price limits by 10\$ each (i.e. to 50\$ and 70\$), for a **very hard** game increase them by 20\$ each.

## 7. Advanced Game

Use the following rules for an advanced game:

### 7.1. Steady Inflation

Each time the player who originally started the first turn starts his turn roll a die to determine an increase in the price for Food or Internet as per the following table:

<i>Die Roll</i>	<i>Effect</i>
1 – 3	Increase the price of <b>Food</b> by the number on the back of the tile on which the pawn closest to End is standing (i.e. the section it is in).
4 – 6	Increase the price in the same manner as above but for <b>Internet</b> instead.

Note that when all pawns are at Start there is no price increase.

### 7.2. Savings Effect on Bitcoin Price

A player may add Bitcoins to his “savings” during his turn. For each 10 BTC he adds to his savings the Bitcoin price goes up by the same amount as if he got a new Bitcoin job (see “Price Effect of Bitcoin Jobs”, chapter 4.5). Any Bitcoins a player has in his savings may not be used or exchanged anymore for the rest of the game. They do count for winning purposes at game end though.

